

1A  
ALTERNATIVES FOR REORGANIZATION OF THE NATURAL RESOURCES  
PLANNING AND MANAGEMENT PROCESS IN THE STATE OF KANSAS

by

WILFORD R. MELTON, JR.

B.S., Prairie View A&M University, Prairie View, Texas 1972  
Bachelor of Science, Architectural Engineering

---

A MASTER'S THESIS

submitted in partial fulfillment of the  
requirement for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING  
Department of Regional and Community Planning

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1979

Vernon P. Deines

Prof. Vernon P. Deines  
Major Professor

Document  
LD  
2668  
.T4  
1979  
M44  
c.2

#### ACKNOWLEDGMENTS

The author wishes to express profound gratitude to the many people for their help, either direct or indirect, in the making and completion of this master's report. Like every academic, I owe personal and professional debts that are to numerous to recite, and some of which I am probably even unaware of.

I would like to dedicate this thesis to my parents, Wilford R. Melton Sr. and Ernestine B. Melton, and to my aunt and uncle, Ethel L. Melton and Dr. L. L. Melton, whose understanding, knowledge, and love has been the cornerstone for my life and inspirations.

I would also like to express sincere appreciation to the Kansas State University faculty who participated on the thesis advisory committee: Professor Vernon P. Deines, Head of the Regional Planning Department, whose continuous "moral and professional support" has been invaluable; Ufere Torti, Associate Professor of Planning; John Keller, Associate Professor of Planning; and Professor Wilfred Pine, Department of Agriculture.

Special appreciation is extended to Roxcy Gaither; Peter Allen; Joseph Copes; David Earl; Marcus Butler; Nancy Richards; "Corky" Neal; Julia and James Bryant; and a very special thanks to Terrance Conrad.

W.R.M.

## PREFERENCE

In the true epitome and concept of conservation, this thesis has been typed with single spacing. . . the results being a savings in paper use, clerical time, material costs, and energy.

TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vii
Chapter	
1. NATURAL RESOURCES PLANNING AND DEVELOPMENT ISSUES . . . . .	1
A. Introduction . . . . .	1
B. Implications for Natural Resources Planning in Kansas . . . . .	6
C. Scope of Study . . . . .	9
2. SURVEY OF ADMINISTRATIVE AND MANAGEMENT PERSONNEL . . . . .	11
A. Sources of Information . . . . .	11
B. Respondents to Questionnaire . . . . .	13
C. Planning Administration: "A Look Into the Machinery" . . . . .	15
D. Survey of Administrative and Management Personnel: "Comments and Conclusions" . . . . .	16
E. Identification of Administration and Management Problems . . . . .	19
F. Conclusions . . . . .	19
3. DEPARTMENT SURVEY: KANSAS AUTHORITIES RESPONSIBLE FOR NATURAL RESOURCES PLANNING . . . . .	23
A. State Board of Health and Environment . . . . .	23
B. State Corporation Commission . . . . .	25
C. Kansas Department of Economic Development . . . . .	27
D. State Highway Commission of Kansas . . . . .	28

Chapter	Page
E. Kansas Park and Resources Authority . . . . .	29
F. Kansas Forestry, Fish and Game Commission . . . . .	30
G. Kansas Geological Survey . . . . .	32
H. State Water Resources Board . . . . .	33
I. Joint Council on Recreation . . . . .	34
J. State Board of Agriculture . . . . .	35
K. Conclusions . . . . .	36
L. Program Administration Overview . . . . .	37
4. ENVIRONMENTAL QUALITY: FEDERAL AND STATE EFFORTS IN NATURAL RESOURCES PLANNING . . . . .	49
A. Federal Legislative Events . . . . .	49
B. States Reactions to Federal Legislature Events . . . . .	60
C. Alternative Organizational Structures . . . . .	73
5. PROPOSED MODEL FOR NATURAL RESOURCES RE-ORGANIZATION IN THE STATE OF KANSAS . . . . .	77
A. Discussion of Proposed Model . . . . .	77
B. Examples of Proposed Planning Models . . . . .	89
6. CONCEPTS FOR NATURAL RESOURCES EDUCATION IN KANSAS . . . . .	96
A. Discussion on Concepts . . . . .	96
B. Proposed Task . . . . .	99
7. AN UNDERSTANDING OF PUBLIC INTEREST IN NATURAL RESOURCES PLANNING AND MANAGEMENT . . . . .	100
A. Functions and Characteristics of Citizen Participation . . . . .	100
B. Citizen Participating Techniques . . . . .	103

Chapter	Page
8. COMMENTS AND RECOMMENDATIONS . . . . .	107
A. Comments . . . . .	107
B. Recommendations . . . . .	109
BIBLIOGRAPHY . . . . .	170
APPENDICES	
1. "The Comprehensive Plan": A Guide for Action . . . . .	112
2. "Model Act For The Creation of A Department of Natural Resources" . . . . .	117
3. Classification of Natural Resources . . . . .	132
4. Legal Devices for Natural Resources . . . . .	135
5. "Models for Measuring Impacts of Program Decisions" . .	145
6. Innovative Efforts in Land-Use Management . . . . .	155
7. Administrative and Management Questionnaire for Natural Resources . . . . .	163
Respondents to Questionnaire . . . . .	167
Questionnaire Letter of Transmittal . . . . .	169

LIST OF TABLES

Table	Page
1. Primary Areas of Responsibility . . . . .	12
2. Respondents to Questionnaire . . . . .	14
3. Problems In Administration and Management . . . . .	20
4. Concerns of Anti-Regionalism . . . . .	43
5. Proposed Department of Natural Resources for the State of Kansas . . . . .	90
6. A Resource Planning Section . . . . .	91
7. Department of Natural Resources Committee Structure . . .	92
8. Department of Natural Resources Committee Structure . . .	93
9. Functions of Regional Planning Commissions . . . . .	94
10. Department of Natural Resources Planning Process . . . .	95
11. Regulatory Controls . . . . .	142

## CHAPTER 1

### NATURAL RESOURCES PLANNING AND DEVELOPMENT ISSUES

#### A. INTRODUCTION

It has been observed that in the '60's and '70's millions of Americans enjoyed a level of living that far exceeded the expectations of this country. By the year 2000, the United States population will require and be expecting even higher levels of living than ever before, (better diets, better housing, more consumer commodities of all kinds, better education and cultural opportunities, more facilities for recreation, etc.). These wants, needs, and values have raised the question of whether natural resources supplies can sustain a rate of economic growth sufficient for their attainment?

These costly phenomena have acted to create new public attitudes and social values towards natural resources planning, administration, and management that will call for far more fundamental and discernible resource policies. No longer will the laissez-faire environment of the nineteenth century be allowed to exist. The concept today has become the prudent development, management, and utilization of all natural resources, both renewable and exhaustible, in order to assure long-term supplies of materials; and the provision of a quality environment in which all Americans can enjoy the beauty and wonder of the natural world, while living in surroundings that are clean, healthful, and attractive.

Historically, this development towards natural resources policy and planning can be attributed to some very important forces and factors which ultimately had great significance on the development of the new public attitudes and values being expressed today. These forces and factors are as follows:

- 1) Pre-Civil War - The most important resource question confronting the nation in this period was that of the "public domain." Land was disposed of to take care of the veterans, to fulfill the nation's Manifest Destiny, to provide land-hungry immigrants with family-farm units, to span the continent with railroads, and to encourage education. The policies that resulted in the disposition of the public domain only incidentally dealt with land use and allocation in relation to production, future needs, or similar concepts now associated with resource policy.

- 2) Disappearance of the Frontier - For many years at each decennial census, the Census Bureau had been publishing a frontier line on a map of the United States. The frontier line was a statistically determined line running from the



Canadian border to Mexico or the Gulf of Mexico. East of this line population densities were more than two persons per square mile, and west of the line densities were less than two persons per square mile. However, by 1890 it was no longer possible to draw such a line. (This contributed to the pressure for restricting immigration into the U.S.)

Actually the disappearance of the frontier line meant that while there were still millions of acres of public domain lands, there were so many islands of settlement that it was just not statistically possible to draw a frontier line. In any event, the disappearance of the line served to call attention to settlement and land policies, and thus added to the forces leading to the development of policies which took greater account of natural resource problems and potentialities.

3) Malthusian Theories - fear that population was on the verge of outrunning food supply. This fear was encouraged by several phenomena. One of these was the abandonment of farms in the Eastern states, especially in New England and New York. From this it was wrongly concluded that farm lands were wearing out. Also relevant was the widely held view that increases in agricultural production could only be secured through bringing in of new acres, and as the available acres declined, it seemed inevitable that increasing population could ultimately not be fed.

One other Malthusian type fear was that about the supply of timber. As settlement advanced, and especially as it became more dense and urbanized, the forest were cut down for farms and cities. After the Civil War a growing number of people were expressing their fears that the country would soon be without a timber supply. Here again, as far as policy development was concerned, this fear of a timber shortage was an important factor in the growing pressures for deliberate natural resource oriented public policies.<sup>1</sup>

4) Scientific Knowledge - The seeds planted in the field of science just before and immediately after the Civil War bore fruit in many ways. Suddenly there was a tremendous increase in scientific knowledge and knowledge in natural resources.

---

<sup>1</sup>Wengert, Norman, The Administration of Natural Resources, Asia Publishing House, Bombay, 1961, p. 31-32.

Many scientific organizations were founded in this period, and scientific and technical educations made substantial advances. Outstanding in this period were the development of:

- the "Timber Culture Act of 1873"
- the "Pre-emption Act of 1877"
- the "Desert Land Act of 1877"
- the Geological Survey in 1879
- the Agricultural Experiment Stations in 1889
- "Revision Act of 1890"

This scientific knowledge also provided for the creation of numerous scientific bureaus and agencies and increased financial support for their work. Policy-makers turned more and more to these bureaus and agencies for help in identifying problems and in formulating solutions.<sup>2</sup>

5) Technology and New Industries - The growth of technology and of new industries, such as, burgeoning electric power, petroleum, and chemical industries contributed a new dimension to natural resource problems. As old manufacturing businesses grew larger, they too became concerned with natural resource allocation and use. Closely related to the technological evolution of the period was the growth of scientific industrial management.

The effort to apply scientific methods to production problems had far-reaching significance for natural resource use and contributed some important concepts to natural resource policy. For one thing, waste and inefficiency began to be regarded as immoral, and natural resources acquired a moral sanction. It was inevitable that efforts to track down waste and inefficiency would in many cases lead to resource questions and point to the need for new public policies or revision of existing ones.<sup>3</sup>

6) American Economy - Radical changes in the character and structure of the economy at the end of the last century contributed to an environment which encouraged a growing concern for natural resource policy. The tremendous accumulation of capital and its management by corporations began to introduce a time consciousness into business so that a "cut-and-get-out" natural resource policy made less and less sense. At this time,

---

<sup>2</sup>Smith, Guy-Harold. Conservation of Natural Resources. 4th ed., Wiley & Sons, Inc., Sydney, 1971.

<sup>3</sup>Wengert, Norman. Natural Resources and the Political Struggle, Doubleday & Co., New York, 1955, p. 17.

too, the United States was changing from a debtor nation to a creditor nation, and from a raw-material exporter to a manufactured-goods exporter.

Although popular social and economic views were still dominated by private thinking, extensive programs of government economic intervention were in the offing.<sup>4</sup>

7) Land as a Resource - Important to natural resources planning has been the growing recognition that land is a resource of immense environmental value. Basically we are drawing away from the 19th century idea that land's only function is to enable its owner to make money. One example of this change in attitude is that wetlands, which were once characterized as "useless" are now thought of as having value.

As we increasingly understand the science of ecology and the web of connections between the use of any particular piece of land and the impact on the environment as a whole we increasingly see the need to protect wetlands and other areas that were formerly ignored. This has led to the strengthening of efforts to protect land from flooding, erosion, filling and other forms of degradation that may accompany certain types of development. The planning of land as a natural resource is no longer the concern solely of agricultural interests, and the expended interest in land use has lent traditional natural resource movement new strength.<sup>5</sup>

8) Air and Water Pollution - Also important to the natural resource movement has been the fact that urbanization has led to problems of air and water pollution. Most of the serious environmental problems are concentrated in our giant urban agglomerations. The most notorious example of air pollution is the smog of Los Angeles and its suburbs. Water pollution is most apparent in urban areas, where concentrations of industrial plants emit enormous, concentrated amounts of pollutants. Problems of the quality of life, or amenity, are especially associated with modern city life. The dirt, and noise, and hectic pace of life in cities are contrasted by social critics with the relative peace and tranquility of the farm and small town. Indeed, it is remarked that we need to preserve recreation, rest, and rehabilitation areas outside the cities in order for all urban dwellers to survive continued exposure to the unnatural environment of the modern

---

<sup>4</sup>Ibid.

<sup>5</sup>Bosselman, F., and D. Callies. The Quiet Revolution in Land Use Controls. Council on Environmental Quality, 1971.

city.<sup>6</sup>

As a result, environmental groups have become concerned about land use practices. Congress and the federal Environmental Protection Agency (EPA) have also begun to realize that solutions to problems of air and water pollution probably require more extensive land use controls.

9) Limits on Growth - Large amounts of homeowners in many communities around the country believe that further development of the land in and around their communities is not in their best interests. They view new people coming into the community as carriers of crime, congestion, and increased taxes.

In semi-suburbia at the edge of the city, when the pressure of population growth means that apartment houses must be built, homeowners raise the cry that the community is being destroyed. Proposed actions must be measured not on their merits, but on what they do to the so called community. The same cries are raised in other middle-class environs when new school patterns threaten a change in racial constituency, or when the suggestion is made that low-income families must be provided with a place to live nearby, or when someone proposes that well-planned industrial developments will benefit the tax rolls and provide employment.

The so-called community may have been a potato farm five years ago; it may consist of old buildings whose inhabitants never spoke to each other before the new school was proposed; it may, (as the last Census demonstrated in New York City), contain a population no more than 58 percent of which was living at the same address five years before. These facts matter not. What does matter is the attachment of the portentous community label to the mind, spasmodic and entirely particular kinship that might spring up about an ambulance service or a new school.

The community which is being talked about so often, and so profoundly, is essentially superficial and highly mobile. Provided only that a certain homogeneity of social class and income can be maintained, communities can be disassembled and reconstituted about as readily as freight trains.<sup>7</sup>

---

<sup>6</sup>Seneca, Joseph J., and Michael K. Environmental Economics. Prentice Hall, 1974, p. 301.

<sup>7</sup>Starr, Roger. The Living End: The City and Its Critics. 1966, p. 43.

Regardless of the merits of these beliefs, residents today, in many communities throughout the country have been sufficiently convinced to elect new officials on anti-growth platforms. Election analysts suggest that environmental lobbyists and political activists have not lost much of their impact in Washington despite the countervailing pressures for accelerated development of the nation's natural resources. This new mood has generated tighter restrictions on the use of natural resources and land at the local and occasionally state levels. These restrictions often take the form of down-zonings or new growth management techniques which shatter many landowners' expectations of profitability expectations that they regard as property rights.<sup>8</sup>

10) Improvements in State Government - Also, today Governors and their States are manifesting a vital and creative role in American Democracy which may well symbolize new dimensions--some suggest a new era--in the present system of government. The emergence of innovative ideas and methods for improving state government administration and public service have resulted from a growing awareness on the part of both local communities and statewide interests that states, not local governments, are the only existing political entities capable of devising techniques and governmental structures to solve problems such as pollution, destruction of fragile natural resources, the shortage of decent housing, and many other problems which are now widely recognized as simply beyond the capacity of local governments acting alone.

States have also placed renewed and much-needed emphasis on coordination both within the departmental framework of state government itself and between local, state, and federal agencies. States are also establishing much closer and more viable working innovations to reinforce the partnership in the development of substate regional entities which both stimulates citizen participation and assist local governments in combining resources for improving services.

#### B. IMPLICATIONS FOR NATURAL RESOURCES PLANNING IN KANSAS

In the state of Kansas, the phenomenon of physical development and growth will require decisionmakers to give consideration to the wise and proper use of the state's natural and energy resources. This has become necessary because industrialization and agricultural activities,

---

<sup>8</sup>University of New Mexico, School of Law, Natural Resources Journal, University of New Mexico, Vol. 15, No. 4, October, 1975.

coupled with the attendant technological and service advances, has served to aggravate the dependence of the Kansas economy upon raw and processed materials. Kansas' economic life now calls for careful and delicate balancing of multitudinous resources against continually changing needs and demands.

Consideration must now be given to how the population of the area is predicted to change and plans must be made to cater for it in the best possible way.

Employment itself will be a problem. Work for some should be available through normal industrial growth, but much of this will be in office jobs, and in the area of agricultural industries and education. The building of factories and huge power plants will consume a considerable area.

Housing is a major difficulty: new houses will be needed and existing houses will have to be improved.

Both industrial and domestic needs for simple commodities like water will increase proportionately. Water extraction from rivers and, in the case of western Kansas, the water-bearing strata many hundreds of feet down, cannot continue indefinitely. The delightful river valleys would be the first to suffer but other environmental upsets are sure to follow. Reservoirs for holding and storing water must be constructed, but again, more land will be consumed. The disposal of sewage and wastes will also increase; modern incinerators and composters to amalgamate sewage with ash must be set up.

Today in Kansas, the soil is being depleted due to heavy agricultural use and heavy dust storms, waters are being polluted due to erosion, sedimentation, feed lot run-off, and industrial waste, the forests and tall grass are vanishing, game and fish continue to be available only because of artificial propagation, stocking, and rigid policing.

Many more people in Kansas will be using cars and other means of transportation. This means the State and it's localities will have to build more roads and transportation systems, and again, more land and other natural resources will be consumed. The shopping facilities available to the population must also increase; facilities for both young and old will have to be rethought. All these schemes will absorb a great deal of the countryside and it is going to be necessary to plan and manage for the conservation of certain areas while others may be built up as deliberate 'honey pots'.<sup>9</sup>

Because of all of this, the essentially rural picture of Kansas

---

<sup>9</sup>Smith, op. cit.

will have to change; town and country will come closer together and a much closer supervision will be needed over the entire state if life is to be at all worthwhile. Therefore, the concept of natural resource conservation and management cannot divorce itself from all of this; a knowledge of the situation, countryside, and resources can go a long way towards helping prevent the worst abuses of mistaken and bad planning and management.

Other pressures generating demands for improved planning and programming on the part of the state are:

1. New requirements for comprehensive planning in order to qualify for federal assistance in several areas;
2. Pressure from local governments which need to know how to shape their programs to coordinate their actions with future state activities effectively; and
3. The growing interdependence of programs among the various agencies of the Kansas state government.

More is being asked of the state government by more people than ever before, and the complexities of interdependent program formulation and execution are increasing rapidly. Because of these conditions it is now highly desirable that actions be complementary and that common goals for the development of Kansas through adequate but prudent use of natural resources be achieved.

So far Kansas has made a slow transition towards new methods and techniques for realization of development and management opportunities. There have been and there still are obstacles to this progress that must be overcome. Not the least of these has been the lack of a source of information regarding the existing State laws concerning the use of natural resources in Kansas and the administration of those laws. Also, at present there appears to be no effective coordination of natural resource planning in the State. Nowhere does this more plainly appear than in the existence of separate and independent commissions and agencies with natural resource responsibilities.

There is also need to coordinate the State's development activities and environmental programs with those of 'private' interests and to maximize the efforts of federal programs in areas that best serve Kansas. Activities of all levels of government operating within the state towards the achievement of common objectives in the areas of natural resources need to be fully coordinated.

If all of these things are to be accomplished, it is essential that improved methods of communication and systems for planning, coordinating, executing and evaluating development and management activities be

adopted.

### C. SCOPE OF STUDY

In relations to the above mentioned context this study will examine:

1. how administrative decision making within the State of Kansas might be altered to take into account natural resource, environmental, and conservation effects;
2. how data collection, storage, and evaluations might be better applied;
3. how an overall natural resource educational program will influence a decision making process;
4. how new decision models might be applied throughout the State;
5. new concepts and programs employed by the federal government and other states;
6. how new techniques and criteria may be used for evaluating policy goals;
7. who the participants are in a natural resource planning process;
8. what factors and influences are at work in the area of natural resources planning and management decisionmaking; and
9. a "proposed model" for natural resource reorganization of the State of Kansas.

The purpose is to help provide understanding for alternatives which may be applied to a comprehensive planning and management system. The assumption has been that a natural resource program means utilization over all of the future and not just until the present supply runs out. Therefore the process or system must fit into the political framework and be in accord with the democratic principles and social objectives of the State, just as it must be economically feasible in order to succeed.

Finally, it has been assumed that political sentiment in Kansas has shown willingness to provide and submit to government consultation and aid on the state level when it has appeared to be a solid solution. This again may be the time for State government to become a forerunner.



#### D. DEFINITION OF TERMS

The below listed terms when used in this report will have the following meanings:

Comprehensive Plan - a. A model of intended future situation with respect to: 1) specific economic, social, political and administrative activities; 2) their location within a geographic area; 3) the resources required; and 4) the structures, installations and landscape which are to provide the physical expression, and physical environment for, these activities; and b. A programme of action and predetermined co-ordination of legislative, fiscal, administrative and political measures, formulated with a view to achieving the situation represented by the model.

Planning - The systematic process by which goals (policies) are established, facts are gathered and analyzed, alternative proposals and programs are considered and compared, resources are measured, priorities are established and recommendations are made for the deployment of resources designed to achieve the established goals.

Natural Resource Programme - Those programmes which deal specifically with particular resources such as water development programmes, soil conservation programmes, forestry programmes, mineral programmes, wildlife and fishery programmes, and so forth.

## CHAPTER 2

### SURVEY OF ADMINISTRATIVE AND MANAGEMENT PERSONNEL

#### A. SOURCES OF INFORMATION

As part of this comprehensive study, administrative and management personnel throughout each state department (natural resources) were surveyed to obtain comments and suggestions concerning the ultimate usefulness or appropriateness of program activities, as well as, whether a department has met all of its objectives. Here the emphasis has been placed on measuring the comparative effectiveness of alternate strategies within the natural resources program.

To obtain the background information about the deficiencies and problems existing within administrative and management structures it was necessary that actual visits to each State Department to research in-house documents and to interview staff personnel be carried out. The information obtained in these interviews and research was intended to outline each Department's legal authority, purpose and objectives, organizational makeup, and planning and programming activities.

Those departments responsible for natural resource planning and development in the State of Kansas have been identified as the:

- |                                     |                                              |
|-------------------------------------|----------------------------------------------|
| 1. Water Resources Board            | 6. State Board of Health                     |
| 2. Park and Resources Authority     | 7. Joint Council on Recreation               |
| 3. Forest, Fish and Game Commission | 8. Kansas Department of Economic Development |
| 4. State Geological Survey          | 9. Highway Commission of Kansas              |
| 5. State Board of Agriculture       | 10. State Corporation Commission             |

These departments major areas of responsibility, requiring administrative and management planning, can be grouped as in Table 1.

Information was also sought from Department personnel such as Executive Directors, Planners, Engineers, Department Heads, etc. This was done by both mail-out questionnaires and by personal interview. Approximately 300 questionnaires were equally mailed to all the natural resource departments in the State, as well as, to the Kansas Advisory

Table 1

## PRIMARY AREAS OF RESPONSIBILITY

1. LANDS - crops, grazing, forest, wilderness, wildlife, recreation, and watershed and their conservation, reclamation, improvement, and management.
2. WATER - its development, control and use for navigation, flood control, irrigation, power, fish and wildlife, recreation, and general purposes.
3. MINERALS - their location, extraction, processing, substitution, use, and salvage.
4. ENERGY - conservation and development.
5. TRANSPORTATION AND PROCESSING - modes of transportation, routes, demands for transportation, consumer requirements, industry guidelines.
6. COMPREHENSIVE PLANNING AND PROGRAMMING - an overall task of coordinated natural resources systems from planning, administration, and management to improvement, construction, and operations.

Council on Intergovernmental Relations, the Kansas State Historical Society, and the State Department of Administration. Also ten (10) personal interviews were held with department's executive directors or an acting representative.

Information and direction was also sought from states having already created new government agencies, reorganized existing executive agencies, or assigned new roles to judicial institutions, as well as from the following types of sources:

- Environmental Protection Agency,  
Kansas City, Missouri
- Big Lakes Regional Planning Commission,  
Manhattan, Kansas
- State Division of Architectural Services,  
Topeka, Kansas
- Community Development Department,  
Manhattan, Kansas
- Ex-Members of the Advisory Committee on  
a Statewide Building Code

This group of professionals was selected for study because it represented a distribution of a service that is more or less uniform and is in contact with policymakers, administrators, and other interested segments throughout relatively large regions.

#### B. RESPONDENTS TO QUESTIONNAIRE

The responses and recommendations received from the administrative and management personnel will aid in correcting many of the problems that exist within the natural resources system resulting from faulty planning, administration, and management.

The replies received from the questionnaire came from a large variation of respondents. Of the three hundred (300) questionnaires mailed out, ninety-one (91) of these were returned. These respondents were identified by categories and along with their respective percentage (%) enumerations have been placed in Table 2.

The total of ninety-one (91) respondents represents a 'response level' of 30 percent, well within the range of the 'national average' of 33 percent to 35 percent for surveys of this type.

Table 2  
 RESPONDENTS TO QUESTIONNAIRE

CATEGORY	NUMERICAL ENUMERATION	PERCENT ENUMERATION
Administrators	25	27.47%
Executive Director		
Executive Secretary		
Division Director		
Chief Engineers	5	5.49%
Engineers (Staff)	10	10.99%
Planners	4	4.40%
Administrative Assistants	4	4.40%
Office Managers	8	8.79%
Advisory Council Members	15	16.48%
Planners		
Engineers		
Businessmen		
Economist		
Etc.		
Staff Personnel	20	21.98%
Trainees		
Secretaries		
Technicians		
Professionals		
TOTAL	91	100.00%

### C. PLANNING ADMINISTRATION: "A LOOK INTO THE MACHINERY"

The abovementioned respondents (Directors, Department Heads, Engineers, etc. - Table 2) were surveyed to determine to what extent the natural resource departments were marshalling their resources to carry out, in an efficient manner, the programs determined/desired by elected officials, both legislative and executive.

The survey was designed to obtain information concerning: (1) the program's adequacy to meet the needs of its target group and the program's effect upon the participants/beneficiaries; (2) the need for a program's existence or non-existence, and; (3) the determination of factors related to the project's high level of performance or its poor level of performance.

All programs can be evaluated in terms of how well their activities were performed, whether they met their objectives, and what impact they had. In some cases, a decision-maker may require all three approaches, but, no matter which combination of approaches were selected, everything will depend on the type of information requested by that decision-maker. This study approach is outlined as follows:

#### I. AGENCY PROGRAM EVALUATION

- A. Effectiveness Evaluation: has agency program met its objectives?
  1. Intended consequences of the program/agency.
  2. Appropriateness of activities in terms of overall program goals.
  3. Alternative strategies to meet agency/program objectives.
  4. Specifications and measurements of agency's/program's output.

#### II. AGENCY PROCESS EVALUATION

- A. Concerned only with the ultimate performance of activities:
  1. Looks at whether the agency has hired all of its staff.
  2. Is money being supplied and expended at the projected rate?
  3. Is agency/program meeting its quota?

4. Track progress made toward projected targets.
5. "Cause and effect" relationships (why or why not).

D. SURVEY OF ADMINISTRATIVE AND MANAGEMENT PERSONNEL: "COMMENTS AND CONCLUSIONS"

The questionnaire's were designed to obtain administrative and management problem information and the replies received are delineated as follows:

1. DOES AN IDENTIFIABLE NATURAL RESOURCE PLANNING SYSTEM EXIST WITHIN THE STATE?

"...the present system reveals a large number of separate departments with responsibilities for natural resource planning, administration, and management."

"...there is no important domestic activity concerning natural resources that is manned or financed solely by any one department. I think there are approximately 10 or 15 such departments and councils existing within the state at present time."

"I remember seeing an executive report that identified approximately twenty-five (25) departments that were either directly or indirectly involved in natural resources planning and management."

"We have too many different requirements and regulations and too many many agencies controlling them. This leads to confusion on everyone's part and the results are generally negative. Many states are now looking towards some type of consolidation within state government."

"Natural resources planning in the state is institutionally complex because it involves so many levels of governmental units, making coordination a key issue."

2. WHAT FUNCTIONS DOES EACH ORGANIZATION PERFORM?

"Some of these state departments are responsible for continuing planning, including policy guidance to management agencies, revising, updating the 208 plan, evaluation of performance of 208 management and the relationship of the water quality system with other systems in the region and with state, federal governments."

"Our agency's primary responsibility is for construction, operation and maintenance of facilities to collect, intercept, treat, dispose, reuse, and recycle wastes from municipalities and industries, including stormwater management, nonpoint source runoff controls, sludge disposal and use."

"...the agency I work for has as it's responsibility information systems -- data gathering, storage, retrieval, analysis, and dissemination."

"...our agency is multifunctional in that it has responsibilities for planning, grant review, and coordination but is lacking direct implementation, fiscal, or servicing authority."

"...this agency has responsibility for the coordination and enforcement of a "general plan", this includes financing of projects (construction, operation, maintenance, planning, administration), as well as, setting user charges and pricing policies."

### 3. THE MAIN OBSTACLES TO MORE EFFECTIVE FUNCTIONAL ASSIGNMENT?

"...the continued use and voluntary nature of most intergovernmental service agreements, functional transfers, and consolidations."

"...the slow pace of government modernization and the resultant inability, unwillingness, or lack of authoritative legislation has prevented this department from assuming various local and regional service responsibilities."

"...in the past there has been failure to use management procedures such as the 'A-95 Project Notification and Review System' to sort out eligible area-wide and local service providers."

"...the lack of decentralization of State-administered services and the inability of most State - local governmental systems to devolve service responsibilities from county or regional to municipal and neighborhood sub-units of government."

"...the lack of authoritative regional service mechanisms." (special districts, council of governments, etc.)

"...weak financial bases, tenuous relationships, and competition with other departments, regional planning organizations, and local governments have reduced even their supportive planning capabilities."

"...the continued defeat of most governmental department reorganization proposals that would involve a clearer definition of function responsibilities."



4. IDENTIFY PRIMARY IN-HOUSE ADMINISTRATIVE POLICY AREAS (E.G. BUDGET, PERSONNEL, INTER-CONFLICT, ETC.)

"I think the most important administrative policy area is the Director's responsibility for the department's budget. This is especially true in the areas of allocation of work programming (staff vs. consultants) and control of those programs (divisions, dept., section, etc)."

"Source of funds are definitely of primary concerns. What's available as far as state monies, federal funds for natural resource, or other types of funding such as: 701; HEW programs; LEAA; DOT; etc."

"Change from work programming to actual implementation. There must be a strong relationship of program to budget, and the adoption procedures must also be related to the office programs."

"...the resolution of conflicts between 'current and long-range' planning staffs."

5. WHAT ARE SOME KEY CONSIDERATIONS IN THE ATTAINMENT OF STAFF PERSONNEL?

"...a key consideration being looked at is hiring practices. Some departments use advertising, some affirmative action, some civil service requirements, and others may use a combination of the three."

"Salaries and wages are key issues. They aren't increasing as fast as in 1960's."

"...there are not enough qualified people around for staffing purposes."

6. THE MAIN OBSTACLES TO PROGRAM IMPLEMENTATION?

"...inconsistency within a department's enforcement program."

"...inadequate funding has been one of the biggest obstacles so far."

"Many advanced techniques and procedures available have not been fully utilized in formulating and carrying out implementation."

"Many implementations strategies are developed as parts of other agencies programs."

#### E. IDENTIFICATION OF ADMINISTRATIVE AND MANAGEMENT PROBLEMS

Once the comments and information were received and reviewed, all of the "common problem characteristics" deriving from the independence granted to the functional departments authorizing them to administer and enforce their own program, were delineated for future planning use.

This information will aid those responsible for decision making to better evaluate the effectiveness of the present process within the State. It was observed that all of the authorities (agencies) responsible for carrying out the activities of the planning process had the following distinct characteristics and problems which may or may not hinder effectiveness.

These administrative and management problems are outlined in Table 3.

#### F. CONCLUSIONS

This survey has been exploratory and investigative in nature and represents a comprehensive and convincing study of problems and recommendations related to natural resource planning.

The comments are typical replies by persons within the state who answered the survey. These men and women represent many years of experience in dealing with administrative and management programs throughout Kansas.

Seventy-one percent (71%) of the ninety-one (91) respondents agreed that any subsequent organization would need the authority to deal with several massive problems resulting from a depressed economy, constricted energy supply and a finite environment. They felt that these problems will confront all levels, involve all facets of federation, and cannot be solved by actions of any one unit acting alone.

Thirty nine percent (39%) of respondents stated that they thought their department's method of reaching decisions were laborious and time consuming and the capacity to plan well for the future, and then act in accordance with plans, was one of their weakest points. On the other hand, thirty-seven percent (37%) stated the opposite, and wondered if an autocratic system capable of swift decisions would be more efficient, or, in the long run, more economical. These gentlemen pointed out that a single administrative mistake in a large autocracy can be disastrous.

Table 3

## PROBLEMS IN ADMINISTRATION AND MANAGEMENT

## ADMINISTRATION

1. Some officials are not experienced at present to administer effective programs. Advances in science and technology demand knowledge of a wide variety of practices and techniques.
2. There is a lack of adequate policies and procedures established by state lawmaking bodies to direct the development and execution of an effective natural resources program.
3. Some officials are not granted the necessary authority to completely administer a comprehensive program.
4. There is a lack of organized continuing education and training programs (in-house) for those who perform the work.
5. Some administrators lack the ability to deal with others (often under difficult and unusual circumstances) on an effective professional level.
6. There are numerous problems with legislative appropriations of funds for administering programs.
7. There is need for both executive and advisory committees that would aid in policymaking and planning.

## MANAGEMENT

1. Some departments are functioning as managing departments for other programs.
2. Management programs implemented in areas of responsibility (Table 1) by each department are usually inconsistent with other department programs.
3. Funding has been a major problem in adequately carrying out a management program.
4. Many advanced techniques and procedures available have not been fully utilized in formulating and carrying out enforcement programs.
5. Little research has been done on the effects of land use controls. No body of knowledge or insight is recorded for future use by the operating agencies themselves and no comparative evaluation across systems have been made.
6. Virtually all of the departments emphasize regulation or restraints. Very few systems incorporate or are considering incentives.
7. Administrative processes have created an atmosphere for piecemeal development of most management programs.

Table 3 (continued)

21

ADMINISTRATION

8. There is lack of strong identification between the organizations major components (e.g., administration, engineering, office management, and enforcement).
9. Governmental recruitment systems have not always been geared to attract competent individuals, most agencies tend to be understaffed and inadequately funded.

MANAGEMENT

8. Lack of an "action plan" that various programs could be neatly fitted into has hindered some program success.
9. Departments must deal with municipalities and unincorporated areas in the State who are operating and enforcing regulations and ordinances that are poorly written, outmoded, non-uniformed, or in some cases no guidelines exist at all.
10. There are problems in meeting qualifications and procedures for designating an area and agency for conducting areawide management planning.
11. Each department is involved with different types of regional planning councils or districts which hinders proper organizational setup for natural resource planning and management.
12. There is need to develop new procedures and methods of retaining and storing records, data, and information in an effort to reduce expenditures and time.

Forty-five percent (45%) of the people answering the questionnaire found that in their dealings with programs there existed confusion about the roles and responsibilities, both fiscally and functionally, of each governmental level and between public and private sectors. There seemed to be no consensus or machinery to deal with functional priorities, thus causing a kind of disenchantment by program participants/beneficiaries.

Almost unanimously, ninety-six percent (96%) of the respondents felt a need for sensitivity of higher levels of governmental departments towards lower levels and more input from lower levels to the higher levels. Of special concern to eighty-seven percent (87%) of the participants in this area were: special interest viewpoints that each level develops; inflexibility of Federal regulations; mandatory responsibilities on lower levels without adequate consideration of impacts and resources; and reluctance to recognize the reality of the urban county. Also, sixty-eight percent (68%) of these same respondents felt a lack of accountability and credibility at all governmental levels due to the lack of more citizen participation.

Most participants felt that their agency was being impelled in the face of crisis after crisis toward the formulation of policies on growth and programs for control and allocation of resources which only a few years ago would have been unthinkable. Yet, not only is agreement on the problems we wish to plan for difficult, but there is also lack of adequate personnel, training techniques and facilities, and data gathering systems.

Finally, fifty-four percent (54%) of the respondents made numerous references to special efforts underway on the part of citizens and their elected officials to encourage more citizen involvement in governmental processes. As one official stated: "Modernization has succeeded only when an obvious majority of citizens involved wanted it to succeed. Because the most important modernization occurs when the general will for unity exceeds even by a small margin the deeply held feelings of many citizens for divisiveness."

## CHAPTER 3

### DEPARTMENTAL SURVEY: KANSAS AUTHORITIES RESPONSIBLE FOR NATURAL RESOURCES PLANNING

In accord with the study's methodology a complete evaluation was done on the agencies directly involved in the natural resource planning of the State.

Following are summary reports of agencies' goals and objectives, statutory objectives, organization structure for carrying out its operations, and existing planning and programming activities and capabilities.

#### A. STATE BOARD OF HEALTH AND ENVIRONMENT

##### Purpose and Objectives

By statute the State Board of Health is given general supervision of the health of the citizens of the State. The Board's involvement in natural resources is through its Division of Environmental Health. The policies of this Division relate to growth and development. The goals of this Division as delineated are:

1. Assisting cities and counties with the preparation and implementation of solid waste management plans
2. Regulate sewage discharge in waters of the state
3. Achieve and maintain level of air quality
4. Regulate development of public water supplies
5. Assist in construction of water pollution abatement facilities
6. Regulation of nuclear power in the state.

##### Organization

The major division for carrying out the Board's natural resources related operations is the "Division of Environmental Health". Within this division a number of on-going programs are in effect which may be directly or indirectly related to natural resources. They are:

1. General Engineering and Sanitation Program - established to give coordinated supervision and direction to environmental problems relating to suburban development, school sanitation, insect and rodent control, refuse collection and disposal, and consultation services to other state and local agencies in matters of general sanitation.
2. Water Quality Control Program - established to develop and maintain waters of the state of such quality that it will adequately provide for all beneficial uses including public water supply, agricultural use, industrial use, recreational use and carriage of wastes. The program is also designed to provide data for development of the state, to provide for protection of the general health and welfare of all associated with waters of the state, and to provide for delivery of safe water to the general public through public water systems.
3. Radiation Control Program - established to institute and maintain a program to permit development and utilization of sources of radiation for peaceful purposes consistent with the health and safety of the public.
4. Air Quality Control Program - established to adopt rules and regulations necessary to control air pollution and delegated to the department of health, the responsibility for enforcing these regulations and providing other related services.

#### Planning and Program Activities

Current planning and programming activities are directed towards meeting the health problems confronting the people of the various areas of the state; developing solutions and programs acceptable to the people; establishing acceptable priorities; evaluating effectiveness of programs; and interpreting problems and programs as defined and developed.

#### Commentary

Planning and programming activities of KDEH are basically regulatory. Because of the water, air, solid waste, and radiation based orientation of the authority, such planning and programming activities must rely also on federal operations, as well as, those operations of other related state agencies.

## B. STATE CORPORATION COMMISSION

Purpose and Objectives

The Kansas State Corporation Commission policies relate to the regulation of mineral resource development and conservation and the regulation of corporation, public utilities, and common carriers. The scope of these policies is broad, and no specific growth and development goals are identifiable. The policies provide for incentives for economic growth and development through regulation and thus the stability of utilities, common carriers and private corporate activity. In addition, they provide for the regulation for conservation of the State's oil and gas resources insuring the provision of future energy supplies and the protection of land and water from the deleterious effects of mineral exploration and drilling activity.

The State Corporation Commission is also authorized to "regulate the taking of crude oil from any pool within the state" in order to prevent waste or the inequitable taking of such resources from the available supply. To accomplish these ends, the Corporation Commission is empowered to make and enforce rules for conserving and distributing equitably the natural oil resources. These rules include the prorating of allowable extractions among the individual oil companies of the state so as to prevent wasteful or excessive withdrawal of the resource.

Following is an outline of the Commission's policies as they relate to natural resources:

1. Supervise and control public utilities and common carriers;
2. Regulate drilling for oil, gas, and other minerals and protect usable water;
3. Regulate injection of air, gas, water upon oil and gas properties;
4. Regulate plugging of oil and gas wells;
5. Regulate disposal of oil or gas field brines;
6. Prevent waste of crude oil petroleum or natural gas;
7. Conservation of natural gas through underground storage;
8. Interstate compact to conserve oil and gas;
9. Fix minimum price of crude oil.



### Organization

To carry out its activities, the SCC is organized into four (4) divisions. The divisions consist of general and administrative, utilities, transportation, oil and gas conservation, and speculative securities. Each division has its head, director, or administrator, and the duties of each are indicated by the title. They are:

1. Utilities Division - administers the public utilities laws and the rules, regulations, and policies of the Commission as they apply to the activities of utility companies rendering electric, gas, telephone, telegraph, and water services.
2. Transportation Division - involved with cases of railroad and motor carrier rate matters, train-offs, station closings, dualization of stations, etc., as well as, receives, processes, and prepares for hearing and action, applications pertaining to motor carrier certificates and permits.
3. Conservation Division - handles the regulation of the oil and gas industry, and protects underground fresh water from pollution. Market demand hearings are held for the availability of oil and natural gas, and from the evidence presented the Commission determines the amounts allowable for the next ensuing month. The division also supervises and keeps records of all wells plugged. To protect fresh water from pollution, repressuring and disposal application are closely reviewed. Also, each notice of intent to drill is carefully checked to see that sufficient surface pipe is set. Depth of fresh water wells in each area is constantly checked as a guide for surface pipe requirements.
4. Securities Division - administers the Kansas Securities Act. Examines all applications for the registration of securities and applications for licenses to act as brokers or agents to sell securities.

### Planning and Programming Activities

Current planning and programming activities are directed towards transportation, utilities, and conservation of oil and gas regulations.

This is basically a regulatory department with activities directed towards policy and regulations.<sup>1</sup>

### C. KANSAS DEPARTMENT OF ECONOMIC DEVELOPMENT

#### Purpose and Objectives

The Kansas Department of Economic Development (KDED) has a broad charge of aiding and promoting the economic development of the state through the promotion and development of industry, commerce, agriculture, labor and natural resources. In carrying out this charge, the department has a legislative mandate to "coordinate activities of groups, public and private, which are engaged in these efforts". These are the major goals that the department has delineated:

1. Stabilization and expansion of the economy of the state to the benefit of all regions of the state.
2. Development of urban areas in a way in which overcrowding is avoided and at the same time protecting agricultural areas from urban sprawl.
3. Assistance in the utilization and preservation of natural resources of the state.
4. Assistance in the conservation of water and other natural resources, and maintenance of recreational facilities.
5. The development and promotion of industry and tourism throughout the state.

#### Organization

This department is organized into five major divisions to carry out its operations:

1. Industrial Division - responsible for dissemination of data on industrial resources, advising communities on the formulation of local development corporations, and performing other industrial promotional activities.
2. Commerce Division - responsible for the accumulation and

---

<sup>1</sup>Drury, James W. The Government of Kansas. University Press of Kansas, 1970.

dissemination of information on economic development and the economy of Kansas.

3. Aviation Division - organized to serve as a liaison between aviation interests and the State, furthering air safety and encouraging development and use of airport facilities.
4. Planning Division - responsible for administering federal planning assistance funds to cities and counties and for carrying out the statewide comprehensive economic development planning activity.
5. Travel Division - organized to promote tourist attractions of Kansas and to stimulate the tourism industry.

#### Planning and Programming Activities

The statewide comprehensive planning program being carried out by the planning division of KDED constitutes a broad interfunctional planning coordination activity. This activity, must be considered as a broadscale overall state assignment which has been delegated to KDED as a special project rather than as a continuing activity. Other departmental planning and programming activities are related to divisional activities and fall along functional lines.

#### D. STATE HIGHWAY COMMISSION OF KANSAS

##### Purpose and Objectives

The State Highway Commission of Kansas (SHC) is responsible for the general supervision of construction and maintenance of all state highways, for assisting and providing information to county and other highway officials, for devising and adopting standard plan specifications for road construction and maintenance, for carrying out research on road construction and maintenance methods, for registering motor vehicles, for issuing driver's licenses, and for the maintenance of records of such registrations. Because of financial and legal limitations, it has a restricted role in development within the State. Current policies of the commission relate primarily towards construction of the interstate system and overcoming the backlog of critical highway deficiencies as long as funds are available.

##### Organization

To carry out its activities, the SHC is organized in six field

divisions. Staff activities include planning and research operations, engineering operations, and engineering research activity. Motor vehicle activities are also operated as a separate division of the department. Planning and programming activities are centered in the division of planning and research, but administration of overall operations falls directly under the State Highway Engineer.

#### Planning and Programming Activities

Current activities relating to planning and programming are concerned primarily with the highway function and are not generally related to interfunctional activities. A five-year development program for state highway construction and improvement has been completed, and a ten-year program is now underway. Much of the planning and programming activity is geared towards capacity studies, normal origin and destination analyses, and improvement surveys. The policy of the SHC is to expand as far as possible their approach to planning and programming of highway activities and relate them as a means of development potential within the state.

#### Commentary

The SHC is largely concerned with limited functional planning. Current efforts are to broaden this approach by considering the relationship of highway development to total transportation and economic development. There is adequate capacity for planning and programming within this agency under the present organization. Major problems confronting the agency are adequate highway and transportation planning. These problems relate largely to statutory restrictions which limit the state highway system to 10,000 miles within the state and which require that certain north-south and east-west mileages be maintained within each county. In addition, the problem of necessary funding to establish a progressive highway network checks the planning process in this agency. Construction and maintenance funds are derived from current revenues rather than bonding and appear to be insufficient to meet the needs of the state in performing this activity. This, in turn, tends to fix the amount of realistic planning and programming that can be done within closely prescribed limits.

#### E. KANSAS PARK AND RESOURCES AUTHORITY

##### Purposes and Objectives

The Kansas Park and Resources Authority (KPRA) is charged with conserving and planning the natural recreational resources of the state

and providing for their use and enjoyment by the public. This involves the acquisition, development and administration of state parks and water recreational facilities. Operational policies are concerned with developing parks and recreational facilities at federal reservoirs and state lakes rather than having a broadly based recreational program including the creation and development of non-water-related recreational facilities.

#### Organization

The KPRA has a decentralized organization structure to perform its activities. There is a small central-office administrative staff, but each facility operates as a self-contained unit.

#### Planning and Programming Activities

Current activities in planning and programming are directed toward land acquisition and site development around reservoirs and other locations within the state. The KPRA also takes care of the clerical duties of the Joint Council on Recreation and gathers and analyzes data for use by that body.

#### Commentary

Planning and programming activities of the KPRA are fairly limited. Because of the water-based orientation of the authority, such planning and programming activities must rely largely on federal operations in the construction of reservoirs and other facilities. Although it is the state agency designated to receive and disburse funds under the Land and Water Conservation Act of 1965, its activities in this area are largely administrative. The KPRA has been engaged in the phase of the comprehensive State Planning Program dealing with outdoor recreation planning. Activities in this area, though, have been limited to supplying data and performing review functions.

### F. KANSAS FORESTRY, FISH AND GAME COMMISSION

#### Purpose and Objectives

The Kansas Forestry, Fish and Game Commission (FF&G) is charged with conserving and protecting wildlife by the regulation of hunting and fishing, the establishment of wildlife sanctuaries, and enforcement of fish and game related recreation facilities. Long term goals of the commission are to maintain fish and game population at the highest level possible and to assure a maximum harvest of fish and game for as many

Kansans as possible. To achieve these goals, it is the objective of the Commission to devise ways and means of maintaining adequate fish and game population and facilities both in response to increasing numbers of Kansans interested in fish and game sports.

### Organization

The FF&G has six divisions: Game, Fisheries, Law Enforcement, Information and Education, Field Services, and Administration. Activities can be classified in three general categories: 1) Regulation, handled by the Law Enforcement Division; 2) Maintenance and Development, performed by Game, Fisheries, and Field Services Divisions; and 3) Administration and Information.

### Planning and Programming Activities

Planning and programming activities are handled through the Administrative Division. A long-range plan for development and continued operation was prepared in 1961 and has been largely adhered to. Updating of this plan is now under consideration. Programming activities relate specifically to this agency's operations and not to the total area of outdoor recreation. The agency is participating in the development of the outdoor recreation plan for the State, but only to provide information and to review material prepared by the Planning Division of KDED. All planning and programming is handled directly by the executive director of this agency, there being no professional staff to perform this function.

### Commentary

Operations of the FF&G are directed primarily towards the hunters and fishermen residing within the state. The Commission at this time undertakes no activities directed towards the recreational requirements of the more urbanized areas, leaving this function to the KPRS and to units of local government. Planning and programming activities of the Commission are primarily concerned with current operations, but are consistent with those laid out in the long-range plan for the agency. This agency's total program was developed to meet special interests rather than to reflect broad recreational needs within the state. It is appropriate, therefore, that the FF&G is now participating in the statewide recreation planning effort.

Operations are now limited to state-owned property, with the exception of the licensing and regulatory activities. Much of the land that is appropriate for hunting and fishing is now in private hands. It

has been suggested that because of the scarcity of appropriate gamelands and fishing areas, private lands be leased or licensed for public use with state funds. The fact that a full investigation of the implications of such a policy has not been carried out indicates the need for additional staff with the Commission to perform such activities.<sup>2</sup>

## G. KANSAS GEOLOGICAL SURVEY

### Purpose and Objectives

The Kansas Geological Survey (KGS) is organized as a part of the University of Kansas. Its general purpose is to make and update a complete geological survey of the state, giving special attention to any and all natural products of economic importance in order to determine the character, location and amount of such products. Broadly, the survey has major responsibility for collecting and making available all kinds of geologic information to the public and providing data and advice about a wide range of problems that have geologic significance to individuals, industry, and units of local and state government.

Because of its involvement in many cooperative programs with the other State agencies, its role is larger and more versatile than merely generating and distributing geologic data. It is involved in cooperative programs with the State Department of Health, State Board of Agriculture, Kansas Corporation Commission, and the State Water Resources Board not only in developing and analyzing data, but also in developing policies for the appropriate use and conservation of resources. In addition, the approach taken by the KGS in its mineral resource studies is one of analysis looking toward commodity development.

### Organization

The KGS is organized around six operating sections: Mineral Resources Section, Water Resources Section, Geologic Research, Operations Research, Administrative Services and Environmental Geology. The operating section heads also form an advisory council to assist the director of the Survey in such policy information as is required to perform his responsibilities.

### Planning and Programming Activities

The KGS provides basic information and data for the development

---

<sup>2</sup>Kansas Department of Economic Development. Kansas Growth Policy Study: A Survey of Legislation and Agency Policy. Institute of Social and Environmental Studies, University of Kansas, August, 1974.

of plans and programs of many state agencies concerned with natural resources. It is primarily concerned with research and thus can be viewed as a research arm of the government.

#### Commentary

The KGS provides important basic data for the formulation of policies and programs of state government. Its function is to help establish policy. The Survey has been considerably strengthened by reorganization, and this reorganization can be the means for improving and broadening its research operations.

### H. STATE WATER RESOURCES BOARD

#### Purpose and Objectives

The State Water Resources Board (WRB) is charged with the collection, compilation, and analysis of information pertaining to the climate, water, and soils of the state as they relate to water usage. The purpose is to develop plans, recommend legislation, and formulate policies respecting water use and management. It is the responsibility of the Board to develop a comprehensive state water plan and to update it biennially. In particular, the objectives of the Board are:

1. Preparation of a Water Resources Development Plan for each water planning district within the state.
2. Participation in the preparation of plans for interstate water resource development.
3. Coordination of water studies and plans for federal, state and local agencies.
4. Insure that all funds disbursed for water and water-related projects are in conformity with the state water plan.

#### Organization

The WRB has two major activities: Planning and Research Operations, and Federal Program Coordination and Operations. The first consists of liaison with federal agencies engaged in planning and constructing water and water-related projects, and processing of applications for federal water projects.



### Planning and Programming Activities

Planning and programming activities of the WRB are performed on a functional basis; that is, only with respect to water usage and water management activities. Because of its responsibility for updating the state water plan, the WRB has a significant opportunity for planning and programming. The Board is participating in the preparation of the statewide economic development plan by furnishing data and making water studies. Furthermore, it performs planning and programming functions in terms of its review responsibilities to see that water-related projects conform with the statewide water plan.

### Commentary

Activities of the WRB are primarily geared towards planning for surface water usage and management. But it has not yet come to grips with its mandate from the legislature to plan adequately for the future.

The Water Resources Board operates within a context of inter-agency planning, being concerned with such diverse agencies as the Soil Conservation Committee, the State Board of Health, and the State Board of Agriculture, which are brought together to develop water resources within the planning context of this agency. This is one of the few areas within the organization of the State where several agencies concerned with different aspects of one area are obliged by legislation to work together.

## I. JOINT COUNCIL ON RECREATION

### Purpose and Objectives

The purpose of the Joint Council on Recreation is to provide coordination for the planning, acquisition and development of needed land and water areas and recreational facilities. It is also charged with developing an outdoor recreational policy to guide the development of outdoor recreation resources.

The Council does not have administrative responsibilities. It serves only as an advisory group to agencies that have been given certain recreational responsibilities. It does, however, serve as an advisory group to the governor and to the legislature in matters of recreational policy.

### Organization

The Joint Council on Recreation is composed of fifteen members. Those agencies that are concerned with outdoor recreation such as the Forestry, Fish and Game Commission, the Park and Resources Authority, Highway Commission, Water Resources Board, Historical Society, Kansas Department of Economic Development, State Board of Health and the Department of Administration are represented on the Council. The Park and Resources Authority provides necessary staff services.

### Planning and Programming Activities

No substantive planning and programming activities are carried out by the Joint Council on Recreation.

## J. STATE BOARD OF AGRICULTURE

### Purpose and Objectives

The Board of Agriculture is responsible for the administration of over forty state laws dealing with agriculture. These responsibilities include such activities as administration of fair labeling laws for livestock feeds and remedies and certain aspects of control and administration of waters and streams within the state. The major goal of the Board is the improvement of agriculture and the protection of the public through regulation, inspection, and dissemination of information. A second major goal is the improvement of the state economy through regulation and control of the state's water resources.

### Organization

Activities of the Board of Agriculture fall generally into the following categories: marketing, labeling, dairy product control and development, entomology, water resource development and protection, and regulatory and administrative operations.

### Planning and Programming Activities

Planning and programming activities are carried out at the divisional level and are not centralized. Activities of this agency are concerned with day-to-day operations and are not geared to long-range inter-functional and inter-agency programming. A significant exception to this is the Division of Water Resources, which works in close cooperation with the Water Resources Board in assisting that agency.

### Commentary

The potential for planning and programming on both a functional and inter-functional basis is apparent in many of the Board's operations. This is especially true about the Water Resources Division, whose activities are critical to the function of the Water Resources Board in its planning and programming activities.<sup>3</sup>

### K. CONCLUSIONS

Upon completion of the department research phase, the following conclusions have been researched and delineated in this section of the study.

1. The present administrative structure for natural resources planning and management reveals a large number of separate departments (ten to be exact) headed by boards or commissions, and in some cases, these departments have subordinate district or field divisions which could be listed separately adding still further to the list.
2. There is no domestic activity concerning natural resources that is manned or financed solely by any one department, but, by a combination of federal grants, loans, state and local taxes, bonds, or services charges.
3. The departments may be listed under one or any combination of the following classifications: (a) regulatory; (b) policymaking; (c) administrative; (d) advisory, or (e) quasi-judicial.
4. The extended activities by these natural resource departments gives credit to the ideas of overlapping, duplication, and in some cases possibly complicated relationships.
5. Resources programs have been administered by specialists and technicians and their dominant objective has been program accomplishment with little concern for unitary management concepts.
6. Some departments are serving as regulatory agencies for other department's programs.

---

<sup>3</sup>League of Kansas Municipalities. An Informational Guide to State Services and Technical Assistance. LKM, June, 1973.

7. Because of the lack of staff, funds, and legislative directions, some department programs have been narrowly developed (piecemeal) programs, aimed at solving special resource problems.
8. There exist within the departments and the entire natural resource system an inadequate means by which to carry out a comprehensive plans review and approval process.
9. The Kansas natural resource system has failed to coordinate it's many programs in order to promote orderly development, both rural and urban.

#### L. PROGRAM ADMINISTRATION OVERVIEW

It was found that because of mandated legislation many of the State's departments (natural resources) found themselves under very difficult schedules to get their programs up and running. The results have been a rush to get as much accomplished as possible in terms of "front-end-start-up" with the hope that this method would save more time for program development and program implementation which are the objectives of the program. The department executives are then faced with the problem of prescribing: (1) How a program will be conducted; (2) What agencies are going to be participating and to what extent; (3) What the milestones of completions are; (4) How they are going to deal with natural resources standards and degradation policy issues; and (5) How to come up with a description of the management program to be developed for program implementation.

Many of the people involved in the administrative and management process felt they had come to the realization that natural resources planning is really public policy decisions by elected officials (75% - political/25% - technical). This means that each department must focus on the public policy-makers and get their whole funding needs in front of him.

Another important point highlighted was that of the cost factors involved with 'needs surveys'. The needs survey for the State of Kansas in the area of natural resources will certainly run into the billion dollar range for corrective actions to totally comply with the requirements of any type of public law. This includes of course, agricultural control, all of the fundable grant processes, et cetera. To further complicate financial matters, many programs are tied up in legal suits concerning money that reverted as a result of not spending. There are also monies being held up because of numerous Senate and House Bills

that deal with appropriations and funding.

Local 'regional planning councils' have long been a concept in the natural resource planning process. There are presently fourteen (14) formally organized regional planning councils and one (1) inter-state agency (Mid-American Regional Council) within the State of Kansas. These councils are grouped into all but fifteen (15) of the 105 counties of the State. Regional planning councils will perform certain functions in the state produced natural resource plan and will play an integral part in the input and dissemination of information in the completed plan.

Most of the department's Directors felt that one of the most critical and important functions within the system would be that of a "planning and policy advisory committee." The Directors stated that:

"If the planning process is going to be successful, there's going to be considerable political input."

This is necessary in order to gain acceptance by the public, which may lead to understanding and confidence in the implementation plan. At present there is a lack of authority and input in the local political process in areas of city and county functions. Also of importance to the Directors were the involvement of special interest groups such as the Sierra Club, the Kansas Wildlife Federation, the Kansas Historic Society, etc. It is contemplated that this group must have a spot within the planning and policy advisory committee. Their function would be that of liaison between the technical planning process and the group(s) consistency.

A number of Directors pointed out that their department's projects must be developed to incorporate the natural resource aspects of many of the other conventional environmental and natural resource programs such as water quality, air quality, and solid waste management. Also to be considered will be areas that may have legislative impacts. Legislative impact, in this case, means the research, development, and assessment of information which will lead to legislative change. These areas as identified by the Directors were: Zoning and sub-division controls, permit and licenses programs, user charges and taxes, etc. What this means for some departments is a complete change around internally, as well as, the inclusion of activities which normally are the functions of the other nine specific state agencies.

Best Management Practices was another major concern of the department Directors. What occurs at present is an agreement between an individual department and either Kansas State University or the University of Kansas to provide manuals of best management practices for the natural resources in the State. At the same time, the Conservation Commission is to develop the overall costs for implementation of the

varying levels of control on a statewide basis. This is the dollar factor, and evaluates the resultant effect of those varying or alternate control levels, it must also relate to economic impacts as far as productivity and profits are concerned. Of course, here we also have the political and/or public acceptability of not only the general public, but of the true political process within the state itself. The point being that if you do not have an acceptable plan and an acceptable end point, you cannot implement a plan. There is no state agency, or any agency, as far as that goes, that can hope to implement a plan which is not acceptable through the political process and specifically through the legislative process.

The one thing that concerns most Directors of an agency is that, in order to be successful in both the program and their relationships with the area-wide agencies, they must get implementation. The last thing that they are looking for is just a plan. If monies are spent and we end up with something that just sits on a bookshelf then the agency has done a terrible disservice to the citizens. It is then terribly important in all of the program developments to try and get interim outputs.

"To the extent that we can get out some program elements and get a good septic tank ordinance or a good erosion control ordinance and get that on the books. I think that will serve us well in our request for additional funds and will also help us fulfill our legal obligations."

Also interesting to note is the fact that as new functions in natural resources have been assumed by the state, extended activities by offices and agencies have resulted in overlapping, duplication, and possibly some complicated relationships. For example, there is no important domestic activity concerning natural resources that is manned or financed solely by any one department, but, by a combination of federal grants or loans and state and local taxes or service charges. In conjunction with these methods of financing are the state's natural resources departments' responsibilities for allocation, facilitation of local activity, and regulation authority usually granted by state legislature. This gives each natural resource department legal prerogative to permit local participation in their programs and to define conditions under which participation may occur.<sup>4</sup>

---

<sup>4</sup>Schulz, William, F. Conservation Law and Administration. Roland Press Co., New York, 1953, p. 9.

Another example of overlapping, duplications, and complicated relationships in Kansas's natural resource system may be seen in the fact that both the Kansas Water Resource Board and the Kansas State Board of Agriculture, have responsibilities granted by Kansas Statute 24-1201(a) for the establishment of watershed districts throughout the state.

These types of examples represent concrete reasons for the need of intergovernmental cooperation in planning. In Kansas however, this type of cooperation tends to be rare, yet all of the natural resource departments have begun to address questions of the usefulness and necessity of cooperation among each department. Questions most frequently addressed today has been: 1) What kinds of governmental units were most vital for inclusion in the system? 2) What was the character of that intergovernmental relationship - coordinative or shared authority, policy or functional cooperation?

Interestingly to note in the Kansas natural resource system coordinating the different departments has been a difficult task not only because of those characteristics of problems listed in Table 3, but also because of: 1) different perceptions about responsibilities and obligations; 2) widely varying experiences in daily administration; 3) geographical proximity that often spawns competition; and 4) the uneven burden of coping with constant problems of balancing and adjusting the claims of various interest throughout the state.

Also, coordination of planning and operation has not been secured because those units responsible for natural resources planning, administration, and management, has not fully understood the impact of considering each resource as being independent of the other. Emphasis should now be shifted to considering the natural resources as being interdependent and interrelated units and new strategies should be developed that would no longer foster administrative approaches to just problems dealing with specific resources. (i.e., the creation of both a "Park and Resource Authority" and a "Fish, Forestry, and Game Commission".)

In any case, it is clear that the State of Kansas has stressed such a particularized approach to specific resources. Because of this, Kansas had developed narrow programs aimed at solving special resource problems. (i.e., water, land, minerals, forests, etc.) Conversely, there has never been a comprehensive plan into which the various development programs could be neatly fitted. This means resource programs, for a number of reasons, have developed on a piecemeal, narrowly focused basis.

Partly this has been due to the philosophical or ideological hostility to national planning. But more importantly, it reflects a peculiar genius of Kansas and American political and administrative processes. Typical of this type of resources administration and in some

respects of administrative processes in general, the following points should be stressed and delineated. These points are:

1. The growth and development of Kansas's resources programs has been pragmatic and pluralistic, directed to solving particular problems identified at the time a program was instituted.
2. The growth and development of Kansas's resources programs has been dependent upon the leadership and zeal of individuals usually specialists or technicians, and the support of articulate groups.
3. The growth and development of Kansas's resources programs has been deeply involved in politics, political struggle and conflict; and
4. Kansas's resources programs have been administered by specialists and technicians rather than by administrative generalists, and their dominant objective has been programme accomplishment.

This has occurred because under present legislation, integrated resources planning, administration, and management concepts that recognize the unitary nature of the natural resource problem does not exist.<sup>5</sup>

Other problems which arise out of, or accompanies the growing governmental interest in natural resources is the impact which geography or space has upon administration. With many of the traditional governmental programs, equity is achieved when these programs are carried on uniformly throughout the state of Kansas. Uniformity of treatment coincides with equality of treatment. But this easy rule does not apply to many resources programs because resources are not distributed uniformly across the state. Water must be developed where it is available for development; minerals where they may be found, and so on. This is, of course, the key element in what is called "regionalism," or "regional development". In any case, a major problem of management and planning of natural resource programs is to adjust them appropriately to the needs and potentialities of different parts of the state. In Kansas, these problems of regional organization and related decentralization have received considerable attention in recent years. However, when regional government approaches are attempted, the state has met resistance from a number of local government administrators based on the

---

<sup>5</sup>Wengert, Norman. The Administration of Natural Resources. Asia Publishing House, Bombay, 1961, pp. 31-32.



list of concerns outlined in Table 4.

With respect to budgeting and accounting, new situations arise which must be dealt with in usual ways. One of these concerns is the difficult problem of how to handle developmental financing. This is too complex a subject to explore in detail, but it certainly raises questions of both budgeting and accounting.

Some of the questions that are relevant are:

1. Where development occurs over a span of year, should costs be allocated to one or to all of the years?
2. How should income be handled, if there is any?
3. How should losses be treated?

An aspect of resource development financing that is attracting both practical and theoretical attention in Kansas is identified as the "Cost-benefit" problem. Simply stated, cost-benefit formulas provide that the costs of development should not exceed the benefits from development. An alternate way of expressing this is that inputs should not be greater than outputs. But how are inputs measured? How are costs determined? More difficult, perhaps, are the questions of measuring benefits or outputs, for many development projects having social benefits are not measurable in monetary terms. Or, in other cases the benefits, though monetary, are statistically not determinable. For example:

-What are the benefits of a good road?

-How does one measure the benefits from a safe water supply?<sup>6</sup>

Another area of fiscal problems for which traditional approaches are often inadequate is auditing of developmental programs. Somehow government auditors have difficulty in distinguishing between defalcations and fraud on the one hand, and administrative misjudgments on the other. With respect to the latter, it is often the case that those in charge of development programs must tread new ground and hence the margin for error should be enlarged. Development by definition often requires the taking of a calculated risk. Yet there is a tendency for governmental accounting and auditing procedures to penalize administrators who take such risks. The results can be to stifle development before it gets started or to impede effective action by yards and yards of red tape.

---

<sup>6</sup>Winfrey, John C. Public Finance: Public Choices and the Public Economy. Washington & Lee University, Harper & Row, Publishers, 1973, p. 46.

Table 4

## CONCERNS OF ANTI-REGIONALISM

- Fear of loss of power, prestige, and responsibility for the administrator and his elected officials;
- Fear of big government--the big fish will eat the little fish;
- Fear of losing his job and not being able to find an equally rewarding position in the regional government or elsewhere;
- Concern (oftentimes true) that he and his local government can accomplish their local segment of the regional job more efficiently than a regional multijurisdictional agency;
- Knowledge--based on experiences elsewhere with councils of governments, regional planning agencies, federal and state agencies--that any regional agency will envelop and overwhelm him and his staff with volumes of reports and paperwork;
- Concern that a regional body will lack heart, humaneness, or the local touch, and will not be accessible or responsive particularly to minority groups;
- Concern--based on prior experiences with special purpose regional agencies--that the regional agency and its staff will be more interested in building a bureaucratic empire than in handling the real tasks of coordinating efforts of local government to achieve common goals;
- Concern that formation of a regional agency will result in additions to the gobbledegook vocabulary with which the local government administrator will have to deal, and
- Concern that a regional approach means more meetings to attend and more time spent away from what the administrator feels are his principle duties.

Finally, in the field of budgeting, I would like to refer to a fairly recent trend in the United States and Kansas which has been given considerable impetus by governmental resource activities. This trend is known as "program budgeting", "performance budgeting", or "planning programming, and budgeting systems" (PPBS). The major characteristic of this approach to budgeting is that budget and appropriation decisions are based upon what the agency hopes to accomplish, (its program), rather than on a more-or-less meaningless list of what the government expects to buy with the money in the form of personal services, supplies, vehicles, and other equipment.

It seems to be that this approach represents a major improvement in budgeting concepts, and will facilitate legislative policy decisions and effect administrative execution.<sup>7</sup>

Turning now to the new types of personnel problems which have resulted from the growing attention of Kansas government to natural resources, I would like to place emphasis on the problems of recruiting technicians, scientists, and other technically trained personnel. In many cases and for many reasons governmental recruitment systems have not been geared to attracting enough technicians, or, technicians with the level of competence needed. Especially in cases where the government services have tended to attract the generally trained arts graduates, The time has come for drastic changes necessary to bring technicians into government service.

The problem is not only one of recruitment. It involves conditions of work, salary levels, promotion and career opportunities, etc. In Kansas for example, government employment has often been considered much less attractive to the young scientist or engineer than employment with private industry. The results being that some personnel people state that government tends to get second and third raters.

Another significant impact on public personnel is in the field of training, for as governments take on more and more responsibility with respect to natural resources programs, the need for training and the content of training programs changes. Where agencies are staffed largely with technical personnel, these people should often be given special training to equip them to deal with governmental problems. Conversely, the non-technical administrative personnel dealing with resource programs must be given an understanding of the technical aspects of the agency program.<sup>8</sup>

---

<sup>7</sup>Norton, Hugh S. Modern Transportation Economics, Merrill Publishing Co., 1971, p. 134.

<sup>8</sup>Sharkansky, Ira. Public Administration: Policy-Making in Government Agencies. Univ. of Wisconsin, Markham, 1970, p. 119.

Also, with technology changing so rapidly, opportunities must often be provided for keeping staff members up to date in the field of their responsibility. This must be done because natural resources programs in Kansas have always rested in one way or another on science and technology.

Perhaps in no other policy area is so much reliance placed upon research and scientific data as a basis for decision. Resource planning is peculiarly the domain of the engineer, the scientist, the statistician, the economist. As a result, there is a tendency to regard resource decisions as being outside the realm of politics. It is not infrequent with respect to resource decision to cite the authority of science as the justification of particular policies and to deprecate the injection of politics into the decision matrix. Yet in no other field is there greater confusion between the role of science and the role of politics. Questions, for instance, of where a dam could be built, how large it could be, and how much power it might produce, and at what cost, are technical questions in the proper domain of the technician. But the questions of when a dam should be built, how its power and water should be used, who shall pay for the structure and how much; these and similar questions are political because they require decisions based upon values and beliefs as well as on technical data. And it is the political process that should generally decide this type of question.

But what often happens is that the value judgments of the engineers or scientists masquerade as scientific certitude or else the political struggle goes on subrosa to influence the technical people in key positions.

In Kansas we also see that politics is more than simply voting or party activity, although these are clearly important aspects of the political process. In short, the political process includes a complex range of activities by which public and governmental decisions are made. Decisions that will be of advantage to some and disadvantage to others. Implicit in this view is the recognition in Kansas of the many forces and factors that influence and shape the direction and content of governmental decisions:

- Values
- Beliefs
- Ideals
- Myths
- Hopes
- Disappointments
- Fears.

All are a part of the context within which governmental decisions are made. It is the interaction among these forces and factors that is the heart of the political process. The issues themselves, the manner in which they are drawn, the participants, their aspirations and expectations, together with the structure, mechanisms, procedures, and techniques of government are all relevant to the working of the political process in Kansas. There are also a number of formal and informal groups (business, social, religious, labour, etc.) acting together for more or less agreed upon purposes having some relation to government, which have large effects upon a number of types of decisions made. However, to speak of groups in the political process in Kansas is merely a useful way to take into account the fact that in most cases today, political action requires organization, for the single individuals rarely can be effective in our complex, populous societies. Hence it may be expected that group activity with respect to resource decisions will be intense. The stakes are large and in the interest vital.

It was also found that there are numerous state agencies that issue publications dealing with aspects of natural resources or conservation. These include the "Park and Resource Authority," the "Forestry, Fish, and Game Commission," the "Geological Survey," the "Water Resource Board," and the "Kansas Department of Economic Development" just to name a few. This is an encouraging circumstance, but the situation has its bad points because no agency confers with any other before publishing its own material. There is no central agency through which all natural resources material is cleared. Lack of coordination is especially detrimental to proper presentation to public school students and other interested parties.

Another drawback to the adoption and application of a unified natural resource program and plan has been the lack of proper conservation of natural resource understanding by the vast majority of the people in the state. Natural resources education has not kept pace with advanced insights as to the need for a unified program. Although natural resources is and has been recognized as a necessary course in the public schools by many educators, few schools have included any such courses in their curriculum.

Finally, some special problems also arise in connection with resources planning in the state of Kansas. It seems today that much planning effort moves forward from an inarticulate major premise that the plans are the answer. But this attitude confuses the methods of planning with the results which can be obtained. It overlooks, too, some of the crucial limitations on planning, which, in fact, emphasize the important role which the political process plays in arriving at policy and programme decisions.

Several points need to be mentioned in this connection. In many situations for which plans are developed, all relevant data is not

available and for data the planner must substitute judgement. Even where data is ample, however, plans rest upon elaborate value premises which must not be confused with objective data. In many cases, plans being for the future, decisions must be made on an assessment of probabilities. And in this process, many variables are assumed to be constant or are ignored.

The purpose of this section of the study has been to survey and analyze procedures employed by each department and its Director trying to coordinate their effects throughout the State. The findings have been that it will behoove those concerned to do the best job possible in program assessment and implementation. It can provide considerable benefit to any state from an environmental and natural resources standpoint if done right. On the other hand, it can do considerable harm to any state if not attached with proper philosophy or with the proper mechanism.

It is recognized that more than planning is needed. Planning and Management requires talent and leadership. Preparing the plans does not accomplish the goals; it is simply the necessary first step. Implementation requires intelligence and, sometimes, courage. Kansas is fortunate in having many qualified leaders in the various areas of state natural resources activities. It will require the combined efforts of all these individuals to develop and implement the "State Natural Resources Plan", so that duplication can be eliminated and tax dollars used to their optimum efficiency. The future of Kansas will certainly be composed of both problems and opportunities and a State Natural Resource Plan will provide a sound basis for answering needs and realizing goals. Through constant updating and revision the process will provide a continuing means for dealing with "program start-up"; program costs; implementation procedures; and other administrative concepts.

This will also allow decision makers a tool for meeting the demands of those who want government to do more and those who want to pay less for what ever it is that government does.

The State of Kansas might also give consideration to improving the efficiency and productivity of those government units studied in this chapter. In a time of increasing fiscal constraints on state government and political constraints on raising taxes, achievement of program goals may depend on just such administrative success. Concern should also be given to effecting a streamlined reorganization of these agencies to pair up and consolidate like functions. This would provide a more effective system in which to evaluate concurrently the consequences of both natural resources and economic development policies. Emphasis may be placed upon developing information useful in resolving goal-setting issues like a desirable rate of economic growth or the overall level of natural resources improvement and conservation.

The essential objective of such concern is the same as the basic objective of all governmental and political action - guiding the patterns and forces of society for the benefit of people. Planning provides the means by which a unit of government may fulfill its commitment to people by anticipating and preparing for future needs inherent in the process of urban growth and change. The primary objective of planning is thus achieved by improving the effectiveness of democratic government.

The most important objectives for planning in the decade ahead should be to gain the initiative in preparing for and guiding the course and quality of development and, second, to apply contemporary technology and professional judgements to problems inherent in the consumption, conservation and recovery of scarce resources such as land, water and air.

## CHAPTER 4

### ENVIRONMENTAL QUALITY: FEDERAL AND STATE EFFORTS IN NATURAL RESOURCES PLANNING

#### A. FEDERAL LEGISLATIVE EVENTS

In the ensuing years, Congress considered and passed a record volume of legislative actions that are having impact on natural resources management throughout the entire United States.

Early in the decade Congress established a new Bureau of Outdoor Recreation, and enacted the Land and Water Conservation Fund Act in an attempt to provide revenues to meet the nation's growing recreation demands. In rapid succession came other legislation such as the National Environmental Policy Act, The Federal Water Pollution Control Act, The Ocean Dumping Act, The Highway Beautification Act, and The Wilderness Act just to name a few of the more important ones.

Congress also acted to set aside and preserve for future generations portions of lands, mountains, beaches, and lakes in unprecedented amounts. The 94th Congress passed several long-awaited measures for conservation and balanced management of natural resources. The Bureau of Land Management, through the Federal Land Policy and Management Act of 1976, has been granted legislative direction and strong authority to carry out its objectives. Also, the National Forest Management Act of 1976 has permanently established the National Forest System and has outlined extensive guidelines for its planning and management.<sup>1</sup>

The Congress and the states also added to the Wilderness and Wild and Scenic Rivers Systems. Since June 1976, thirty-four (34) Wilderness areas making up some 1.7 million acres of land have been added, and, there are now nineteen (19) rivers protected by the Wild and Scenic Rivers Systems with an additional fifty-one (51) rivers either under study or already studied and proposed. Also, under terms of The Alaska Native Claims Settlement Act, the Congress is to consider designation of major additions to National Park, Forest, Wildlife Refuges, and Wild and Scenic Rivers Systems. In December, 1978 under the authority granted by the 1906 Antiquities Act which allows the establishment of "national monuments" by executive decree President Carter ordered that 56 million acres of Alaskan wilderness be preserved as new national parks, forests and wildlife refuges. The Interior Department will submit a proposal next year (1979)

---

<sup>1</sup>Jackson, Senator Henry M. Environmental Quality: Progress and Prospect. Biloxi, Mississippi, April 3, 1968.



to preserve an additional 54 million acres of Alaskan wild lands, bringing the total to 110 million acres to be preserved.

More than 8 million acres of prime U. S. farmland was converted to urban development, reservoirs, and other uses from 1967 to 1975 - an average net loss of 1 million acres per year. Losses in the southeast and Corn Belt regions were most severe, accounting for 3 of the 8 million acres, with the greatest losses of prime farmlands occurring in areas with minor environmental and management problems. Also, erosion to topsoil from farmlands is severe enough to threaten continued crop productivity despite federal expenditures for soil conservation of nearly \$15 billion since the 1930's. The Water Resources Conservation Act of 1977, calls for a soil and water resource inventory and program planning effort similar to that required of the Forest Service by the Resources Planning Act. Other approaches to effective soil conservation are aggressive implementation of the nonpoint source pollution control program, through Section 208 of the 1972 Water Pollution Control Act, and making price supports, loans, crop insurance, etc., conditional to adoption and maintenance of adequate soil conservation measures.<sup>2</sup>

Soon after taking office, President Carter initiated a major interagency review of federal water resource projects and announced his intention to develop comprehensive water policy reforms and to oppose construction of projects which fail to meet minimum economic, environmental, and safety criteria. A federal task force on water conservation is preparing detailed options and recommendations as part of a comprehensive review of water, which provides one-fourth of the nation's freshwater, has already been seriously depleted in parts of the Midwest and Southwest and is now being further mined or overdrawn for irrigation and municipal water supplies, and, throughout much of the West and parts of the Midwest the major environmental event of the year was the drought.

A new Executive order on Floodplain Management has been issued that restricts federal executive agencies from undertaking, supporting, or allowing construction and other incompatible development in floodplains unless the agency makes a formal finding that no practicable alternative exists. There is also an Executive order requiring all federal executive agencies to refrain from supporting construction in wetlands wherever there is a practicable alternative.<sup>3</sup>

Hard rock mining on public lands is still governed by the Mining Law of 1872. It does not provide for balanced use of the federal lands

---

<sup>2</sup>Carter, Luther J., "Soil Erosion: The Problem Persists Despite the Billions Spent On It", Science, 196:409, 1977.

<sup>3</sup>"Floodplain Management", Executive Order 11988, Supra Note 260, at 803.

but allows mining to preempt other uses, it provides for conveyance of mineral lands out of federal ownership rather than for leasing them subject to rental and royalty payments, and it does not provide adequate control of environmental damage from mining on public lands.

In 1977, much-publicized cases came to surface in which plans to build dams came into conflict with endangered animals and plants. In Tennessee, the Tallico Dam was halted by court order because it would destroy the last available habitat for the Suail Darter, a small freshwater fish. An endangered flower, the Furbish Lousewort, was found within the impoundment area of the proposed Dickey-Lincoln reservoir in Maine.<sup>4</sup>

At the 29th meeting of the IWC (International Whaling Convention) in 1977, member countries agreed to a cutback of 10,211 whales for the 1977 quota, complete protection of Bowhead whales, and new quotas to include all species of large whales.

O.R.V. (Off Road Vehicles) users are a small percentage of the total population, but the resource damage that they cause is out of proportion of their numbers. ORV's have invaded a variety of lands from deserts and coastal sand dunes to forested mountains and fertile plant and wildlife habitats. In addition to causing plant destruction, soil erosion, and gullying, ORV's can adversely affect soil moisture, water quality, and wildlife habitat.<sup>5</sup>

The Department of the Interior's "Preliminary Urban Parks Study" recommends changing the Land and Water Conservation Fund grant formula to be more responsive to urban needs. And finally....

The President's National Energy Plan is intended to provide a smooth transition into the era when the world's oil will become more scarce and costly.<sup>6</sup>

These and other measures came in response to a steadily growing public concern about the quality of the environment and for the natural resources. The results of which has been those programs mentioned above regarded by many as a step toward a kind of totalitarianism, by others as a conflict with free enterprise and personal liberty. But regardless of which view one might favor, there is no question that Congress has responded admirably in the last few years; and senators and representatives have been quick to impress upon their constituents the volume of

---

<sup>5</sup>The Geological Survey of America, Committee on Environment and Public Policy. Impacts and Management of Off-Road Vehicles, Boulder, Colorado, 1977.

<sup>6</sup>Executive Office of the President, Energy Policy and Planning, The National Energy Plan, Washington, D. C., Government Printing Office, 1977 p. vii.

legislation that has been passed.

Most importantly, is the ramifications that the legislation and programs for the environment and natural resources has had on the use of land. The Federal Government virtually from its inception has strongly affected the use of land, so much so that it might be fairly said that the Federal Government has made nearly all of the important governmental decisions, leaving the irrelevant incidentals to lesser governments. Could it be reasonable said that local zoning regulations are as important to land use as the Federal Government's involvement in transportation development? Federal tax policies, agricultural policies, military expenditures, housing subsidies, and virtually every other aspect of its activities have also affected land use.

Thus the Federal Government, with few laws on the subject of land use control, nevertheless has had the greatest governmental effect. But since the laws specifically intended to affect land use were passed mainly by local governments, it is on these local governmental operations that legal attention traditionally is focused. But the Federal Government is not without laws directly relevant, and more are likely in the next few years. Some of these relevant laws for example will be discussed in terms of natural resources under the following topics:

1. Air and Water Pollution
2. Outdoor Recreation
3. Agriculture Programs
4. Soil and Water Conservation
5. Forestry Administration

The discussions will only be brief reports on the above topics and how the laws apply.

The first area of consideration is that of the 'pollution control programs' which will show a multiple range of actions taken in that particular area.

## POLLUTION CONTROL PROGRAMS

### I. Air Quality

The Clean Air Amendments of 1970 set in motion a nationwide, federal-state program to achieve acceptable air quality. The Act requires achievement of national standards of ambient air quality to protect public health by 1975. These were known as primary standards and required that more stringent standards needed to protect aesthetics, property, and vegetation "secondary standards" - must be achieved

within a "reasonable time".

The act specifies major reduction in new car emissions of hydrocarbons and carbon monoxide, as well as, nitrogen oxides. The reduction in emissions are to the level that Congress estimated to be necessary to achieve the health-based ambient standards even in the most heavily polluted areas of the Nation.

- A. Urban Transportation - one of the most dramatic impacts of the Air Act is on urban transportation, particularly commuter driving habits. In those 37 metropolitan areas where state controls on stationary source emissions and federal emission limits on new motor vehicles will not by themselves reduce total emissions sufficiently to meet the air quality standards, were required to include transportation controls in their plans for achieving national air quality standards.

There are two basic types of transportation control strategies:

- 1) those which reduce miles driven, such as expanded mass transit and carpooling; and
  - 2) those which reduce emissions per mile, such as inspection and maintenance programs, retrofit devices for older vehicles, and changes in traffic patterns.
- B. Land Use and Growth - land use and the distribution of economic growth will be affected by the Clean Air Act's provisions for controlling major new sources of air pollution. Standards must be established for the performance of new sources based on the best available demonstrated control technology and processes and will apply even when they are more stringent than the emission limits necessary to meet the air quality standards.

The land use and growth distribution impact of the new source performance standards is neutral, it neither encourages nor discourages siting a plant in any area of type of area. It does however require States to exercise siting controls when necessary. States must be able to preclude the siting of a new facility in a particular area if its presence there, despite best available emission controls, would cause or exacerbate an air quality standard violation.

E.P.A. has issued regulations requiring States to approve in advance the siting and construction of both new polluting

facilities and such "complex facilities" as shopping center, amusement parks, and highways that would cause violation of air quality standards by attracting concentrations of vehicles.

## II. Water Quality

The Comprehensive "Federal Water Pollution Control Act" (FWPCA) Amendments are aimed at strengthening the clean water program. The Act:

1. extends federal - state regulations to all navigable waters.
2. requires specific effluent standards for individual facilities to be implemented through permits
3. makes mandatory the use of the best available demonstrated technology in new facilities
4. authorizes stringent federal standards or prohibition for toxic discharges
5. strengthens and streamlines federal enforcement procedures
6. authorizes large fines
7. permits citizens to bring legal actions to enforce its requirements, and
8. strengthens the federal grant program for municipal treatment plants while working toward self-sufficient financing of treatment plants once the current backlog of needs has been met.

The law's basic regulatory requirement is that "point source" discharges (industries, municipal treatment plants, feedlots, and other discrete sources) must obtain a permit specifying allowable amounts and components of effluents and a schedule for achieving compliance.

The act requires States to develop a comprehensive and continuing planning process for water quality management. Plans must include not only point source controls but also controls for diffuse land runoff and other nonpoint sources. States must submit annual reports to EPA that inventories all point sources of pollution, assesses existing and anticipated water quality, and propose programs for non-point source control.

### III. Pesticides

The Federal responsibility for regulating these chemicals in the public interest was transferred to EPA in 1970 through portions of the Federal Food, Drug, and Cosmetic Act and the Federal Environmental Pesticide Control Act (FEPCA) which substantially amends the Federal Insecticide, Fungicide, and Rodenticide Act of 1947 (FIFRA). It strengthens and expands regulatory authorities from labeling to the use of products, authorizes classification of chemicals for restricted use only, streamlines administrative procedures, and extends control to products sold only in intrastate commerce.

### IV. Noise

The Noise Control Act of 1972 gives the federal government a major new role in controlling noise problems. Regulation over new products is made a federal responsibility. But there is still room and need for vigorous local action. Federal controls, except those for aircraft, trucks, and railroads operations, apply only to the noise emissions of products, not to the time, place, or manner of their use. For example, although federal regulation will cut the noise generated by new construction equipment, local regulation and enforcement will still govern its maintenance and set the hours for its use. Communities may also wish to restrict traffic and other noise-generating activities at times.

The most significant source of noise is transportation (airplanes, automobiles, trucks, buses, and railroads).

### V. Solid Waste

Since 1965, the federal government has helped communities find new solutions for solid waste problems through research, analysis, demonstration of new technology, and technical assistance. EPA grants and activities have stimulated development of new technologies for the recovery of wastes; have contributed to research, development, and implementation of improved methods of collection and disposal; have helped close thousands of open-burning dumps; and have developed and demonstrated management tools to maximize the efficiency of operations.

The federal government also continues to stimulate recycling by purchasing recycled materials and by seeking to eliminate discriminatory treatment of recycled materials in such areas as government approved interstate transportation rates.

#### VI. Energy and the Environment

The United States is the most energy intensive nation in the world. With only 6 percent of the total population, this country accounts for more than one third of the world energy consumption.

Energy is a vital component of environmental rehavilitation as well as America's prosperity. The problem is whether reasonable energy demands can be met without harming the environment.

EPA energy objectives are to: minimize the growth of energy demand; promote efficiency and conservation; work toward decreasing the reliance on fossil fuels; make energy-environment impace assessments on the basis of entire energy chain (extraction, processing, transportation, and use); maximize pollution control technology and increase energy flexibility by increasing electricity and uses, particularly in transportation; encourage clean use of domestic coal; promote the development of exotic energy sources (solar, geothermanl, and fusion); and to oppose projects which promise quick energy but at high environmental cost.

#### OUTDOOR RECREATION

Return to the land, back to nature, year of the bike, and hike for health were all cries heard in the seventies. State governments met those cries with expanded environmental awareness programs administered through their agencies responsible for providing outdoor recreation oppertunities. Park and recreation systems received recognition for those programs that met public demands.

State park systems established and expanded nature interpretative programs; park naturalists were added to inform the public of man's relationship to nature; historical restoration and interpretation projects and programs were improved; and new state legislation was enacted to provide safe, pleasant, outdoor recreation places and experiences.

Aside from the special use taxes and authorized bond issues, the States have relied predominately on the Land and Water Conservation Fund (LWCF) and the Housing and Urban Development (HUD) Open Space Act, both federal programs, to provide funds for acquisition and development

of outdoor recreation properties.

## AGRICULTURE PROGRAMS

### I. Consumer Benefits

A specific benefit to the consumer is the passage of the federal Wholesome Meat Act. It has provided for minimum standards to be enforced in all States in regards to ante-mortem and post-mortem inspections, reinspection, and sanitation of all meat and meat food products.

The inspection of poultry products and shell and processed eggs also are maintained under the same rigid standards as that for red meat. These enforcement procedures are a result of the passage of the Wholesome Poultry Products Act and of the Wholesome Egg Product Inspection Act.

Closely tied with the consumer services program is the enforcement activities in the weights and measures area. Ninety percent of the state agricultural agencies are involved in assuring the public accuracy weights, measures, and counts in their day-to-day commercial transactions. This activity ranges from checking to see that the huge railway scales accurately weigh the wheat that the farmer is sending to market, down to insuring that a 12 ounce can of soda actually contains the full amount specified.

The eradication and suppression of animal disease is an important function of all state agricultural agencies. Some programs are aimed specifically at diseases transmissible to humans and others are aimed at diseases which pose a serious and definite threat to the general health and welfare of all livestock.

Plant, insect disease, and weed laws have been enacted to protect the horticulture of specific regions and prevent the spread of a number of serious diseases, insects, and toxic weeds to other areas.

### II. Poison Regulation

The federal Environmental Protection Agency (EPA) has brought together all pesticide programs under one department. The passage in 1972 of the federal "Environmental Pesticide Control Act" gives EPA authority to establish controls and patterns of use for pesticides nationally.



The act will provide EPA with the capability to assist state departments of agriculture in carrying out their responsibilities under these new national standards.

In conjunction with these guidelines is development of field reentry standards for agricultural workers to protect them from exposure to pesticides. These standards were established through the hearing and rule-making process of EPA and the Occupational Safety and Health Division of U. S. Department of Labor. State departments of agriculture have provided extensive input into the rule-making process. These departments as well as other state agencies will have responsibility for administering and maintaining the reentry standards.

### III. USDA Programs

The Marketing and Consumer Services of the United States Department of Agriculture (USDA) conducts regulatory programs in cooperation with all States, generally with state departments of agriculture, but sometimes with state livestock commissions. In animal health and plant pest control work, cooperative programs are conducted with all States, Puerto Rico, and the Virgin Islands to control and eradicate various diseases and plant pests. The Animal and Plant Health Inspection Service (APHIS) conducts these programs, establishes goals, and keeps all States informed of progress toward eradication and encourages uniform procedures in various states. The Plant Protection and Quarantine Division of APHIS conducts programs designed to prevent the introduction of plant pests not known to occur or be widely distributed in the United States.

## SOIL AND WATER CONSERVATION

### I. Conservation Districts

The function of the meeting soil and water conservation problems is principally carried out through individual conservation districts which include within their boundaries virtually all of the nation's privately owned land.

### II. Other Developments

New federal conservation incentive programs hold promise for rationalizing land treatment systems and accelerating installation of erosion control practices. New authorities contained in the Water Bank

Program, the Rural Development Act of 1972, and the Agriculture and Consumer Protection Act of 1973 provide for long-term contracts between landowners and the U. S. Department of Agriculture as a basis for furnishing coordinated technical and financial assistance.

Initiatives at the national levels to establish land use policies have emphasized the need for adequate soil survey data to help determine the "carrying capacity" of land not only for agricultural use but also residential, commercial, recreation, and other purposes.

A new inventory of private recreation facilities has been initiated by conservation districts in cooperation with the Bureau of Outdoor Recreation and the Soil Conservation Service. Also, renewed interest in concepts of flood plain management using zoning, easements, land use restrictions, incentives, and other techniques to reduce flood damages and enhance the value of stream systems can be seen throughout the country.

## FOREST ADMINISTRATION

### I. Forest Fire Protection

All States are involved in fire protection on state and private forest and watershed lands. The federal government cooperates, through the Clarke-McNary Act of 1924, with financial and other aid which is administered by the U. S. Forest Service. Fire weather forecasting by the Environmental Science Services Administration, (U. S. Dept. of Commerce), has aided the States fire-fighting forces through specialized weather forecasts and warnings. The National Association of State Foresters and the U. S. Forest Service have completed a study to develop a system for determining on an interim basis the total value of all damageable resources on protected lands.

### II. Forest Management Assistance

Technical forestry assistance is available to private landowners on an advisory and educational basis. The federal government through the U. S. Forest Service, provides financial and other assistance to the state foresters in carrying out this program. Assistance and advice to private landowners covers tree planting, timberstand improvement, improved harvesting, marketing assistance, and formulation of management plans to help meet the owner's objectives.

### III. Reforestation

The federal government, through the U. S. Forest Service, cooperates in reforestation under the Clarke-McNary Act. Private landowners purchase trees from state nurseries at minimal cost with the remaining expense of production being carried by state and federal governments.

Title IV of the Agriculture Act of 1956 provides assistance to the States in their own forestation programs with the objective of increasing the potential supply of industrial wood to meet future needs and to provide increased public benefits from other values associated with forest land.

### IV. Watershed Programs

Federal programs in this area comes under the Watershed Protection and Flood Prevention Program (P.L. 566) which assist in forest land treatment measures such as soil stabilization, tree planting, improved fire protection, and improved forest watershed management.

### V. Forest Pest Control

Foresters may be responsible for the prevention, detection, and suppression of forest insects and diseases on state and private lands. Air and ground surveys covering millions of acres are conducted annually to detect or evaluate insect and disease outbreaks. In many states this involves cooperative efforts with the U. S. Forest Service, as well as other government agencies and private landowners. The forest Service's primary role in these cooperative efforts is the providing of technical assistance and cost-sharing with the States on approved insect and disease prevention and suppression projects.

## B. STATES REACTIONS TO FEDERAL LEGISLATIVE EVENTS

A multiple range of actions have been undertaken by States because of Federal involvement in the area of natural resource planning and management. Because of many varied types of Federal legislation, State governments have approached natural resource planning and management from a number of different areas and concepts.

States have, for instance, responded with various laws and enforcement procedures directed at controlling water, air quality, and pollution problems. This can be seen in the vast improvements in water pollution

control programs where states have moved to strengthen the regulatory policies and programs governing the discharge of polluting materials. The first step was to establish water quality standards which consists of legally sanctioned uses assigned to specific waters. These standards were to be accompanied by water quality criteria and implementation plans. Also a second outstanding feature in state water pollution control programs was the increase in the number of states providing financial assistance for the construction of waste treatment facilities. In addition, more effective use of planning as a part of the state's water pollution control strategy might be cited as a third highlight.

In the case of air pollution control the state's primary responsibility was the designation of air quality control regions (AQCR) for all affected interstate and intrastate areas. This also brought about new state departments of ecology or environment as well as increased financial assistance, and support of state programs and control agencies in operation.

Progress in the area of state parks and recreation area development can be seen in all states. State facilities have been developed into resort and lodge areas, parks for the handicapped, state marines, coastal resources, and other types of public facilities.

Also events, personalities, and places associated with the nation's history represent another major dimension closely related to state park and recreation operations. A number of states have devoted considerable resources to this type of program.

In many of the populous states, agriculture is becoming more involved in environmental problems common to both urban and rural areas. Of major importance is the problem of air, water, and soil pollution and their effects on city and country life. Another subject of increasing concern is the retention of open spaces and the evaluation of land-uses for recreational, commercial, residential, industrial, and agricultural purposes.

States have also had to deal with water shortages and floods, poorly managed timber resources, surface mining which has caused pollution and destruction, and new trends in cropping practice intensification which has endangered the sustained production capacity of many of our finest soils. Progress continues to be made in the conservation of agricultural land and water resources, a fundamental requirement for the economical and sustained production of food and fiber in the Nation. Proper grazing management practices were performed and significant increases in wildlife habitat management were registered. Where climatic hazards made the intensive and sustained application of conservation measures especially important, additional landowners were assisted with planning construction services.

Due to the prevalence of man-caused fires, the states, individually and jointly, have expanded considerable efforts in fire prevention campaigns. State forestry departments are updating their fire-fighting efforts through acquisition of more modern equipment and increased use of retardants, water drops, and other improved techniques. States have also begun to hire more service foresters in efforts to improve forest land management by providing planning, development and technical assistance to community action agencies, rural development groups, soil and water conservation districts, and local development associations.<sup>7</sup>

There has also been heavy activity by the States in other areas such as land-use planning, (See Appendix 6) adequate funding, participation in cooperative actions on a regional basis, recruitment and training of technicians and professionals, assistance in improving detection and monitoring devices, and in research efforts. Also several states have mounted their efforts to improve natural resource management and environmental quality by coordinating administrative efforts. Departments of ecology or environmental conservation protection, by these or other titles, have been established to bring together functions formerly administered by different departments and to take on added functions as required. However, both administratively and program wise, much remains to be done, and innovation is required to find new and better ways to detect and prohibit further deterioration of the environment and our natural resources.

Solutions to American's natural resources problems can only be accomplished through joint governmental efforts. This means interdisciplinary pursuit by federal, state, and local levels of government. State government, however, more than any other level of government, possesses the implements to mold the setting that must exist if comprehensive natural resource's planning, management, and development is to proceed successfully.

The state is in fact, an established regional form of government which occupies a unique vantage point that is both broad enough to allow it to view developments within its boundaries as part of an interrelated system, yet close enough to enable it to treat natural resource problems individually and at first hand. There are clear reasons for this. The ability of local governments to meet critical problems is largely conditioned by the state. The tools the localities can utilize, the money they spend and the powers they exercise, are to a great extent determined by a wide assortment of state constitutional, statutory, and administrative regulations. Even given the independence that is afforded localities by home rule, the state still controls and delimits local government's functions.

---

<sup>7</sup>Morton, Rogers, C. B., Secretary of the Interior, "Rigorous Conservation, Responsible Development, Our National Resources: The Choices Ahead", U. S. Department of the Interior, Conservation Yearbook, Series N. 10, 1974.

Responsibility for providing a workable pattern of local government in metropolitan and non-metropolitan areas, with variations as circumstances require, is clearly a state responsibility, especially in the case of metropolitan areas, whose present complex pattern is the handiwork of the state itself. Local governments face numerous obstacles. These range from deficiencies in authority and funds to problems that transcend the corporate boundaries of local governments yet deeply affect their capacity for sound development. There is no doubt that if localities are to function well, the state must provide the proper framework and many of the means for them to do so. From a regional viewpoint the state has ample powers and financial resources to move broadly on several fronts. Far ranging state highway, recreation, and water resource development programs, to name a few, have had and will continue to have great impact on the development of natural resources programs. Moreover, strong state leadership will in the long-run determine its role within the federal system in influencing the character of development within its boundaries.

The discussions below will be brief reports on the actions taken by states to solve problems in natural resource areas.

#### WATER AND AIR POLLUTION

##### I. Reorganization of State Pollution Control Agencies

Highlights in recent developments at the state level has been the major reorganization of the State's organizational structure for administering its pollution control programs. One result is that air and water pollution control programs are now consolidated activities in most states. The objectives being sought in these reorganizations, although varying in importance among the states, generally are seven. These objectives are to:

1. Consolidate fragmented activities to make program administration match the integrative way problems occur in the environment
2. Reduce the proliferation of boards and commissions to make state government more manageable, and in some cases change their role and composition to "professionalize" state environmental policy-making, and make policy-makers more responsive to elected leaders and the public
3. Transfer pollution control programs from the health department to broaden pollution concern beyond health

4. Create a stronger regulatory role for the State and an agency advocate for the environment
5. Design a new environmental department that will be more publicly visible, thus demonstrating the State's commitment to environmental interest groups to form a stronger political base for environmental control.
6. Increase accountability for public officials and public programs
7. Facilitate administrative efficiencies.

Two models seem to be guiding the states in these organizations. One is the EPA like configuration, which is best exemplified by the reorganizations in Alaska, Arkansas, Illinois, Minnesota, Nebraska, Oregon, Puerto Rico, and Washington. The other, the super-department concept adopted in Connecticut, Delaware, New Jersey, New York, Pennsylvania, Vermont, and Wisconsin, combines environmental functions with all or most of the functions of the typical conservation or natural resources management agency.

## II. Water Pollution Control

Undoubtly the most important of the improvements in water pollution control programs instituted by the states in recent years is the strengthening of regulatory policies and programs governing the discharge of polluting materials. Developments in two areas particularly highlight the improvements.

The first is the establishment of water quality standards. These standards consist of legally sanctioned uses assigned to specific waters and associated water quality criteria and implementation plans. Another area of improvement in regulatory policies is the direct enforcement of federal-state water quality standards through the use of Section 13 of the Refuse Act of 1899. The federal Refuse Act permit program has as its purpose the regulation of discharges of pollutants and other refuse matter into navigable waters.

The second outstanding feature in recent improvements in state water pollution control program is the increase in the number of states providing financial assistance to the construction of waste treatment facilities. These assistance programs appear to take one of the following forms:

- direct aid to local units of government in the form of grants for the construction of municipal waste treatment facilities

- grants to prefinance the federal share of the total construction grant
- loans in addition to grants
- financial assistance for the operation and maintenance of municipal waste treatment facilities
- tax write-offs to private firms to encourage and assist the construction of industrial waste treatment facilities.

In addition, more effective use of planning as a part of the state's water pollution control strategy might be cited as a third highlight in recent developments at the state level. Among notable recent developments are: 1) legislation enacted requiring local governmental units to prepare sewerage plans, and the financial aid extended in this respect; 2) comprehensive and state financed sewerage studies covering the entire state on an area or county basis; 3) state-supported engineering feasibility studies, virtually covering the entire state, to facilitate creation of joint or regional waste treatment systems; 4) state financial support provided to assist development of waste disposal plans in the state's metropolitan areas; and 5) legislation enacted which required basin planning as a condition for financial grants to assist the construction of municipal waste treatment facilities.

### III. Air Pollution Control

The Clean Air Act is the most extensive piece of federal antipollution legislation to date in terms of defining the role of states in implementing a national program to control pollution. One of the first requirements to be met as a result of the new act was the designation of air quality control regions (AQCRs) for all affected interstate and intrastate areas. This was completed by a number of state control agencies submitting proposals to divide their entire state into AQCR's. As a result, the country is divided into 247 air quality control regions, of which 182 are intrastate, 53 are interstate, and 12 were undesignated, but are now regions in accordance with federal law.

The need to consolidate and coordinate the many and diverse state environmental efforts resulted in a number of air programs becoming part of new state departments of ecology or environment. Financial support of state and local air pollution program has continued upward and the number of air pollution control agencies in operation



has increased also. While financial support is instrumental in carrying out antipollution activities, it is not the only requisite for a successful program. Adequately trained personnel, professional and technical, are also needed to translate financial resources into program achievements. However, as a result of non-competitive salaries or limits on hiring, a number of states are experiencing shortages of qualified manpower.

Recently there have been a number of actions undertaken by the states in establishing various programs and activities to control air pollution. To provide an idea as to the involvement, some of the more significant accomplishments follow:

- enactment of comprehensive air pollution control bills. These new laws includes the basic authorities required for state implementation plans and provides for establishment of local control programs under the auspices of county boards of health
- operations of motor vehicle emission inspection and testing programs
- trends whereby antipollution costs are being passed on to the consumer in the form of rate or product price increase. (Commonwealth Edison Company, Southwestern Bell, etc.)
- laws which authorizes a commission board to withhold approval of proposed development by companies that are considered to have harmful effects on the environment.
- air pollution control laws that now contain stronger provisions for eliminating pollution at major sources such as copper smelters and electric power generating plants. The law contains a provision for a permit system that will require owners of new equipment having a potential for causing air pollution to have such equipment inspected and tested before an operating permit is issued.

These are just a few examples of innovative procedures and in the coming years, it may be expected that states will continue to increase their pollution abatement activities at an unprecedented rate.

## OUTDOOR RECREATION

### I. State Parks

Progress in the area of state parks and recreation area development can be seen in all the states. Each year state park systems attract

millions of visitors.

State facilities have been developed into resort and lodge areas, parks for the handicapped, state marinas, coastal resources, and other types of public facilities.

Also events, personalities, and places associated with the nation's history represent another major dimension closely related to state park and recreation operations. A number of states have devoted considerable resources to this type of program.

## II. Environmental Awareness

Realizing that quality outdoor recreation programs and consideration for the environment cannot be separated, the states have developed programs which reflect this awareness.

For example, Pennsylvania's Ridley Creek State Park is one of several state parks programmed to serve the major population center of Philadelphia, just 45 minutes away. The park with its 2,490 acres will keep its rural farm heritage yet it will serve a high density of people daily with a wide range of recreation programs. Other state parks are:

- completely devoted to environmental awareness activities that will include resident study accommodations, instruction centers, special observation facilities, and other related services.
- parks which preserve important natural areas such as turbulent white waters and quiet pools which reflect shale and sandstone walls
- those which preserve coastline for recreation and tourism by prohibiting heavy industry from locating there
- those given by land developers whom have been required to dedicate land for park purposes or contribute fees to a park development trust fund. The amount of land to be given, or the fees to be paid, is based on a formula involving projected population densities and the size of the property to be developed.

## III. Outdoor Recreation and Finances

Providing the diversified types of outdoor recreation programs and facilities demanded by the public has proved to be yet another strain on already tight state budgets. It has become necessary

for the states to seek new ways of financing their programs, one of the most successful of which is the bond issue.

States appear to have found the bond issue to be an effective means of providing funds for recreation programs and facilities despite tight money conditions in the nation.

Bond issues are generally designed to incorporate funding for programs related to outdoor recreation such as control of water and air pollution.

#### IV. The Future

The states seem to be establishing a progressive trend in outdoor recreation planning development. They have awakened to the fact that available space is quickly disappearing and action must be taken now to preserve what remains for the public good.

#### STATE AGRICULTURE

State Departments of Agriculture evolved over the years as individual agencies within the framework of state government that were, with few exceptions, assigned certain consumer protection and agricultural promotion responsibilities.

In the formative years of these departments emphasis was placed upon the protection of our food supply as it related to both the producer and the consumer. Today these responsibilities are every bit as important as they were some time ago. As food production, processing, and handling became more efficient, so too did State Departments of Agriculture, for with increased technology and efficiency came new problems for the producer, processor, and consumer.

Standards were established for the manufacture and sale of the basic agriculture - business inputs such as fertilizers, pesticides, feeds, seeds, and animal health remedies. These standards were enacted into laws and regulations now enforced by Departments of Agriculture. As food processing developed and took on new forms in packaging and handling, pure food laws emerged to insure the consumer of a constant supply of wholesome and unadulterated food products. The enforcement of these laws has been carried out by either State Departments of Agriculture or Health since their enactment. Ninety percent of state agricultural agencies are now assuring consumers of honest weights and measures of most products they purchase through a constant check of all metering, measuring, and weighing devices under existing weights and measure statutes.

In many of the populous states, agriculture is becoming more involved in environmental problems common to urban and rural areas. Of major importance is the problem of air, water, and soil pollution and their effects on city and rural life. Another subject of increasing concern is the retention of open spaces and the evaluation of land uses for recreation and agriculture. In a few of the key urban states, one of the most difficult of all problems has become the proper and most effective disposal of plant and animal waste. This subject alone has been one of the criteria used by certain processors of agricultural products in the selection of sites for new plant locations in some states.

### SOIL AND WATER CONSERVATION

As national environmental awareness has increased in recent years, the importance of programs to conserve and enhance land and water resources has been underscored. America's growing population, and its increasing concentration in urban areas of all kinds, has resulted in particular emphasis being given to certain aspects of soil and water conservation programs.

Foremost among these are programs that help to abate water pollution, such as erosion and sediment control projects; those aimed at achieving more rational and scientific land use, especially on the fringes of urban areas; and those which improve natural beauty and the quality of the environment.

Other aspects of land and water conservation and development remain equally important. Water shortages and floods continue to plague large areas of the country. In the Great Plains, there are serious wind erosion hazards. Millions of acres of privately owned timber resources are poorly managed and insufficiently utilized. Surface mining causes destructive pollution. New trends in cropping practices and the intensification of agriculture endanger the sustained productive capacity of many of our best soils.

#### I. Conservation Districts

The function of the states in meeting these problems is principally carried out through individual conservation districts which include within their boundaries virtually all of the nation's privately owned land.

Conservation districts have entered into memorandums of understanding with many state and federal agencies and help to coordinate their services. Serving as a channel for the application of

technical, financial, and educational services provided by the federal and state conservation agencies, the districts;

1. Assist individual landowners, in town and country, to develop and carry out scientific conservation plans.
2. Provide and interpret basic data on soil and water resources to individuals, groups, and local and state government agencies engaged in land-use planning and implementation, resource development, and economic improvement.
3. Provide technical services to individuals and agencies engaged in resource development on a community and regional basis.
4. Sponsor projects for water conservation and utilization, flood protection, and economic development on a watershed and/or multi-county basis.
5. Conduct erosion and sediment control programs in urban and rural areas.
6. Aid in the coordinated planning and implementation of needed resource conservation measures in areas where public and private lands are intermingled.
7. Assist public bodies and private landowners in carrying out measures that reduce air and water pollution, improve waste disposal procedures, and enhance the landscape.
8. Carry out environmental education programs with schools and colleges, organized youth groups, and the general public.

## II. Agricultural Conservation

Process continues to be made in the conservation of agricultural land and water resources, a fundamental requirement for the economical and sustained production of food and fiber in the nation. Proper grazing management practices were performed and significant increases in wildlife habitat management were registered. Where climatic hazards make the intensive and sustained application of conservation measures especially important, additional landowners we assisted with planning construction services.

In all cases, those receiving services through the districts carried out these measures in accordance with modern conservation plans based on soil surveys and scientific land capability information.

### III. Urban Conservation Program

The application of conservation technology developed in agricultural programs to the problems of expanding cities, suburbs, and other developing areas continues to increase sharply. Units of government are being assisted with land-use planning activities by providing soil surveys, interpretations of desirable and potential land use, and plans for waste disposal and other conservation facilities. Demands are increasing rapidly for technical and planning services to help expand parks, create recreational areas on public and private lands, and preserve open space and unique agricultural and other resource lands. Districts are experiencing sharp increases in requests for assistance in selecting sites for schools, highways, businesses, and utility construction, and in conserving and developing land around schools and colleges for outdoor laboratories and environmental instruction.

### IV. Sediment Control

Programs by districts to control sedimentation of lakes, reservoirs, streams, and ponds are becoming more significant. This is especially true in urban and developing areas, where erosion and consequent sedimentation from new residential, commercial, highway, and industrial construction sites vastly exceeds that occurring on farm and forest lands.

Sediment control laws give conservation districts greater authority to deal with erosion control in cooperation with county governments. These laws, which vary widely in detail, generally enables the creation of local ordinances to require sediment control plans and practices in all developing areas. The laws are significant in that they require, rather than encourage, the application of conservation measures to control erosion. In the past, district programs relied entirely on persuasion and voluntary action.

### V. Community Conservation

Requests to districts for assistance with community-wide, regional

and watershed conservation programs are growing steadily. The purpose of these projects are to expand economic opportunity, and they embrace a wide variety of conservation and resource development measures, agricultural developments, and social and educational programs.

## STATE FORESTRY ADMINISTRATION

### I. Forest Fire Protection

Due to the prevalence of man-caused fires the states, individually and jointly, have expended considerable efforts in fire prevention campaigns.

State forestry departments are updating their fire-fighting efforts through acquisition of more modern equipment and increased use of retardants, water drops, and other improved techniques.

Infrared fire detection equipment and chemical retardants are coming of age and is being used on a trial basis by some states.

### II. Forest Management Assistance

States have now begun to hire more service foresters in efforts to improve private forest land management. Objectives of forest management on private lands are: 1) an increase in quantity and quality in the nation's timber supply; 2) improved income for the owners and a stable economic base for local communities; 3) improvement of other resource values such as watershed, grazing, recreation, etc., and 4) maintenance or enhancement of a quality natural environment.

In addition, the various state forestry agencies provide planning, development, and technical assistance to community action agencies, rural development groups, soil and water conservation districts, and local development associations.

### III. Reforestation

State foresters operate or cooperate in the operation of state forest nurseries which shipped millions of trees for planting on state and private lands. The cost for these tree purchases are shared with private landowners by the state.

State forestry personnel also provide technical assistance to nonindustrial private landowners who also reforest millions of acres annually.

#### IV. Watershed Programs

State forestry agencies are responsible for multiple-use management of private forest and related land resources. State foresters are assisting in a number of measures aimed at improving watershed management techniques.

These watershed management measures include the prevention of erosion with consequent siltation; provision of maximum quantities of usable water, improved measures in fire preventions, flood control, and other. The programs are provided for by the "Watershed Protection and Flood Prevention Program" (P.L. 566) and by U. S. D. A.'s Watershed Memorandum No. 108.

#### V. Forest Pest Control

States are employing a greater number of trained entomologists and pathologists to intensify their pest control programs. Assistance is available to share the costs of employing such professionals or to provide additional education to selected state employees who will then become qualified in these particular professions. Basic research in the pest control program is generally conducted by the various universities, the federal government, or private research groups, with the state forestry departments participating in an advisory capacity or financial capacity where funds permit. Due to considerable mortality in forests resulting from insects and disease attacks, forest pest control should receive even greater emphasis in the future.

### C. ALTERNATIVE ORGANIZATIONAL STRUCTURES

#### 1. Environmental Protection Agency:

is concerned with implementing the regulations or controls needed for environmental improvement. EPA has organized its activities under five Assistant Administrators; three are in functional areas of 1) planning and management, 2) enforcement, and 3) research and monitoring. A fourth Assistant Administrator is concerned with the pollution programs in air and water quality; and a fifth supervises the pesticide, radiation, and solid waste programs.



-The Office of Air Programs administers air pollution control, which was notably strengthened by the Clean Air Amendments of 1970.

-The Office of Water Quality sets standards for water quality and implements its programs in part, by assisting municipalities in financing construction of sewage treatment plants.

-The Office of Pesticide Programs administers legislation which requires that all pesticides shipped in interstate commerce be registered with the EPA.

-The Office of Radiation Programs sets radio activity standards on nuclear reactor effluents.

-The Office of Solid Waste Management Programs places emphasis on recycling materials, issues guidelines for the construction and operation of acceptable solid waste disposal systems, and authorizes funds for demonstration grants for recycling systems.

These several offices constitute the main substantive program of the EPA. In addition, several service and enforcement departments were established. The Assistant Administrator of Research and Monitoring is concerned with establishing an instrumentation and monitoring network which will provide an index of environmental quality. The research office also studies the effects of environmental insults, ecological relationships and processes, and pollution control technology.

## 2. Proposed Department of Natural Resources:

the new Department of Natural Resources would consist of five main organization entities:

- 1) land and recreation
- 2) energy and mineral resources
- 3) oceanic
- 4) atmospheric and earth sciences
- 5) Indian and territorial affairs.

The duties of the Department will be to determine how materials should be used in keeping with ecological balance which is essential to environmental improvement. This means that the disposition of resources and materials will be guided by policies consistent with environmental quality, and those federal agencies concerned with resource usage and disposition, which are now

scattered in the government, could be better coordinated.

3. New York Department of Environmental Conservation:

is an attempt to bring together in one agency all resource management functions as well as all pollution control activities. The new Department is basically divided into an environmental quality section concerned with all forms of pollution control and an environmental management section responsible for natural resources management including:

- 1) land resources
- 2) mineral resources
- 3) forest resources
- 4) marine resources
- 5) wildlife resources.

The department is headed by a Commissioner, who reports in turn to a State Environmental Board made up of citizens and representatives of other state agencies. The Board is advisory to the Governor on board environmental policy, including environmental quality, economic impact, and population growth. The Board also has veto power over environmental standards and rules and regulations proposed by the Commission.

4. Washington's State Department of Ecology:

consolidates the pollution control functions into one agency, including air and water quality, solid waste management, and water resource uses. However, the Department of Ecology does not incorporate the resource management functions in its administration. These remain in separate state agencies.

The Department is structured organizationally into functions, such as standard setting, planning, and enforcement without regard to media, e.g., air, water, or solid waste; and in this sense represents a departure from other environmental organizations. Another feature is that it sets up a strong "environmental administrator" directly accountable to the Governor, eliminating the interagency or special interest board which have been common in other states.

The Ecological and Biological Commission are advisory to the "administrator", rather than having legislative or veto powers over him. A quasi-judicial Pollution Control Hearings Board provides for appeals from the control regulations of the administrative department.

5. Illinois Interim Environmental Organization:

the concept sought to separate planning, policy, and administration rather than to consolidate them. The result is an unusual and innovative organization with a Pollution Control Board engaged in setting standards and making policy, an Environmental Protection Agency engaged in administration and enforcement, and an Institute of Environmental Quality engaged in long-range planning. The Illinois farmers acted on three principles different from other states: First, they sought to strengthen the policy making function by professionalising it, making it full time, and giving it its own staff; secondly, they acted on the theory that some functions such as prosecution and adjudication conflict in a single agency and should be separated; and thirdly, they presumed that some duplication of functions heightened competition and maximized action against pollution. In the search for efficiency, reassertion of the proper role of state government has required new levels of innovation, creativity, and initiative. The continuing task is not easy; the time-lag of apathy still exists and in many cases, relationships often remain imprecise. These new organizational makeups represent innovative concepts that can aid states in meeting the level of efficiency desired.<sup>8</sup>

---

<sup>8</sup>The Council of State Governments, "Environmental Quality and State Government", Council of State Governments, Iron Works Pike, Lexington, Kentucky, December, 1970.

## CHAPTER 5

### PROPOSED MODEL FOR NATURAL RESOURCES RE-ORGANIZATION IN THE STATE OF KANSAS

#### A. DISCUSSION OF PROPOSED MODEL

At the turn of the decade Kansas finds itself engaged in developing a long-range, comprehensive action plan for social and economic growth. Because natural resources are such a vital part of the State's economic base it is now necessary to undertake the design of a program for the long-range development of these resources. The program should aspire towards optimizing future natural resource development within a total environmental context, thus requiring inclusion of factors such as discovery, utilization, depletion, pollution and waste abatement, and the effects on people and their urban and rural communities. The program should also identify and quantify information and data about the forces which influence the development and utilization of the State's natural resources and describe the manner in which these forces interact with each other and with other sectors throughout the State.

In order to implement this type of program it is necessary to set up a natural resource management system which includes a structure of organizations and institutions and their responsibilities in carrying out the area-wide plan. The organization may be a new one or existing agencies of general purpose state and local government, special districts, or multi-purpose regional agencies, or any combination of these. Agencies functions, organizational structure, powers, and funding are all elements of the management program. By shortening the lines of management and communications and by consolidating the authority of the many segments of government, improvements in efficiency and substantial economics of expenditure would be attainable.

The unit responsible for areawide functions should have the legal and administrative capacity to perform services it is assigned or assumes and a geographic area of jurisdiction adequate for effective performance and the realization of economies of scale. The unit should provide citizens with equal access to areawide services, reduce economic externalities or spillovers in the performance of functions, and achieve interpersonal and interjurisdictional equalization in financing a public service. Also, the performance of areawide functions should be accessible to and controllable by the public, and maximum opportunities for direct citizen participation in service delivery should be provided.<sup>1</sup>

---

<sup>1</sup>Kansas Commission on Executive Reorganization, Reorganizing Kansas State Government, Topeka, Kansas, 1971.

Comprehensive state planning should assist in effectuating unification of the executive branch and may be depicted by a four-step comprehensive planning and programming process in which the state planning agency would participate as a staff agency within state government. The four steps are as follows:

1. goals and policy definitions;
2. plans and programs determination;
3. annual budget determination; and
4. program implementation and progress evaluation. (See Appendix 1).

In this context planning may be seen as the designing phase and policy-setting element, while management is the operational phase, when policies are translated into action and implemented. The planning phase must be a continuous process that provides guidance to all management agencies involved in areawide natural resource conservation and development. It must be financially self-sustaining with the ability to perform updates and annual certification of the plan. The planning agency should be given the responsibilities of evaluating the progress of plan implementation and monitoring the schedule set forth in the approved plan.

Also of importance will be the consultation with the budget division to determine the feasibility of long-range programs. When all plans and programs have been coordinated and approved, a report should be prepared and submitted to the Governor for review and modification as appropriate. Each management agency would implement those programs for which budget allocations are provided, and at the conclusion of each fiscal year would prepare a written progress report on each implemented program. These reports would assess the extent to which each program had achieved its stated objectives and the resources expended on each program.<sup>2</sup>

The management system should be designed with flexibility in mind and should be tailored to its own quality, financial needs, and governmental style. A governor can designate one or more management agencies to carry out the plan, and there should be considerable latitude within the requirements for these agencies that will allow various metropolitan areas, small towns, and rural areas to devise an acceptable and implementable natural resource management plan. In short, the management problem must be able to carry out the plan, this requires legal, financial, and institutional capability. Also it requires that management is politically feasible, that organizations either exist, are being set up, or are likely to exist with enough power and funds to do the specified job.

---

2

Brown, Fred R. Management: Concepts and Practice. Washington, D. C., 1972.

While the management setup might vary from region to region, the central objective will be the same -- the creation of competent decision-making bodies that will work together to achieve the natural resource objectives. The aim here will be to overcome irrational fragmentation of responsibility, in which jobs are unnecessarily duplicated and governmental agencies work at cross purposes with one another. In order to achieve this type of coordination the State of Kansas may choose from one of the following concepts:

1. If the number of local units involved is small, management may be decentralized with localities performing all functions with only a coordinator at the areawide level acting as a planning and administrative mechanism to intergrate local units.
2. If there are a great many small and conflicting political and service jurisdictions, these areas may choose a two-tiered federated governmental structure in which local governments are assigned key operating functions, while other policy-setting responsibilities are handled by an areawide body.
3. Last, but not least, the State of Kansas may choose a consolidated form of government with both local and areawide functions being performed at the regional level.

Depending on the degree of institutional change recommended in a plan, the transition from the existing management structure to the proposed management program will require varying amounts of time and governmental effort. State and local laws may need to be enacted, or additional funding provided. State and local administrative actions may be needed, or even state constitutions revised, in order to create powers and capabilities for management agencies to implement the plan.<sup>3</sup> (See Appendix 2).

Getting from here to there is a highly individualized matter, affected by a state's constitution, state and local statutes and ordinances, political climate and preferences in specific regions, and fiscal considerations.

The state and local governments are, and will remain, crucial in the daily operational monitoring and control of a Natural Resource Planning

---

<sup>3</sup> Environmental Protection Agency, Management Agencies Handbook, Washington, D. C., September, 1975.

Process and therefore must organize their agencies accordingly to carry out this responsibility. The four most common forms of state natural resource/environmental organization are:

- 1) a consolidation of natural resource/environmental management activity;
- 2) land-use control commission;
- 3) statewide solid and liquid waste management service; and
- 4) state courts for natural resources/environmental rulings.

The form which state and local organizations take depends partly on the nature of various interest groups and political pressures and partly on pragmatic results of recent experiences. The job then becomes bringing these conflicting organizations and goals into some type of resolution or interface. This takes great effort and determination to create flexible enough organizations, and linkages among them, so that the social glue holds broad groups together, while individual habits and desires have greater play in ordinary affairs. In this case, clearly some super decision function needs to be added to atune the institution to the natural resources planning process.

The creators of administrative organizations must now accept the idea that every production unit, whether in government or business, has an ecological decision interface beyond the normal technical, organizational, and institutional levels. That is, if we are to live in the natural environment with some recognition of its constraints upon us to achieve a natural resources planning process, then the decision process needs to include more than the techno-economic, managerial, and socio-political issues. The decision process must encompass the interaction of human activity with the ecosystem as well, and must include structures that have been expanded to include a natural resource level with linkages to all organization and ecosystem also.

This new form of organization would be very much more complex than any past administrative form, but would include some of those features common in other structure models. The organization would contain the following features:

- 1) an ecological level that possesses scientific insight into the natural process of the ecosystem, a quality monitoring information system, and linkages with all other organizations with natural resources/environmental quality information.

- 2) an institutional level capable of negotiating and adjusting its production system to take into account the objectives of both the social and the natural environment.
- 3) an organizational level with sufficient flexibility and knowledge to make decisions based upon shadow prices and simulated markets to achieve ecological balance, as well as acting on profit motivation.
- 4) the technical core will have to be more interdisciplinary than ever before, to have social and natural scientists and environmentalists on its product development and production teams.
- 5) the marketing staff (organizational level) will have to perceive what the behavioral response of users will be to changes in technical product and services which are necessary to meet ecological standards.
- 6) the managerial-technical levels will need much more complex matrix organizations and interdisciplinary teams than ever before to solve the combined technological/shadow-pricing/consumer-behavioral changes which are essential for environmental quality.
- 7) the enterprise will need a functional line and staff organization to provide the essential services to the institution (general public).
- 8) the enterprise will need a highly decentralized direct-line-of-command authority within small interdisciplinary production programs.

The foundation for this new form of organization will be centered around three very basic characteristics or organizations:

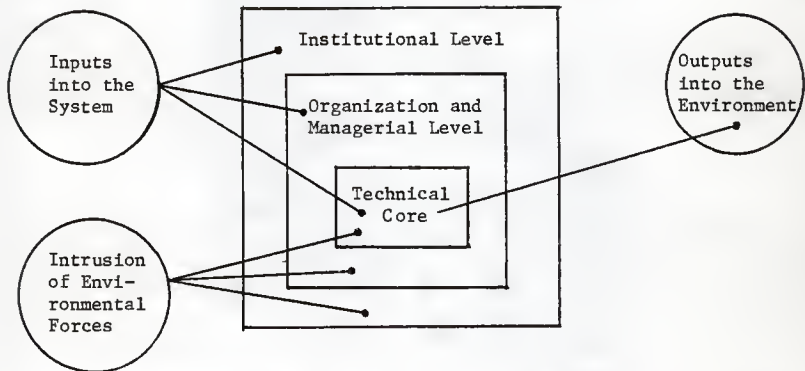
- A. Technical or Production Level - performs productive tasks. Provides scientific, technological, engineering, product, marketing, distribution, and financial knowledge.
- B. Organization and Managerial Level - the managerial level serves and protects the technical core, assigns and coordinates its tasks, finds money and markets to keep it busy, and thus markets its productive effort.



The organizational level is made up of middle management and the information processes of top management.

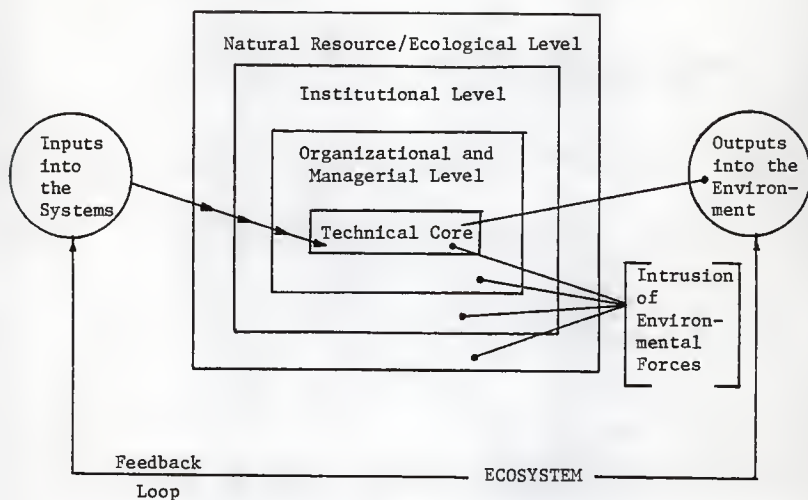
- C. Institutional Level - is concerned with relating the institution (organization) itself to the social, physical, and economic environment. That is, it is concerned with legislation, public affairs, its own legal identity, lobbying consumer wants and dissatisfactions, markets, money sources, community affairs, civic pride, and social trends of today. (Principle participants: board of directors and/or chief executives, secretaries, etc.).

ORGANIZATION: (COMPOSITE SYSTEM)



The above composite shows the organization as it would normally exist. The new form of organization with the natural resources level can be observed on the following page. This type of model is designed to contain the eight (8) previously mentioned features.

## ORGANIZATIONAL SUBSYSTEM WITHIN THE ECOSYSTEM



If we were to try to portray these relationships graphically in an organization chart, then the technical level would contain 1) an interdisciplinary matrix organization, and 2) a line organization; the managerial level would contain 3) a functional organization and 4) a general staff; the institutional level would contain 5) a decentralized or de-centralized or divisional structure, 6) a marketing or applications planning structure to relate to new societal problems, and 7) a political liaison activity; and the natural resources/ecological level would contain 8) a natural resources/ecological research unit, and 9) a natural resource/ecological information structure appropriately linked to other organizations. Each level will make use, moreover, of all the administrative analytical skills and/or techniques described before. This is, environmental impact statements, benefit-cost analysis, carrying capacity, materials balance, trade-off studies, marginal cost analysis, environmental dispersion, and market simulation.

This type of structure will allow for a holistic decision model which would include:

- 1) identifying problems and goals from human expectations and values
- 2) viewing the problems in terms of what might be a more ideal whole state
- 3) using a mission analysis to describe the ideal state in terms of constraints and alternatives, and
- 4) identifying the work functions needed to realize the performance specifications.

Also interesting to note is the fact that this model organization, as well as alternative models mentioned, will make possible the economics of joint housekeeping activities and of the balancing off, in the budget, of the relative priorities of various functions of government.

Organizations usually exist to serve a purpose. It come into being, and is maintained in being, to meet a set of needs among individuals and groups in the society. The organization may be governmental, business, or voluntary; it may be competitive or noncompetitive; the needs in the society may be obvious and urgent, or only dimly perceived. But the relationship is nonetheless present. So by its nature, then, the organization survives and realizes itself only to the extent that it can:

- 1) Define the needs of its special publics;
- 2) Translate these needs into an organizational mission (purpose);
- 3) Establish an administrative system for managing the use of resources to accomplish the organizational mission;
- 4) Evaluate the administrative system in terms of its effectiveness in mission accomplishment.

These four requisites of organizational existence are, in effect, also the major phases in the operating cycle of the policy process.

When trying to point out the intimate relationship between a policy process and an organization, one must develop an understanding for the elements or variables coming into view in such an environment. First of all, I think it is safe to say that: 1) ideology and values establish the permissible role of governmental activities in society; 2) ethical standards set acceptable modes of conduct of individuals and groups working within a policy field; 3) institutional arrangements are the political, governmental, and social mechanisms through which people interact with each other (e.g.,

family, business, voluntary associations, governmental agencies, etc.) Secondly, to further expand this policy/organization concept, it is observed that a number of internal characteristics must also be understood. These characteristics must also be understood. These characteristics are:

- Power arrangements govern the interplay of individuals, organizations, and agencies influencing, or trying to influence, the direction of policy;
- The historical context shows the direction and emphasis of policy over time;
- Individuals have their roles and impact as personalities and in the leadership functions;
- Formal and informal norms of conduct and behavior are influential; and
- Organizational structures are employed for implementation of policy.

From these perspectives, there can be identified the external and internal characteristics of the policies that are the purposive basis of an organization.

Also of importance is how to take a holistic view of the entire natural resource spectrum. First of all, it is imperative that an administrator of a natural resource program know the following things:

- 1) The design of the whole system and the criteria for determining the worth of the output
- 2) The constraints on the system, which are the forces in the environment beyond his control
- 3) Who the decision maker is and what is his jurisdiction
- 4) The processes of transformation in the system, which are the material-energy exchanges or the behavioral change potential of the human participants.

If an administrator knows these characteristics of the system, which are very large concepts indeed to comprehend, he is then in a position to design and carry out a program by the arrangement of its managerial elements. That is, he can implement a program to carry out the mission (criteria) of the system by the following additional steps:

- 5) Mobilizing the resource inputs
- 6) Determining the performance and feasibility of components
- 7) Analyzing and controlling the costs
- 8) Developing an information system to ascertain actual performance and costs
- 9) Organizing tasks and work assignments sequentially, and motivating people to accomplish them.

These concepts require that the resources of government and administration, of management, of economic and technical knowledge, and skill must be brought to bear on the problem. This must be done on the ground, where the resources are situated, where the conditions and needs are known, and where the people most directly concerned are living.

An effective organization must have the capacity to involve the full use of principles of regional decentralization of administration under broad central control. This will allow for the essential field controls of planning, programming, financial, and business operation particularly, to be dominantly regional rather than departmental (local), and will allow for programs to be developed in and for the region as a unified whole, with departmental and bureau technical participation and assistance, rather than through management by a number of separate departments and bureaus with only secondary and voluntary correlation at the regional level. An organization of this type may result in more realistic, balanced, efficient, and timely development, with greater economic and social benefits and direct financial returns.

The organization should enjoy the close collaboration of the state and local governments of the region in its planning and programming function. It should also have a responsibility to submit annual, business-type financial reports and audits covering the state of the enterprise-its resources and liabilities, income and expense, and estimates of future returns. Most importantly, not only should be organization be regional but also semi-autonomous and quasi-corporate. Its character should be such that it will function well both as a unit of democratic government in close contact with the public and its interests and as manager of a large government enterprise of business and utility type.

The organization, to be successful, must also have the ability to understand and apply a number of strategies for managing natural resources in its efforts to develop any type of a successful program. These

strategies will provide a range of techniques that will aid natural resource decision makers in meeting the objectives of the program.

Accordingly, the goals and objectives for a desirable program are:

- 1) An improved base for production and service in the economy.
- 2) A sustained yield of resources, to assure supplies of essential materials, energy, facilities, and services for the economy and the people.
- 3) Broader opportunity for economic activity and advancement of individual and community in investment, employment, settlement, industry, business, and service.
- 4) Increased real wealth, security, well-being, and living standards for people. (today and tomorrow).

The development of natural resources usually involves conflicts between resource use, development, and preservation. This accents the need of a coordinated "multi-purpose" program in which the requirements for fish, wildlife, and recreation are well balanced with those of navigation, power, irrigation, and industry. To achieve this type of coordinated resource program, based on the general objectives expressed above, the policy objectives should be:

- 1) Plans based on adequate and reliable data for the unried development of all natural resources.
- 2) Programs adjustable to economies and fiscal policy. (This insures a definite and effective order of construction of the projects included in the plan.)
- 3) An accounting for social (general and potential) benefits in considering plans and programs.
- 4) Federal contributions toward projects in amounts warranted by all federal agencies and natural interest involved.
- 5) Assistance in settlement of interstate controversies over resources.

- 6) Systematic and effective interagency and interstate co-ordination in formulating resource plans and programs.
- 7) Elimination of inconsistencies and conflicts in laws and regulations for control or utilization of resources.
- 8) Widest and most equitable apportionment of resources and benefits of development.
- 9) Recognition to established rights and responsibilities relating to resources.
- 10) Encouragement of diversified development of industry, land, air, water, mineral, and other resources, in promotion of economic stability.
- 11) Assistance in organizing public agencies and co-operatives to participate in resource development.
- 12) Conservation of resources and limitation of use of scarce resources to more urgent needs.
- 13) Facilitation of redistribution of population as affected by resources and economic opportunities created by resource development.
- 14) Effective operation of programs and projects.
- 15) Other steps as needed to provide for the maximum public benefit at least public cost.
- 16) Comprehensive consideration to the environmental or biological consequences of natural resources programs.

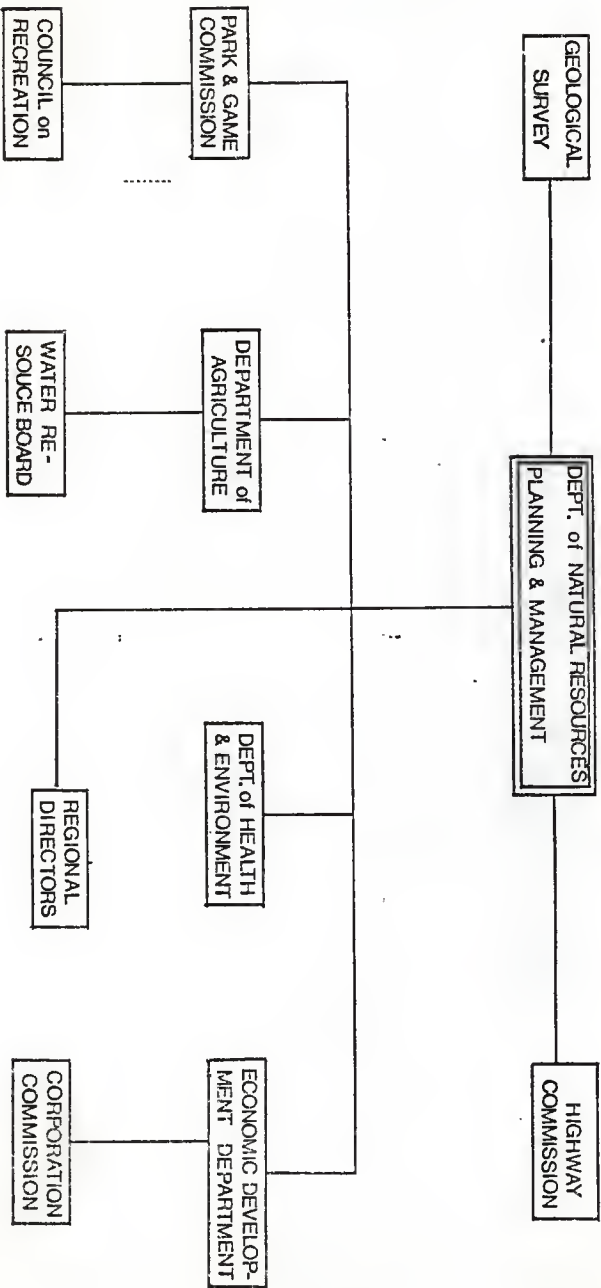
It can be noted here, that no matter how much enthusiasm policies, goals, and objectives generate, results will follow only when that enthusiasm is accurately informed and carefully applied. Once the policies, goals, and objectives are adopted they are ready for their principle role as the foundation for the plan of action and the organizational structure.

## B. EXAMPLES OF PROPOSED PLANNING MODELS

To facilitate actions called for in the above discussion, the following Tables (5-10) will provide some examples that may aid in preparing a planning and management system.



PROPOSED DEPARTMENT of NATURAL RESOURCES for  
THE STATE of KANSAS



# A RESOURCE PLANNING SECTION

## DEPARTMENT of NATURAL RESOURCES

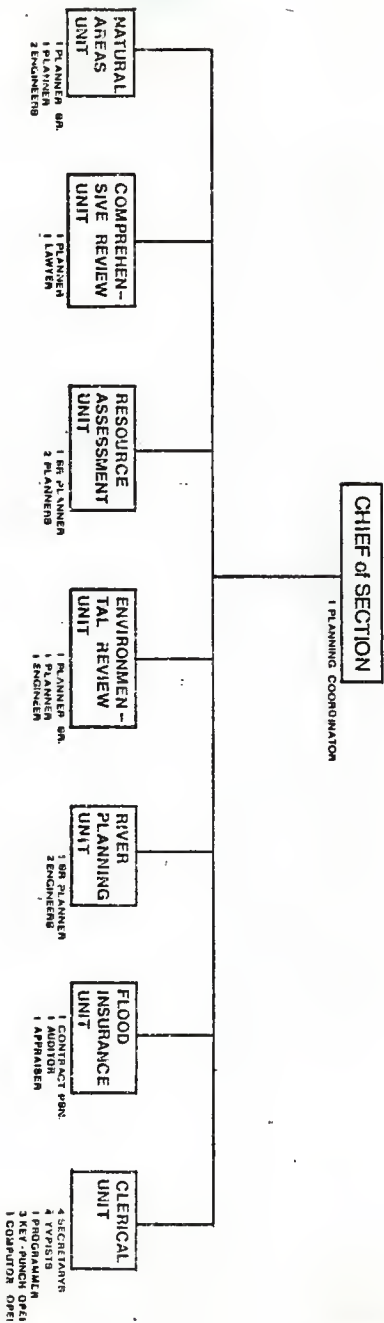


Table 7

## DEPARTMENT OF NATURAL RESOURCES COMMITTEE STRUCTURE

Technical Planning Group/Committee  
(New Reorganized Department)

1. Will consist of agencies and groups and have some type of regulatory or resource management responsibilities and are considered essential for program completion.
2. Review interim long-range objectives; prepare plans, develop targets, performance standards.
3. Members are:
  - Department of Agriculture
  - Park and Game Commission
  - Department of Health and Environment
  - Department of Economic Development
  - State Geological Survey
  - Highway Commission
  - Planning and Research
4. Other possible Members are:
  - Kansas State University
  - League of Kansas Municipalities
  - Kansas Association of Regional Planning Commissions
  - Kansas State Association of Counties
  - U.S.D.A. Soil Conservation
  - Advisory Commission on Environment

Table 8

## DEPARTMENT OF NATURAL RESOURCES COMMITTEE STRUCTURE

## Planning &amp; Policy Advisory Group/Committee

1. Will develop indices of accomplishment while measuring and monitoring planning outputs.
2. Will inform its constituents as to the development and efficiency of planning output.
3. Will provide socio-political input from voter constituents.
4. Members are:
  - Special citizen interest groups
  - Other local, state, and federal agencies.

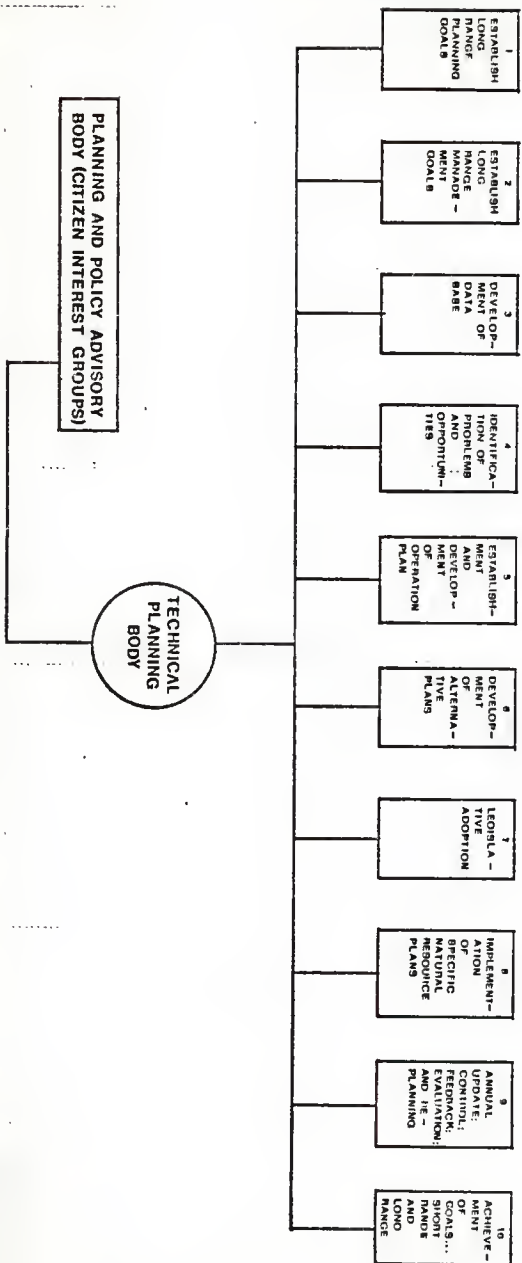
Table 9

## FUNCTIONS OF REGIONAL PLANNING COMMISSIONS

1. Systems assessment of regional natural resources planning and management needs.
2. Compilation of abatement planning which has to be completed for the areas.
3. Determination of current service areas.
4. Systems assessment of adequacy of local ordinances and regulation for natural resources control.
5. Serve as a depository for interim planning output for public participation purposes.
6. Meet with local officials periodically to brief them on the planning efforts and to compile constituents comments.
7. Assemble information on local problems or areas unique to the region.
8. Assistance in final policy determination on a regional basis.

# DEPARTMENT of NATURAL RESOURCES PLANNING PROCESS

95



## CHAPTER 6

### CONCEPTS FOR NATURAL RESOURCES EDUCATION IN KANSAS

#### A. DISCUSSION OF CONCEPTS

The general aim or purpose of natural resources education in the State of Kansas is to bring about a situation where society will consciously adopt, enforce, and maintain a rationalized and, as nearly as possible, a self-perpetuating program of natural resource use. This program may be obtained by changing social philosophy, through education, by perpetuating the realization of some very definite and deliberate objectives. These objectives are as follows:

##### 1. To Develop a Popular Understanding of Natural Resources.

The average man has at best only a rudimentary notion of what natural resources are. Even the supposedly educated man may have no more than a vague idea that wood is cut from some remote forest, iron and gold are dug out of the ground, petroleum is spouted mysteriously from wells, that some waters yield salmon, and that these substances are used more or less incidentally in the economic world. This idea should be enormously expanded, for natural resources include an almost endless list of utilizable materials from climate, soil, ground water, surface waters, etc., at one end, and all the physical and biotic materials, landscape beauty, recreational resources, and geographical location at the other end. The people of Kansas should be made aware of these, know what role they play in building civilization, how they are used, and in what classes they fall as regards to their abundance and exhaustibility. (See Appendix 3).

##### 2. To Create Geographical Habits of Thinking.

There is an almost universal habit of regarding our social and economic institutions as purely man-made structures. Intelligent geographical thinking requires that the people of Kansas recognize that all such institutions are related to natural resources. To think of them together, as inseparable phenomena geographically related, will yield a perspective which the citizenry does not now possess.<sup>1</sup>

##### 3. To Sensitize the Individual to Evidences of Resource Waste.

---

<sup>1</sup>Traxler, Arthur E. Improving the Efficiency and Quality of Learning. American Council on Education, Washington, D. C., 1962, p. 76.

Everywhere in America, in every single community, there is evidence of resource waste, destruction, unwise use, and depletion. The range of issues of concern to citizens has expanded and the State of Kansas should consider employing its educational system (schools, colleges, universities, other educational programs, state and local institutions) in promoting natural resources awareness, encouraging active participation, and stimulating participatory experiments.<sup>2</sup>

4. To Correct the Belief that Resources are Inexhaustible.

Today the populus must be educated to the fact that natural resources are not inexhaustible and must be planned for and used accordingly.

5. To Promote the Index of Trusteeship in Place of Ownership.

The implication of this is that ownership of the earth and its natural resources is vested in mankind or society rather than in individuals. This concept, however, must be handled with extreme care for there will surely be opposition with cries of "communism".

6. To Dispel the Notion that Science is a Substitute for Natural Resources.

It is commonly believed that, if we use up certain materials, the scientists and inventors will provide new substances. Almost universally, by all ranks of men from unskilled laborers to university students, this is regarded as an automatic truth. Science has given an imposing array of substitutes for many materials, but, for every substitute discovered, tow or three new uses have been invented.

7. To Teach An Appreciation of Alternative Land Uses.

For more than a century, Kansas have regarded agriculture as the highest use of all land. This still holds true throughout most of the state, however, the people must now be educated to some of the alternative uses. (i.e., land requirements in increasingly growing urban centers, location requirements for industries, open space and recreation, historic and architectural landmarks, etc.)<sup>3</sup>

8. To Create a New Evaluation of Ownership.

Almost universal is the belief that the highest form of land ownership is the possession and holding in fee simply by the individual. The philosophy seems to have been that land and other materials were

---

<sup>2</sup> Johansen, John H., American Education, Wm. C. Brown Co., Dubuque, Iowa, 1975, p. 337.

<sup>3</sup> Tobier, Arthur, "Evaluating Learning", The Urban Review, APS Publication Inc., New York, 1976, Vol. 9, No. 1, p. 59.



failing to fulfill their destinies until put into absolute and unrestricted private ownership. Some Kansans are now coming to realize that various forms of public ownership are higher and more socially useful forms and should therefore take precedence. This is an imperative task for re-education of the state.

9. To Build a New Social Philosophy of Rights.

Personal rights have received a vast deal of attention all through American history. More recently, the expansion of public jurisdiction, eminent domain, and the rights of states have also received increasing notice. The need here is to teach people of the state that no person, group, community, or governmental unit has a "right" to use any resource in a manner inimical to the general rights of society.

10. To Obtain New Laws and Regulations.

The present laws were not framed so as to protect natural resources, to safeguard the public domain, or in many respects even to promote the general welfare. New laws and regulations should be framed to foster effective and efficient use of natural resources. One must also keep in mind that laws and regulations are almost always outgrowths of customs and practices in society, and perhaps we need new customs even worse than we need new laws and regulations. (See Appendix 4).

11. To Develop New Customs and Practices.

New customs and practices would replace long-established but defective mores and folk customs in dealing with natural resources. Some of the destructive and undesirable habitual practices are:

- Subdividing and cultivating land rectangularly.
- Burning over grassland, woodland, and idle areas each spring.
- Despoiling trees, shrubs, and flowers for trivial reasons.
- Dumping trash and rubbish into ditches, roadsides, and other unoccupied places.
- Treating all edible wildlife as legitimate prey for man.
- Using creeks and rivers for sewer and waste disposal.
- Despoiling landscape beauty.
- Allowing communities to be designed by ignorant or self-centered real-estate dealers.
  
- Allowing beaches, waterfronts, and other natural recreational resources to be preempted by private ownership.

Customs and practices, it must be remembered, invariably rest upon popular ideas. These new popular ideas have begun to submerge throughout the nation.

## 12. To Cultivate a New Community Ambition.

In the past, the ambition of nearly every community was to grow and become large. "Watch X-ville grow" was the slogan of most chambers of commerce. But community growth means spanding exploitation of nature and increasing concentration and deprivation of human beings. Every-thing which can be done to encourage community growth has been attempted, but almost nothing has been done to make the community a better place in which to live. Citizens of Kansas should now be educated to the fact that concerned citizens everywhere have begun to employ a number of new growth and waste management and control techniques and trends. We need not to exploit more resources but to learn to use wisely and more fully those already being exploited.<sup>4</sup> (See Appendix 5)

### B. PROPOSED TASK

The evidences of resource destruction and depletion, when taken collectively, appears to represent a fundamentally erroneous "way of life" on the part of the American people. A way of life eventually leading to economic decline and social ruin, and avoidable only by prompt and heroic measurs. The problem cannot be legislated out of existence, because laws are ineffective or inoperable when they strike directly at the people's way of life, unless they are supported by popular ideas. The task facing Kansas, therefore, is to get an entirely new set of ideas into the collective thinking process of the populace. Scientists already possess the necessary ideas; hence the objective may be to transplant the ideas from the mind of the scientist to the mind of the common man.<sup>5</sup>

---

<sup>4</sup> . . . . "Educational Imperatives in a Changing Culture", Harvard Educational Review and the Teachers College Record, Scott, Foresman and Co., 1968, p. 101.

<sup>5</sup> Brickman, Wm. W., Educational Imperatives in a Changing Culture, University of Pennsylvania Press, 1967, p. 217.

## CHAPTER 7

### AN UNDERSTANDING OF PUBLIC INTEREST IN NATURAL RESOURCES PLANNING AND MANAGEMENT

#### A. FUNCTIONS AND CHARACTERISTICS OF CITIZEN PARTICIPATION

Those who consider themselves comprehensive planners/administrators/decision-makers must consider working under the assumption that their primary functions are 1) to create a master plan to guide the deliberations of specialist planners; 2) to evaluate proposals and programs of these specialists in view of the master plan, and most importantly, 3) to coordinate the planning effort so as to ensure that proposals and programs reinforce each other to further the public interest. Each of these functions' requirements for ideal performance will be:

- that planners/administrators/decision-makers understand the overall public interest in connection with the subject matter of their plans, and
- that they also possess causal knowledge which enables them to gauge the approximate net effect of proposed actions on the public interest.

These two requirements will allow critics to complain that if comprehensive planners deal with a great many more areas of public policies than specialists, their factual and causal knowledge in each area is bound to appear shallow, at least by comparison with that of the specialists in it. Therefore, planners/administrators/decision-makers claims to comprehensiveness, if they are to be persuasive, must refer primarily to a special knowledge of the public interest.

Characteristics of public interest goals are that they are constantly shifting rather than highly stable, always intermediate rather than final, and are more in the nature of criteria than of concrete destinations. These public interest goal conceptions are likely to have these characteristics because of the limitations on collective human foresight and imagination. However, the comprehensive planner must assume that various collective goals can somehow be measured at least roughly as to importance and welded into a single hierarchy of objectives, as well as, prescribe courses of action to achieve these objectives without great distortion or harmful sideeffects of a magnitude sufficient to outweigh the gains achieved through planning.<sup>1</sup>

---

<sup>1</sup> Altshuler, Alan A. The City Planning Process: A Political Analysis, Ithaca: Cornell University Press, 1965, p. 299.

In regards to the latter assumption, today many new opportunities have been provided for a wider spectrum of the public to participate in many phases of the decision-making process and to offer their views on a broad range of issues. In addition, means are being sought whereby inputs from the public can be creative and constructive rather than negative and obstructional.

There is no evidence that the public is being asked to help identify a range of options from which it may choose, rather the public is being requested to indicate what it dislikes about a preselected plan or policy. This has had some important implications both for the process of decision making and for its outcome. In order to canvass a wide range of viewpoints, for example, the time and often the expense required to reach a given decision have considerably increased. At the same time, however, policymakers have been able to obtain a clearer indication of potential support (or opposition) for proposed programs.

Demands for a more direct role for the public in natural resource/environmental policy making have been particularly intense and reflects a number of major concerns. The first has to do with ethics. It is generally assumed (by democratic societies) that the individual has the right to be informed and consulted, and to express his views on matters which affect him personally. In modern representative government procedures for determining social choice depends upon a constitutional parliamentary mechanism whereby the elected representatives provide a channel between the governors and the governed; the identification of public preferences is left to a variety of time honored devices such as:

- the ballot box
- public inquiries (polls, surveys, interviews, etc.)
- spontaneous and planned protests
- letters ot officials
- news media (radio, television, newspaper)
- citizen organizations, groups, corporations,
- etc.

I would like to mention here that there appears to exist today two very interesting views relating the effectiveness of the above mentioned constitutional parliamentary mechanism. It is contended that:

- 1) the system works well when interests can be identified, when those affected can articulate their views, and when channels of communication are widely known and

- 2) it works less well when it is difficult to determine whose interests would be affected by any particular proposal and when people do not know how to convey their views to the authorities concerned.

In more recent years there has been a growing concern that the public or at least significant segments of it, has become increasingly alienated from governmental decision-making. Sometimes there are no channels of communication for transmission of information or expression of views, and even when some linkages exist, the public may not know about them, or they may seem ineffectual. In some instances a profound distrust of the entire political system has developed and criticism has been especially acute in matters that affect minorities.

A second factor underlying pressures for greater power sharing has been the failure of past plans for policies to correctly identify the desires of the public. Schemes drawn up by planners and promoted by politicians have failed to obtain public support, either at the ballot box or in the treasury. There are numerous illustrations in urban redevelopment, construction of highway networks, and water management in which policies have failed to deliver the intended benefits or have caused unpredicted economic, social, or environmental consequences. Critics have suggested that at least some of these errors of judgment could have been eliminated by a broadening of technical expertise and of potentially affected interests.

Indication of the mounting frustration with existing means of consulting the public have taken a variety of forms. Increasing criticism has appeared in letters to officials or to editors of newspapers and in articles in scholarly journals. A politically more significant development, however, has been growth in the membership of pressure groups seeking to influence planning and policy-making.

Not only have established groups improved their political stature, but there has also been a large increase in the number of new groups, especially those concerned with urban and environmental problems. This growth has been accompanied by some important changes in the nature and composition of groups, the goals they seek, and the strategies they employ. While the membership core of many groups remains urban, middle class, and professional, the range of socioeconomic status of new subscribers has widened in recent years. Furthermore, while traditional strategies in seeking influence, such as establishing contracts with planners and politicians, preparing briefs for hearings, and writing letters, continue to be used, several new procedures have been added, ranging from holding workshops and public meetings to staging demonstrations and the remarkable successful use of the courts.<sup>2</sup>

---

<sup>2</sup>Hendee, J., "Conservation, Politics, and Democracy," Soil and Water Conservation Journal, 1969, p. 213.

The overall effect of these developments has been to make planners and politicians increasingly aware not only that the public wants to be heard and that it may have valuable contributions to make, but also that its influence can no longer be ignored.

## B. CITIZEN PARTICIPATING TECHNIQUES

As indicated, those urging citizen participation perceive it in different ways, depending on such factors as position and status, whether they are in power or out of power, their responsibilities, their constituencies, their overt and covert goals, and many others. Some of these perceptions which foster motivations in citizen participation can be listed as follows:

### Participation as Policy

To some, increasing citizen participation is simply a matter of sound and desirable policy to be implemented in as many ways as possible. Like most policy choices, this is a normative conclusion--a goal to be sought. This implies that persons being affected by planning have the right to be consulted. In dealing with this concept, however, one must consider what the nature of that involvement should be, how it relates to decision-making responsibility, and whether the normal representative system and the constitutional protection of individual rights are sufficient.

### Participation as Strategy

Some advocates of participation approach the subject as a matter of strategy, a maneuver to accomplish other unstated or stated objectives. How participation and the arguments for it are used depends on, among other things, whether one is working from within or from outside the system. For those outside the system "Power to the People" signals major changes in power relationships, if not revolution. For those within the system, such as government agencies and interest groups, participation may serve as a major technique for gaining legislative and political support and legitimation. It is not uncommon to try to interpret the support of large number of citizens as equal to the public interest. The use of survey research may serve similar purposes.

### Participation as Communication

Some argue for more participation in order to improve information inputs into administrative decisions. Since government is designed to serve people, the views and preferences of people are necessary inputs to responsive decisions. Often, it is argued, the technician or bureaucratic

specialist will make "bad" decisions when he decides for people instead of with them. In this view, questions of how to deal with dissent or with minority groups are usually minimized, and the importance of making choices and of determining how costs as well as benefits should be allocated is overlooked.

#### Participation as Conflict Resolution

In some situations participation is urged as a way to reduce tensions and resolve conflicts. Underlying this emphasis are assumptions that sharing points of view increases understanding and tolerance and that the very process of involvement weakens a tendency toward dogmatic assertions and reduces personal biases and mistrust. Insofar as conflicts rest upon misinformation, participating and involvement in town meeting situations provides opportunities for exchange of information and may induce modifications of values and opinion and increase confidence and trust.

#### Participation as Therapy

In recent years the emphasis on participating as social therapy has been frequently articulated in connection with the so-called War on Poverty. On the premise that particularly the urban poor are alienated from society, opportunities for them to be involved in decisions with respect to programs which affected them were provided to cure this "social disease". Variants of this approach have appeared on college campuses, leading to varieties of student involvement in academic decisions. Proposals for increased participation have also been directed to overcoming the adverse effects of racial prejudice and other forms of discrimination.<sup>3</sup>

These types of citizen input systems may influence the nature and effectiveness of participation in four main ways:

- 1) the relative degree of activity of passivity in the body politic;
- 2) the amount of legal, administrative, and political discretion granted in formulation and execution of policy;
- 3) the relative importance of bargaining and concession trading vis a vis consultation and compromise as mechanisms for conflict resolution; and

---

<sup>3</sup>Gale, R., "From Sit-in to Hike-in: A Comparison of the Civil Rights and Environmental Movements in Social Behavior", Natural Resources and Environment, No. 230, 1972.

- 4) the role of the law in guaranteeing access to information, providing safeguards for citizens' rights to amenity and scrutinizing political and administrative procedures.

Here it appears that the style and effectiveness of citizen participation will vary tremendously from local to local, as well as from issue to issue. What is desirable and effective in one place may well prove unsuccessful in another. Thus, the following checklist of criteria for evaluating the responsiveness of the political and institutional culture to more broadly based participation might be of help.

Checklist:

1. What is the nature of citizen's rights to environmental quality, to amenity, and to legal standing on environmental matters?
2. What are the statutory rights of access to information before, during, and after natural resources policy has been implemented?
3. What is the scope and political effectiveness of natural resources assessment reviews for policies, programs, and projects at the national, regional, and local levels, and for public or private proposals?
4. What is the role of the media in investigating and reporting natural resources issues before, during, and after the policy making process?

What use is made of the media in facilitating public communication and discussion, and to what extent can participatory action groups make use of it in airing their grievances?

5. What is the nature of formal (statutory) and informal (experimental) mechanisms for inducing participation, and what use is made of them in given case studies?
6. What is the role of education, (in schools, colleges, universities, and adult education programs), in prompting natural resources awareness, encouraging active participation, and stimulating exploratory participatory experiments?



7. What is the role of key people, (politicians, professionals, community leaders, citizen activists), in scrutinizing the policy-making process and in fostering reform?

As vision and action, public participation in natural resource decisions could only be spun from the peculiar web of civilization. Unlike the eastern vision or that of a primitive society, we are concerned with individuals, their free will, the interior life of their minds, and their responsibility for their own destiny.

For this reason, public participation in the state of Kansas might be viewed as a means for gaining better accountability from its social institutions and a way in which new adversaries may gain standing. In most cases the interest should be on having decisions which both maintain the natural resources and efficiently serve the people. Often these interest collide, and in such choices the short run advantage usually goes to the people. Consequently, we need to tinker constantly to see that the right allocation mechanism is assigned to the appropriate natural resource. The more complex a society, the greater the proportion of its time and energy should be spent tinkering simply to maintain it in a similar position.<sup>4</sup>

---

4

Committee on Agriculture and Forestry, Subcommittee on Rural Development, "Agriculture, Rural Development, and the Use of Land", U. S. Senate, 93rd Congress, 2nd Session, Washington, D. C., 1974.

## CHAPTER 8

### COMMENTS AND RECOMMENDATIONS

#### A. COMMENTS

The recognition of natural and energy resources as comprehensive and integral mechanism in the development and growth of the state will require that well-designed policies and timely actions be implemented in such a manner as to encourage more intelligent and far-reaching responses, primarily better public policies, and resourceful management of Kansas's resources.

In light of the new innovative ideas and methods, which are laying the framework for more efficient and effective planning and programming of needs and services, the State of Kansas should now begin to prepare itself to meet future demands to provide essential policy and program alternatives for executive decisions and legislative actions in the area of natural resources. By so doing, the State of Kansas will provide an important mechanism for coordinating interstate activities and for insuring that needs identified in local, metropolitan and regional planning efforts are considered in state programs.

This reassertion of the proper role of state government requirements for new levels of innovation, creativity, and initiative. This appears to support the idea that a quiet revolution is also occurring within the system of state government.

The tools of this revolution are new laws taking a wide variety of forms but each sharing a common theme: "the need to provide some degree of state or regional participation in the major decisions that affect the use of our increasingly limited supply of natural resources."

In the past, trends and issues involved in natural resources has caused the public and the press to label state government as an anachronism, an impediment to progress and unwilling or unable to respond to the tide of change. Needs, however, have shifted, and state government is beginning a return to its inherent position as the fulcrum of the federal system. This is of necessity, for federal bureaucracies are slowly learning that they cannot alone cope adequately with many domestic needs for which they have been making the principal decisions during much of this century. For example, at the federal level many initiatives to meet domestic needs are still being debated or "considered" in such critical areas as consumer protection, governmental reorganization, energy use and controls, land use legislation, welfare reform,

ethics in government--while states and their subdivision have acted decisively. In fact, the taproot of many major national programs may be traced to successful innovative programs first launched within state government.

In this bicentennial decade states have placed renewed and much-needed emphasis on coordination both within the departmental framework of state government itself and between local, state, and federal agencies. States are also establishing much closer and more viable working innovations to reinforce the partnership in the establishment of sub-state regional entities which both stimulate citizen participation and assist local governments in combining resources for improving services.

Many state governments are increasingly aware that a new urban-rural relationship must evolve, and special attention must be given to striking a productive balance and interrelationship between food-producing rural areas and commercial industrial cities. A similar need for new balance is apparent between long overdue environmental protection and the heretofore prevailing emphasis on economic development.

As administrative organisms, state governments are increasingly aware of the need to reorganize to improve the quality of their performance by the use of sophisticated modern business methods and tools, including effective data systems. There is also a new desire for establishing more meaningful priorities in the use of state tax resources. One thrust is to utilize the fiscal soundness of the state to reduce tax burdens while providing for the new requirements of the citizens. In addition, state government is establishing a firmer working partnership between its executive and its legislative branches, contrary to the sometimes sharpened and often counterproductive executive-legislative divisiveness at the federal level.

Human values, citizen involvement, and allied qualities appear to motivate many of the innovations described--a welcome reemphasis following an era when political and administrative priorities too often seemed to lack those qualities. State government is increasingly concerned with the individual's relationship to the state and for the citizen's right to information, privacy, and participation in decision making. Finally, there are signs that a new ethic of government service is emerging within the states. The signs are not limited to reforms in campaign financing, in which many states have pioneered well ahead of the federal establishment, or to eliminating conflicts of interest; they go beyond the obvious and suggest a different dimension of commitment, of service to people and of concern with the quality of life.

## B. RECOMMENDATIONS

Comprehensive planning takes into account the physical, social, economic, ecologic, and related factors of an area and attempts to blend them into a single compatible whole that will support a healthful and efficient society.

To facilitate the state of Kansas in preparing for comprehensive natural resource planning and programming this report makes the following recommendations:

1. That the Governor and legislative body of the State of Kansas consider the establishment of a "Department of Natural Resources."
2. That the "Model Act" identified hereinwith be used as a basis on which a Department of Natural Resources can be established.
3. The State give considerations to "strengthening areawide natural resources planning and decision making".
4. Considerations be given to improving "areawide natural resources delivery".
5. That alternatives be considered for providing more balanced federal financing for regional systems.
6. That considerations be given to improving state and local financing policies.
7. Take positive and immediate steps to organize formal mechanisms for inter-agency program planning in natural resources planning and management.
8. Strengthen operations research and system analysis capability.
9. Examine the organizational form of the present state natural resource planning and management system in order to determine if an alternate form would be a better vehicle for action.
10. Organize a technical planning group and an advisory planning and policy group to investigate opportunities and to disseminate information.
11. Present procedures and methods of retaining and storing records should be looked at in order to reduce expenditures.
12. Provide training in all areas of natural resources planning and management as part of personnel upgrading systems.

13. Considerations be given to establishing a planning process that will respond rapidly and sensitively to public needs in areas involving natural resources.
14. Procedures for the administration, enforcement, hearings, and appeals of programs be coordinated.
15. That the State of Kansas develop a "Comprehensive Plan" that various development and conservation programs could be guided with.
16. That adequate means by which to carry out a comprehensive natural resource's "plans review" and "approval" process be established.

## APPENDICES

## APPENDIX 1

"The Comprehensive Plan": A Guide for Action

In carrying out a comprehensive planning and programming process on a Federal, Statewide, or local level will require the use of certain instruments of communication that will articulate the statements of needs for public or other action. These instruments should also delineate objectives and alternatives of policy for consideration by the chief executive, the legislature, and the public at large. The instruments of communication may be listed in the following groups:

1. Comprehensive Natural Resources Policies Plan

This should be the overall major instrument for long-range policy and strategy for achieving use, development, and conservation goals in natural resources. Also included should be statements of long-range objectives having to do with physical, social, economic, aesthetic, and cultural development of the state. The general purpose of the plan is:

- to comprehensively examine past and present conditions prevailing in the state;
- examine the effect of past and present operations of state government and their relation to other levels of government;
- identify projected problems to be solved and opportunities to be realized in a natural resources process;
- articulate long-term goals and objectives to be accomplished; and
- to identify in long-range terms the physical facilities, functions, manpower, and financing that will be required for a continued orderly natural resource program in the state.<sup>1</sup>

---

<sup>1</sup>Nebraska Soil and Water Conservation Commission, "Report on the Framework Study", State Water Plan, Lincoln, Neb., May, 1971, p. 2.

## 2. Functional Plan

This would be a set of intermediate range plans on a five to fifteen year time frame and would identify the policies to be followed and activities to be carried out in specific functional areas such as: transportation, energy, agriculture, recreation, industry, etc.

This functional plan could provide each participating agency with a precise knowledge of where it is going and whether or not it's course of action is consistent with policies set forth in the "Comprehensive Plan". The general purpose of a "functional plan" is to:

- service as input to the creation and modification of the comprehensive plan;
- establish priorities for accomplishment among competing objectives;
- identify primary relationship among programs;
- establish guidelines for the allocation of resources and the assignment of responsibility;
- identify in fairly precise terms those things that ought to be done or accomplished to carry out policies in each functional area.

## 3. Program Plan

This type of plan should be the responsibility of each participating agency and should show that agency's operations and activities to meet use, development, and conservation objectives. Each program plan prepared by an agency should:

- describe precisely the annual accomplishments to be attained by the program;
- identify resources required to achieve the accomplishments described;
- outline the formal and informal relationships with other programs directed toward achievement of similar objectives;



- project the program plan for at least 5 year periods;
- serve as a basis input to the formulation of functional plans and to the preparation of the annual development program.

#### 4. Annual Development Plan

The annual development plan would be a responsible instrument to be reviewed and revised annually to reflect changes in policies and goals to be accomplished by program activity. It would also reflect changes in technology and in new or modified conditions arising in Kansas to which public policy should be directed. It would serve to assess the validity of the comprehensive natural resources policies plan and the various functional and program plans and to modify them as necessary.<sup>2</sup>

#### 5. Regional Development Plan

This plan would serve to provide information for policy formulation. Regional development plans reflect coordinated local plans, policies, and programs to be undertaken at that level. The plans should be prepared for 5 to 15 year time spans and should be comparable in detail to the functional plans prepared at the state level.

The purpose of the plan is to fulfill current and anticipated federal requirements for the preparation and maintenance of a regional or metropolitan plan as a prerequisite to obtaining federal grant-in-aid. It also provides the means for coordinating and evaluating the results of federal and state grants to local units of government and metropolitan agencies.

Coordination in the formulation and updating of regional development plans with other elements of the comprehensive planning and programming process would add the dimension of regional interests and activities. Dichotomy would be established between overall state planning and regional planning which would increase activities at different geographical

---

<sup>2</sup> Environmental Protection Agency (EPA). Alternative Futures for Environmental Policy Planning: 1975-2000, Stanford Research Institute, October, 1975.

scales to meet common overall goals and use, development, and conservation alternative courses of action at all levels.<sup>3</sup>

6. Legislative Authorizations and Directives and the State Budget

Legislative authorizations and directives and the state budget have three major functions;

- They serve as instruments for obtaining public and representative concurrence on priorities for implementing policies and for the allocation of resources to various state needs.
- They serve a legal authorizations for expenditures and for the initiation of program activity.
- They serve as precise guidelines for actions by boards, agencies, and commissions of the state government.

In the concept of comprehensive planning and programming, the budget and legislative authorizations and orders would come from the annual development program and would also serve to modify that instrument. Presentation of the annual development program would also serve as a framework within which to make various legislative and budgetary decisions. The effect of these decisions would be reflected in the revised annual development program, in the statewide comprehensive natural resources policies plan, and in the program plans of the various operating agencies.<sup>4</sup>

7. A Monitoring Mechanism to Provide Information on Policy and Program Implementation

Program and policy formulation cannot be adequately

---

<sup>3</sup>Kulp, Earl M. Rural Development Planning: Systems Analysis and Working Method, New York: Praeger Publishers, 1970, p. 81.

<sup>4</sup>National Governors Conference, "Innovations in State Government", Messages from the Governors, Washington, D.C., June, 1974, p. 41.

undertaken unless a knowledge of past program and policy decisions is available and the effects of these decisions have been appropriately evaluated.

To accomplish these functions a monitoring mechanism should be established to provide information regularly to be used in re-evaluation and re-planning activities.

Characteristics of this monitoring mechanism should include the following:

- Regular reports of program accomplishment measured against predetermined schedules or other program goals
- Regular appraisals of objectives and program techniques in the light of operating experience
- Identification of difficulties encountered in carrying out programs and evaluation of program capacity in meeting program and policy objectives.

Regular appraisals of shifts in state needs and opportunities, and analyses of implications for alternative or modified policies or programs is essential to the functioning of a comprehensive planning and programming system.

A monitoring mechanism having the characteristics described above would provide decision makers with basic information for determining the effectiveness of their policies and programs in coping with present and anticipated problems and for realizing opportunities for the use, development, and conservation of natural resources.<sup>5</sup>

---

<sup>5</sup>Robinson, Ira M., "Decision-Making in Urban Planning", Sage Publications, Beverly Hills, 1972, p. 391.

## APPENDIX 2

"MODEL ACT FOR THE CREATION OF  
A DEPARTMENT OF NATURAL RESOURCES"

The statute set out below creates a "Department of Natural Resources" to administer the majority of the laws dealing directly with the use, management, and control of natural resources of the state. This statute is the result of the belief that a study which criticizes existing organizational structures and laws, and particularly when the criticism is leveled at legislation, should bear the onus of suggesting corrective measures.

In addition to establishing the organizational arrangements for comprehensive natural resource planning and programming in Kansas, the following proposed legislation also sets forth the institutional framework for the process by articulating legislative policy for comprehensive natural resource planning and programming; designating the responsibilities of the various participants in the process; describing the content and timing of the instruments required in the process; and establishing the legal basis for the various components of the process.

The model act for the creation of a "Department of Natural Resources" has been outlined as follows:

## MODEL ACT

- Section 1 Declaration of Policy
- Section 2 State Planning Officer
- Section 3 Establishment of a State Department of  
Natural Resources
- Section 4 Definitions
- Section 5 Powers and Duties
- Section 6 Additional Powers of the Director
- Section 7 Division of Forestry - Powers
- Section 8 Division of Water - Powers
- Section 9 Division of Parks and Recreation - Powers
- Section 10 Division of Fish and Game - Powers
- Section 11 Division of Mines and Minerals - Powers
- Section 12 Division of Lands and Soils - Powers
- Section 13 Division of Public Relations and Education - Powers
- Section 14 Continuous Natural Resources Program Planning
- Section 15 Review of Federal Assistance or Grant-in-Aid  
Applications
- Section 16 Advisory Commission and Council
- Section 17 Conflict with Other Statutes
- Section 18 Saving Clause

## Section 1.

### Declaration of Policy

The legislature hereby recognized and declares that it is essential to the health, safety, and general welfare of the people of the state of Kansas to conserve, protect, develop, and manage the natural resources of this state. The legislature further recognizes the significant achievements that have been made in the conservation, protection, development, and management of our natural resources, and declares that the most efficient and economical method of accelerating these achievements is by creating a Department of Natural Resources. It is further the policy of the state that this agency shall act as a directing, advisory, consulting, and coordinating agency to harmonize the planning and programming activities, of all levels of government, as they relate to natural resources; to render natural resources planning assistance to all governmental units; to act as the central coordinating agency for planning and programming of natural resources among state agencies, boards, and commissions; and to stimulate the public interest and participation in the conservation, protection, development, and management of the natural resources of the state.

## Section 2.

### State Planning Officer

The Governor of the State of Kansas is hereby appointed the State Planning Officer and is charged with the responsibility for carrying out the purpose of this act.

## Section 3.

### Establishment of a State Department of Natural Resources

There is hereby established within the State Department of Administration a Department of Natural Resources, the administrative head of which shall be the Natural Resources Planning Director, who shall be appointed by and serve at the pleasure of the Governor. Subject to the provisions of the Kansas Civil Service Act and acts amendatory thereto and supplemental thereto, the Natural Resources Planning Director is authorized to employ and prescribe the duties of such assistants and employees as may be necessary in carrying out the provisions of this act as are required.

#### Section 4.

##### Definitions

The following terms shall be construed in this Act to have the following meanings, except in those instances when the context clearly indicates otherwise.

Department - means Department of Natural Resources

Director - means Director of Natural Resources

Resource - shall include fish, game, water, soil, forests, scenic areas, parks, recreation areas, and minerals.

Conservation Program - means the programs developed by the Director of Natural Resources for the Department of Natural Resources and deals specifically with particular resources such as water development programs, soil conservation programs, forestry programs, minerals programs, wildlife and fishery programs, and so forth.

Conservation Laws - shall include all administrative and substantive laws, except those specifically excluded, dealing with water, forests, fish, game, soil, scenic areas, state parks, state recreation areas, and minerals.

#### Section 5.

##### Powers and Duties

In general, but not by way of limitation, and subject to other applicable provisions of this act and to other laws not inconsistent herewith, the State Planning Officer, with staff assistance of the Department of Natural Resources shall:

1. Prepare comprehensive, long-range recommendations for the orderly and coordinative conservation, protection, development, and management of the state natural resources including detailed recommendations on long-range operating plans of state boards, commissions, departments and agencies.

2. Analyze the quality and quantity of services required for the continued orderly and long-range growth of the state, taking into consideration the relationship of activities, capabilities, and future plans of local units of government, the private sector and the federal government.
3. Review current programming and future planning (of all state boards, commissions, departments and agencies) as they apply to the conservation, protection, development, and management of the natural resources of the state.
4. Act as the coordinating agency for the planning activities of all state boards, commissions, departments and agencies and local levels of government. Involvement in natural resources.
5. Review all plans filed with the federal government by state boards, commissions, departments and agencies relative to any new, expanded or amended federal aid program.
6. Make available to the state legislature or any authorized committee or commission thereof information concerning state-wide natural resources plans and basic research from which these plans had been developed.
7. Prepare an Annual Natural Resource Program for submission to the legislature.
8. Prepare an economic report appraising the natural resources economic situation of the state, reviewing the extent to which natural resources have provided, through their conservation, protection, development and management, employment and income, and such other economic information as is relevant to state development which shall be transmitted to the legislature and to the people at the beginning of each calendar year.
9. Survey, review and report to the Governor on the accomplishments of state programs in achieving the goals and objectives set forth in the Governor's Annual Natural Resources Program report.

10. Provide technical assistance and encourage the development of planning programs by state boards, commissions, departments and agencies and local levels of government.
11. Apply for, receive, administer and utilize any grants or other financial assistance from the federal government under Section 701 of the Federal Housing Act of 1954 as amended, or any other federal grant-in-aid or assistance program, and other private or public sources that shall be made available for achieving the purpose of this act.

Provided, however, that in odd number of years when a governor-elect is about to assume office, the governor-elect shall be invited to participate in the preparation of the reports provided for under paragraph 7 and 8 above.

#### Section 6.

##### Additional Powers of Director

The Director, to carry out the purposes of this Act, shall have the following additional powers and duties, which may be exercised through or by the various divisions of the Department of Natural Resources:

1. To acquire by purchase at a reasonable price, condemnation, lease, gift, devise, transfer, or otherwise, lands or other property, real, personal, or mixed, for state forests, state parks, water projects, wildlife areas, recreation areas, demonstration areas, historic or scenic areas, or any other purpose within the policy of this Act. Land may be acquired subject to reservation of mineral rights or other encumbrances when such acquisition is considered by the Director to be consistent with the primary purpose for which the land is acquired. No mining operation shall be conducted on land controlled by the Department unless adequate security, as determined by the Director, is posted to ensure restoration of the mined area.



2. In the name of the State of Kansas, the Department or a particular division as may be appropriate, to enter into such contracts, understanding, memoranda, and cooperative agreements as will facilitate the administration of the Department and the policy of this Act.
3. To apply for and accept from the federal government, its agencies, or other public or private sources, gifts, grants, or other aids made available for Department purposes. The gifts, grants, or other aids received may be used subject to any reasonable limitation imposed upon them.
4. To make investigations into all matters which affect the Department or its policies and in this regard to have the power to enter upon private land, to administer oaths, and to subpoena witnesses and papers pertinent to the investigations.
5. To make rules and regulations to carry out the purposes of this Act.
6. To delegate the powers granted by this section. If the delegation is to a Division Chief, it shall be exercised only for the division which he heads.
7. To call upon institutions of higher learning or other private institutions for cooperation in research and investigations conducted by the Department, and to provide reasonable compensation for such work.
8. To keep records of all proceedings, contracts, bonds, documents, rules, regulations, orders, and other official acts of the Department.
9. To lease or sell mineral or mining rights under, or on, lands controlled by the Department when the lease or sale is consistent with the policies of this Act. Each lessee or purchaser must post sufficient bond as determined by the Director to insure restoration of the area mined.

10. To sell, lease, or exchange lands and other properties controlled by the Department when in the judgment of the Director the retention of such property would not serve to effectuate the policy of this Act.
11. To grant such easements, licenses, and rights of way over lands controlled by the Department of public utilities, public sewer corporations, political subdivisions, public authorities, and other persons as may be consistent with proper conservation, management, development, or protection techniques.
12. To lease areas of land not to exceed . . . acres controlled by the Department to churches, school districts, civic organizations, or private citizens of the State for periods of not more than ten years to be used for health, recreation, or educational purposes upon such reasonable conditions as are consistent with the policy of this Act.
13. To enter into authorized interstate compacts.

#### Section 7.

##### Division of Forestry - Powers

The Director, to carry out the purposes of this Act, shall have the following powers, to be exercised thorough or by the Division of Forestry:

1. To administer the forestry policies of the Natural Resources Program.
2. a. To control, protect, develop, and manage all forested areas administered by the Department and designated by the Natural Resources Program primarily for forest purposes.  
  
b. To protect and advise on and cooperate in the control, development, and management of all forested areas administered by the Natural Resources Program for some primary purpose other than forestry.
- c. To protect and advise on and cooperate in the control, development, and management of all forested areas administered by other state departments and agencies.

3. To establish, operate, control, and maintain an adequate fire protection and prevention system.
4. With the consent of the division having control over the area involved, to sell at the best obtainable price, the forest products from the lands administered by the Department.
5. To assist the division of public relations and education in the promotion and development of forestry knowledge throughout the State of Kansas.
6. To advise and assist landowners or occupiers in forest management and protection and the planting of forest and shade trees.
7. At the request of landowners, to reforest areas where reforestation is necessary or desirable to effectuate the policy of this Act. In the event that the Director reforests any such area, the landowner shall pay the actual costs of planting to the Director.
8. To carry out the inspection and replanting provisions of the Strip Mining Acts.
9. To establish and maintain tree and shrubbery nurseries.
10. To execute, administer, and enforce the forestry laws of the State.

#### Section 8.

##### Division of Water - Powers

The Director, to carry out the purposes of this Act, shall have the following powers, to be exercised through or by the division of water:

1. To administer the water policies of the Natural Resources Program of the Department.
2. a. To control, protect, develop, and manage all water projects and water areas administered by the Department and designated by the Natural Resources Program primarily for water conservation and water purposes.

- b. To advise on and cooperate in the control, development, protection, and management of water projects and water areas administered by the Department and designated by the Natural Resources Program for some primary purpose other than water conservation.
- c. To advise on and cooperate in the control, development, management, and protection of water projects and water areas administered by other state departments and agencies.
3. To establish, operate, and maintain an adequate flood forecasting and stream gauging system, and to issue news reports on the condition of the streams in the State.
  4. To investigate all water obstructions and to notify the owner to remove, relocate, alter, or repair them if necessary.
  5. To devise all possible ways and means to conserve and develop the water supply and water resources of the State.
  6. To construct, maintain, and operate works for water storage, flood control, channel improvement, or other purposes of the division.
  7. To issue such licenses, permits or agreements as are required by the laws of the state relating to the supply, storage, transportation, appropriation, obstruction, or use of water and water power.
  8. To report all evidences of pollution to the Department of Health and the Sanitary Water Board.
  9. To execute, administer, and enforce all water laws of the State not specifically administered by other departments of the State.

#### Section 9.

#### Division of Parks and Recreation - Powers

The Director, to carry out the purposes of this Act, shall have the

following powers, to be exercised through or by the division of parks and recreation:

1. To administer the parks and recreation policies of the Natural Resources Department.
2. To control, develop, and manage all state parks, historic sites, and scenic areas.
3. With the advice and cooperation of the division of forestry, to control, develop, and manage all forested areas administered by the Department and designated by the Natural Resources Program primarily for park and recreation purposes.
4. With the advice and cooperation of the division of water to control, develop, protect, and manage all water projects and water areas administered by the Department and designated by the Natural resources Program primarily for park and recreation purposes.
5. To cooperate with the Department of Highways in the beautification of state highways, and the establishment and maintenance of roadside rests.
6. To assist the Division of Public Relations and Education in the promotion and development of parks and recreation knowledge.
7. To lease areas in state parks, historic sites, and scenic areas controlled by the division to concessionaires under such reasonable conditions as the Director may determine.
8. To cooperate with municipal subdivisions of the State in meeting their recreation obligation to the inhabitants of the subdivisions and the state.
9. To cooperate with the Department of Highways in placing adequate direction signs guiding the public to the areas controlled by the division.
10. To execute, administer, and enforce all park and recreation laws of the State.

Section 10.Division of Fish and Game - Powers

The Director, to carry out the purposes of this Act, shall have the following powers, to be exercised through or by the division of fish and game:

1. To administer the fish and game policies of the Natural Resources Program of the Department.
2. To control, protect, develop, and manage all the fish and game resources of the State.
3. With the advice and cooperation of the division of forestry, to control, develop, and manage all forested areas administered by the Department and designated by the Natural Resources Program primarily for fish and game purposes.
4. With the advice and cooperation of the division of water to control, develop, protect, and manage all water projects and water areas administered by the Department and designated by the Natural Resources Program as primarily for fish and game purposes.
5. To execute, administer, and enforce the fish and game laws of the State.

Section 11.Division of Mines and Minerals - Powers

The Director, to carry out the purposes of this Act, shall have the following powers, to be exercised through or by the division of mines and minerals:

1. To administer the mines and mineral policies of the Natural Resources Program of the Department.
2. To carry out the licensing, registering, and inspection provision of the Strip Mining Acts.
3. To execute, administer, and enforce all the mines and mineral laws of the State.

Section 12.Division of Lands and Soil - Powers

The Director, to carry out the purposes of this Act, shall have the following powers, to be exercised through or by the division of lands and soil:

1. To administer the lands and soil policies of the Natural Resources Program of the Department.
2. To execute, administer, and enforce laws previously administered by the State Soil Conservation Commission.
3. To execute, administer, and enforce the restoration provisions of the Strip Mining Acts.

Section 13.Division of Public Relations and Education - Powers

The Director, to carry out the purposes of this Act, shall have the following powers, to be executed through or by the division of public relations and education:

1. To administer the public relations and education policies of the Natural Resources Program of the Department.
2. To cooperate with any public or private agency or individual in gathering or supplying information and in advancing Natural Resources and Natural Resources concepts.
3. To publish and disseminate information in relation to Department functions and activities. The use of such information in the public schools of the State shall be subject to the approval of the Department of Public Instruction.
4. To provide Natural Resources lecturers, movies, and other educational media for youth and adult groups in the State.

#### Section 14.

##### Continuous Development Program Planning

The State Planning Officer shall have in continuous process and revision a comprehensive statewide Natural Resources policies plan for the coming years, in light of direct studies of the palns, needs, and operations of state agencies, local units of government, and the federal government, and of existing and prospective resources and capabilities of the state to undertake and coordinate measures to meet such existing and prospective needs, demands and opportunities that are identified. In the performance of this work the State Planning Officer shall have the authority to require the various departments, boards, commissions, and agencies of the state government to furnish information with respect to their programs and plans at such times and in such form as required to carry out continuous Natural Resources program planning.

#### Section 15.

##### Review of Federal Assistance or Grant-in-Aid Applications

The Natural Resources Planning Director shall, as soon as practical after adoption of this legislation, prepare a compilation of all federal programs and projects involving Natural Resources agencies of the state government. He shall maintain this compilation on a current basis and, as necessary, shall require the various state Natural Resources Divisions to provide periodic reports relating to federal programs in which they participate. The Natural Resources Planning Director is also empowered to require that, as soon as practical after the adoption of this legislation, copies of all existing state programs and program plans prepared for any federal agency in conjunction with any federal aid program involving the State of Kansas be filed with the Department on Natural Resources. The Natural Resources Planning Director shall review all applications, plans, and proposals submitted to any federal agency relative to any new, expanded or amended federal aid program. Such review shall be made prior to the time of the submission of the application or plan to the federal government and shall serve to determine whether or not the proposed paln or application is consistent with state natural resources policy objectives; whether or not the proposal involves duplication or conflict with any other federal program being carried on by or requested by any other state agency; and whether or not the proposal or plan has been established so as to maximize federal benefits available to the state. Reports on the findings of such review shall be provided to the State Planning Officer. Any federal aid plan or proposal which the State Planning Officer determines to be inconsistent



with the state development plan and program, or other established state development policy, or with any state, local or other federal program shall be returned to the originating agency for further consideration. In such cases the Natural Resources Planning Director shall consult with the appropriate natural resources division for the purpose of bringing the federal aid proposal involved into conformity with the state development plan and with other pertinent state, local or federal programs. No application for federal assistance shall be forwarded without the approval of the State Planning Officer, in accordance with the procedures contained in this section; provided, however, that the State Planning Officer may by regulation exempt such federal assistance programs from the provisions of this section because of their relative lack of significance, or for such other reasons as he may deem appropriate and feasible.

#### Section 16.

##### Advisory Commissions and Councils

The Governor may, at his discretion, establish such advisory commissions or councils to further the work and responsibilities of the Department of Natural Resources of the Department of Administration as may be necessary and appropriate. All members of such commissions or councils shall serve at the pleasure of the Governor, and any vacancies occurring on such commissions or councils shall serve without compensation but shall be reimbursed for the necessary expenses incurred in the performance of their duties as shall hereafter be provided by law.

The Governor shall designate the chairman and such other officers as he may deem necessary to each advisory commission or council. The Natural Resources Planning Director or his delegate shall act as executive secretary to any such commission or council. Advisory commissions or councils established pursuant to this section shall meet at the call of their chairman, or of the Natural Resources Planning Director.

#### Section 17.

##### Conflict with Other Statutes

In the event of any conflict between this or any other statute, law resolution, or order previously enacted by the legislature of the State of Kansas, the terms and conditions of this act shall prevail.

Section 18.Saving Clause

If any clause, paragraph, subsection or section of this act shall be held invalid or unconstitutional it shall be conclusively presumed that the legislature would have enacted the remainder of this act without such invalid or unconstitutional clause, paragraph, subsection or section.<sup>1</sup>

---

<sup>1</sup>Advisory Commission of Intergovernmental Relations, State Legislative Program, Washington, D. C., November, 1975.

## APPENDIX 3

## CLASSIFICATIONS OF NATURAL RESOURCES

Natural resource planning, administration, and management is often discussed as though it were a single large program applicable to all resources. When one attempts to formulate a natural resource program, however, he quickly discovers that the same sort of proposals are not applicable to all resources. At once, the need for classification of "natural resources" become apparent. This situation stems from the fact that some classes of resources have a longer use life, are more exhaustible, or can be more easily renewed than others.

Most classifications of natural resources are now based on the relative renewability of the resource. With this basic criterion we can distinguish between the different classes of resources. Thus the distinct classes of resources are:

Class I: Fund or Stock Resources. Our total physical supply of these resources is relatively fixed and nonrenewable. Coal, petroleum, natural gas, and peat soils can be replaced over long periods of time, but we cannot expect any significant increase in the total physical quantity of these resources during the time period in which we operate. Fund resources fall into two general subclasses:

1. resources such as coal and the mineral fuels, which are exhausted or chemically changed through use, and
2. resources such as metals and tone, which wear out very slowly and which are often capable of reuse.

Class II: Flow Resource. Resources such as precipitation, the water in streams and lakes, sunlight, wind, tides, and climate. The flow of these resources comes in a continuous and predictable stream, which continues regardless of whether the resources are used or not. From a natural resources standpoint, these resources are renewable. But they must be used as they become available; and failure to use them results

in permanent loss of the value they could have had. Flow resources can sometimes be captured and stored for future use. Water can be retained in surface or underground reservoirs while the energy from the sun can be stored both in plants and in certain chemicals. When flow resources are stored in this manner, they take on some characteristics of fund resources.

Class III: Biological Resources. This includes crops, forests, range and pasture cover, livestock, wildlife, fish, and even human beings. These resources have some flow characteristic in that they are replaceable over time, provided care is taken to safeguard and use the seed stock needed for each new generation. At any given time, however, they may also be treated as fund resources, which can be so used or exploited as to greatly reduce or even prevent their future flow or growth. Unlike fund and flow resources, the productivity of biological resources "may be decreased through exploitation, maintained at the present level, or increased by the action of man".

Class IV: Soil Resources. These represent a combination of fund, flow, and biological resources. A farmer may exploit or destroy a fund of fertility stored up over periods of several centuries. He may use his land in such a way as to draw only upon the annual flow of fertility created by the action of plant roots, soil solutions, and organisms in releasing various soil nutrients for possible plant use; or he may carry on a soil-building program (use of legumes, manure, and green manure crops), which emphasizes the action of plant roots and soil micro-organisms in building up the productive capacity of his soil. Soils lack the life-cycle characteristics of plants and animals. Except

for peat soils, which are better treated as fund resources, they are comparable to biological resources in the sense that their productivity can be decreased, maintained or increased by human action over time.

Class V: Man-Made Improvements. This represents a special classification of land resources in that they are not natural resources. Most buildings, streets, multipurpose dams, and other similar improvements have a predictable economic life. Aside from this characteristic, they may be treated for natural resources purposes in much the same way as soil resources. Their productivity over any given time period can be adversely affected by abuse or destructive action. Yet with good management and the timely application of an appropriate flow of inputs for repairs and other improvements, their long-run productivity can be definitely enhanced.<sup>1</sup>

Other definitions of natural resources have also been applied. They have been expressed as renewable and non-renewable resources and by definition will include the 5 classes of resources previously mentioned.

Renewable Resources are those which create or sustain life--those upon which organic existence depends. They include sunlight and air, soils, forest and other vegetative cover, water and animals. Such resources either renew themselves by reproduction, or are continued in supply by natural processes which can be aided or interfered with by man.

Non-Renewable Resources are those which are not organic, and not of themselves creative. They are used to support and increase prosperity and security. They include metals, petroleum, gas, and coal. These resources are non-renewable in the sense that they do not reproduce themselves, that it takes nature ages to create them, and that man has not yet found a way to speed the process of their creation. Programs for such non-renewable resources depends upon economical methods of recovery and use, salvaging of wastes and development of substitutes. Continuing discovery of additional deposits will also help meet ever increasing human demands.<sup>2</sup>

---

<sup>1</sup>Morton, Rogers, CB, Sec. of the Interior, "Rigorous Conservation, Responsible Development, Our Natural Resources", The Choices Ahead, U. S. Dept. of the Interior, Conservation Yearbook Series No. 10, 1974, p. 5.

<sup>2</sup>Callison, Charles H. America's Natural Resources, Roland Press Co., New York, 1957, p. 9.

## APPENDIX 4

LEGAL DEVICES FOR NATURAL RESOURCES PLANNING AND  
INTEREST IN REAL PROPERTY

The public administrator, planner, etc., who attempts to provide for a "comprehensive natural resource program" can choose from a variety of legal tools. The selection of legal tools requires that an appropriate mix of techniques be used to achieve the public goals at the lowest possible cost. Certain devices have been developed that will compel or induce wise management or use of natural resources. The combination of these devices to be used in any given situation will certainly depend on the circumstances, individuals, and groups concerned.

Legal Devices

1. Zoning - zoning is an area in which state has directly legislated to land use. This technique involves - the division of land by legislative regulation into districts, and the prescription and application in each district of regulations having to do with structural and architectural designs of buildings and of regulations prescribing use to which buildings within designated districts may be put.<sup>1</sup>

In the past no county or other municipality has tried to specify a particular manner of using rural land. That is, many have restricted certain areas to agriculture but none have divided the open area into specific uses. (e.g., forestry, agriculture, recreational and so forth).

Now, however, as states begin to reform their land regulatory systems it is increasingly apparent that Hawaii's 14 years of administering a system of statewide controls offers a valuable source of partical experience.

Hawaii - the state "Land Use Commission" consists of seven private citizens plus the:

- Director, Department of Land and Natural Resource
- Director, Department of Planning and Economic Development.

---

<sup>1</sup>Black, H. C., Black's Law Dictionary, rev. 4th ed., Minn.: West Publishing Company, 1968, p. 1793.

The Commission has divided the entire state into four districts specified in the statute:

- urban
- rural
- agricultural
- conservation

The uses to be permitted in the urban districts are determined by the county governments and their zoning regulations, and the county has no obligation to permit the land to be used for "urban" type development.

The use of lands in rural and agricultural districts is governed by regulations adopted by the Land Use Commission. In general these regulations permit only traditional agricultural uses in the agricultural districts. In the rural districts low-density residential uses and quasi-public uses are also permitted.

The conservation districts use of land is subject to the sole regulation of the Department of Land and Natural Resources. The regulation divides the conservation area into two general sub-zones, an RIV restricted "Watershed" zone and a GU "General Use Zone", plus three special subzones designed to permit specifically a college, a cemetery, and a nursing home.

Both planning and land use zoning are aided by several unique advantages. Overlapping governmental jurisdictions are absent. Each island, with a small number of exceptions, is a county, and each county is surrounded by the permanent "Blue Belt" of the Pacific Ocean. Each county has a city-type government and there are no independently incorporated cities. Authority for property assessment and taxation is vested in the state government, and taxes are assessed in accordance with land use zoning.<sup>2</sup>

2. Permits and Licenses - permits and licenses have been used much more extensively than zoning as a means of controlling natural resources. By requiring a license or permit before a certain act can be performed, public agencies can impose the necessary conditions precedent and thus exercise an element of control. In addition, on the basis of the number of permits issued, it is possible to permit and anticipate the total action that will be taken as a result of the issuance.

An example of this type of land and/or natural resource regulatory system can be seen as follows.

---

<sup>2</sup>Reitze, Arnold W. Jr., Environmental Planning: Law of Land and Resources, NAI, 1974, p. 48.

Vermont: The "Vermont Environmental Control Law" (Act 250) created an Environmental Board (9 members), assisted by seven (7) regional commissions, who consolidate and coordinate regulations and issues permits on all major proposals for development in the state. Permits are required for:

1. any residential subdivision involving lots of less than 10 acres;
2. any commercial or industrial development of substantial size; and
3. any development above the elevation of 2500 feet.

Applications for permits are reviewed by an Agency 250 Review Committee, consisting of representatives of certain state agencies. This Committee then sends recommendations to one of the seven district commissions, which holds a public hearing, at which comments may also be offered by local or regional planning commissions.

Applications may be denied if the proposed development is determined to be detrimental to the public health, safety, morals, and general welfare.

Criteria:

1. does development result in undue water or air pollution;
2. is there a sufficient supply of water available;
3. does development cause an unreasonable burden on an existing water supply;
4. will soil erosion occur;
5. does development cause highway congestion;
6. can adequate educational services be provided; and
7. can adequate municipal or governmental services be provided.



The "Law" further requires the adoption of a series of state-wide plans, (in 3 stages), which will become additional criteria for decisions on applications for permits.

Stage 1 - an interim "capability plan" which is a catalog of current land uses and capabilities

Stage 2 - a "capability and development" plan

Stage 3 - a "land use plan"

These statewide plans are intended to provide:

1. a criteria for issuing development and subdivision permits;
2. a guide for state agency operation;
3. a guide to regional agencies and local governments in carrying out their planning, implementing efforts; and
4. a means of informing private enterprise of public goals and policies thereby facilitating their activities.<sup>3</sup>

3. Taxation - taxation represents another important power of government over the use of land and/or natural resources. Most of the taxes levied by the federal, state, and local levels of governments are levied for the express purpose of collecting revenue. Certain precautions are used in most jurisdictions to keep these taxes from being arbitrary, discriminatory, or unreasonable.

Chief Justice Marshall on the other hand, observed that, "the power to tax is the power to destroy". This suggests that the taxing power can be used to attain particular ends such as:

- force the distribution of property holdings;
- exemptions can be used to favor particular classes of uses;
- tax policies can be used to encourage either conservation or the more intensive use of particular natural resources.<sup>4</sup>

---

<sup>3</sup>Gallion and Eisner, The Urban Pattern, New York: D. Van Nostrand Co., 1975, p. 473.

<sup>4</sup>Bosselman and Callies, The Quiet Revolution in Land Use Control, CEQ, 1971, p. 54.

Today, techniques such as preferential or use value tax assessment programs have been instituted at state levels as incentives for the maintenance of open space of all kinds - particularly agricultural lands. These kinds of programs can be classified into three categories: preferential assessment, deferred taxation, and restrictive agreements.

A. Preferential Assessment - is simply an assessment on current use of the land rather than its value on the open market. No penalty is brought if the land is later converted to another use. (In some cases tax recapture clauses or conveyance tax legislation has been added to reduce the speculative benefits of this form of taxation.) If the land has enjoyed preferential tax treatment for five years for example, the speculator must include a five year, five percent conveyance tax as a deductible transaction cost in calculating net returns for development. But the rate of annual appreciation, the value of land as an element in the total development process, capital gains taxation, and other considerations can swamp the conveyance penalty in the decision to develop.

B. Deferred Taxation - is nothing more than preferential assessment with a built-in penalty clause for change in use. For example, New Jersey's open space law. Land in the program must be no less than five acres in area and actively devoted to an agricultural use for no less than two successive years immediately preceding the tax year in question. Any change in use from agriculture results in a roll-back tax equal to the amount of tax saved during that year and two preceding years being assessed to the property owner. (Deferred taxation has the advantage of producing revenue for a community precisely at the time when it is most needed for new facilities and services to accommodate new residents.)

C. Restrictive Agreements - in this form, the community, or state, as well as, the landowner, can choose which lands will receive preferential consideration. In a restricted agreement program, the landowner agrees to restrict the use of his land for a specified number of years. In turn, the local unit of government agrees to certain tax concessions. Typically, the use of the land is restricted to ten years, and either party must give several years' notice if he intends to change land use. After he gives that notice, either the land reverts to standard taxation or some type of penalties are imposed. If the owner changes the land use without following the prescribed procedures, much more stringent penalties are assessed. For example, if the owner illegally changes land use, all of the deferred taxes, plus 20 percent penalty plus interest, are collected,

4. Authorities - the use of the authority is only an indirect aid to the private citizen of the state. It is, however, a direct

aid to municipalities because of the limitations on the amount of their indebtedness. Authorities, when established, are bodies corporate and politic, and are empowered to acquire, hold, construct, impose, maintain, operate, own, and lease, among other projects, bridges, tunnels, flood control projects, highways, parkways, parks, recreation grounds and facilities, sewers and sewer systems, sewage treatment works, waterworks, water supply works, water distribution systems, swimming pools, playgrounds, lakes, and low head dams. None of these powers, however, are to be exercised to duplicate an existing enterprise. The authority can conduct only those projects specified by the articles, unless none are specified, in which case the authority is deemed to have all powers granted by the Act.

5. Non-Profit Corporations - by the non-profit corporations device it is possible to incorporate for various non-profit purposes that will allow the acquisition and maintaining of land for public parks and recreation purposes. Being able to hold property in its corporate name is merely one advantage of a corporation. Others are, for example, that the corporation can have perpetual existence, and that the corporate form limits individual liability for departments.<sup>5</sup>
  
6. Acquisition of Land - in this mode, units of government may acquire property (either a fee or less than fee interest) through:
  - a. Purchase,
  - b. Lease,
  - c. Gift, or
  - d. Condemnation (a forced sale).

Purchase provides the most control by the owner but requires the payment of the full cost during a short period of time. However, installment sales contracts can be used, as well as other deferred payment plans. Since the cost of interest tends to be lower than the appreciation in land values, such as approach seems worthy of serious consideration.

Lease arrangements are aptial and temporary solutions for projects seeking to protect open space. Money is spent but no permanent benefit accrues. However, a lease can be used to avoid development until land can be permanently acquired. A lease with a purchase option

---

<sup>5</sup>Urban Land Institute, "Management and Control of Growth", Vol. 111, ULI, 1975, pp. 56-58.

can be used to acquire land immediately while deferring the purchase payments. An additional benefit of this technique is that the price can be negotiated based on present values.

Gifts are a useful method of acquiring land. When land is to be protected from development, owners will often give land or sell at bargain prices. Such gifts can be encouraged by the favorable treatment provided in the internal revenue code. The disadvantage of gifts is that often the land comes with undesirable restrictions. This can usually be overcome by negotiations with the donor.

Condemnation requires authority (inherent or constitutional or statutory) and further requires that legal procedures be properly followed. Condemnation through the power of eminent domain requires that the acquisition be:

- a. for a public use and
- b. is necessary.

Public use is interpreted by the courts to allow substantial discretion to the acquiring authority. Common tests are:

- a. actual use; and
- b. beneficial use.<sup>6</sup>

#### Other Legal Devices to Consider

In addition to those six (6) legal devices just outlined, there are a number of other such techniques that may also serve as basis for a sound natural resource enforcement program. These regulatory controls will be necessary to assure that the management agency(s) has the authority to implement any type of land use plan.

#### Other Legal Devices for Direct Interest in Property

"Fee Simple Ownership" - an absolute estate of inheritance clear of any condition or restriction.

"Easement" - rights held by others to use one's land for special purposes.

"Deed Reservations" - reserve mineral rights, timber cutting rights, rights-of-way, or other comparable privileges to the grantor.

---

<sup>6</sup>Schulz, Wn. F. Conservation Law and Administration, New York: Roland Press, 1953, p. 567.

Table 11

## REGULATORY CONTROLS

- Zoning
- Flood plan zoning and regulations
- Environmental performance zoning
- Subdivision regulations
- Planned unit development regulations
- Buffer zones
- Conservation and scenic easements
- Dedication practices
- Density bonuses
- Housing codes
- Building codes
- Performance bonds
- Construction permits
- Development permits
- Transferable development rights
- Hillside development regulations
- Drainage regulations
- Grading regulations
- Soil erosion and sediment control ordinances
- Vegetative cover ordinances
- Solid waste control ordinances
- Septic tank ordinances
- Package treatment plant standards
- Taxation policies
- Public works policies
- Public investment policies
- Land conservation policies
- Discharge permits
- Public purchase of development easements
- Public purchase and lease-back of undeveloped land
- Compensatory regulations
- Differential assessment
- A land gains or speculation tax
- Critical areas regulation
- Coastal zone regulations
- Sequential or phased construction of publicly funded capital improvements
- Farmland conversion regulation: Nuisance, Negligence, Trespass, Ultra-hazardous activities
- Site location regulation
- Special district arrangements
- Public trust doctrine
- Ninth amendment
- Inverse condemnation

"Covenant" - an agreement between property owners to enforce something.<sup>7</sup>

"Fee Tail Estates" - owner in each succeeding generation had the right to possess and enjoy the property but could not set or dispose of it to persons other than the heir next in line of succession.

"Life Estates" - life tenant can enjoy, possess, and use the property throughout his own lifetime.<sup>8</sup>

"Homestead" - a portion of the holding, limited both as to total area and value, owned and occupied by families as their home. (rights cannot be sold)

"Lease" - relationship created by a contract that gives a tenant or leasee the right to possess and use a property held or owned by a landlord or lessor.

"Mortgage" - conveyance of landed property by a borrower (mortgagor) to a lender (mortgagee) as security for the payment of a debt, with the provision that the conveyance is to be void if the debt is paid in the manner and period perscribed.

"Land or Purchase Contract" - arrangements by which buyers with limited capital may acquire rights to property. Similar to mortgage transactions, the giver of a land contract can gradually build up his equity in the property he is buying to the point at which he can convert his contract

<sup>7</sup>Deed restrictions and covenants run indefinitely, for definite periods, or they may be limited by statute. They are legally enforceable as long as they do not run counter to public policy. Enforced by court orders or injunctions issued against persons who violate or by personal actions for damages.

<sup>8</sup>Two Conditions of Estates: "Precedent" estate - involves requirements that must be met or events that must occur before an estate will vest. "property shall vest with a given heir on a specified birthday, when he marries, or on the death of a life tenant". "Subsequent" estate - involves events or types of action the nonperformance of which will defeat estates already vested. "property will continue only until the happening of certain events or "during", "while", or "so long as" the grantee complies with certain conditions".

into a mortgage or possibly assume complete ownership. However, as long as he continues to operate under a land contract, the title of the property remains with the holder of the contract. The buyer under these conditions has the right to possess and use the property. These rights together with his equity in the property can easily be forfeited without need for foreclosure proceedings if he defaults in his payment.

"Lein" - is a right enjoyed by certain classes of creditors (including mortgages) to require, if necessary, the sale of a debtor's property to satisfy some debt or charge. Principal types of liens are:

1. mechanic's lien for charges associated with the use of labor and building materials;
2. tax liens for the payment of delinquent property, inheritance, gift, or income taxes; and
3. judgment liens, which result from court actions.

"Estate-in-Severalty" - an estate which is held by a tenant in his own right only, without any other being joined or connected with him in point of interest during the continuance of his estate. (once known as "common property").

"Tenancy-in-Common" - each party owns an undivided share in the property. He may sell this undivided interest or dispose of it by will; otherwise it becomes part of his estate upon his death and passes to his heirs at law.

"Joint Tenancy" - two or more persons holding joint or co-ownership in a property, each with rights to survivorship to the interests of the others. This means that if one of the owners dies, his ownership rights go automatically to the survivor(s) rather than to his heirs.<sup>9</sup>

---

<sup>9</sup>Barlowe, Raleigh, "Land Resources Economics", The Economics of Real Property, New Jersey: Prentice Hall, 1972.

## APPENDIX 5

## "MODELS FOR MEASURING IMPACTS OF PROGRAM DECISIONS"

If a State land use program would go into effect, decision makers will definitely need strategies that will measure the consequences of their decisions and programs. This new form of decision process must aid in the anticipation of future ecological impacts by providing decision makers means to foresee and justify whether their programs will meet rigorous standards, at what cost, and whether side efforts may entail more damaging consequences than those they were trying to remedy. Hence the decisions deserve to be made with as much information, skill, and understanding as can be brought to bear upon them.

The skills and methodologies for improving predictability and understanding in natural resource land use decision making will be discussed briefly in terms of processes. These techniques are: 1. carrying capacity; 2. land use; 3. cost-benefit analysis; and 4. environmental impact statements and all are integrated in a land use impact analysis to arrive at a net assessment of the quantitative and qualitative judgments in decision.

1. Carrying Capacity - the capacity of natural and human environments to accommodate or absorb change without experiencing conditions of instability and degradation is a significant concern in view of current trends of growth and development.

From the standpoint of ecosystem management, the term "carrying capacity" is used in terms of the biological given resource, "stock", and its maximum sustained "yield". Specifically, it is interpreted as the maximum number of individual of a species than can be supported by a given habitat under various conditions of stress. The general implied goal is to maximize the productivity of the system, subject to the constraint of non-impairment or non-degradation of the supporting ecological system.

In the management of range-land resources, the concept is inherent in the limitation of livestock numbers according to available forage or water. A range-land is said to be stocked at its carrying capacity when a given number of animals with known daily nutritional and water requirements is in equilibrium with or does not exceed the actual land productivity or forage and water on a sustained yield basis. The consequence of exceeding carrying capacity is downward trend in range conditions.

In forest resource management, the concept is applied in terms of harvesting only the net annual increase in board-feet of timber produced on the forest on a sustained yield basis so that the overall total board-



feet of timber is constantly maintained.<sup>1</sup>

2. Land-Use Planning - new goals, new information, and a new emphasis on implementation have spawned the development of many new methodologies for incorporation into the land-use planning process. The potential synthesis of these methodologies points to a new land-use planning process which may be termed guidance system planning and can be observed as follows:

Stage 1: Inventory, Monitor, Predict

-an inventory of natural systems in the area, existing land use, and many other factors analyzed as informational input for land-use planning.

Monitoring of growth or a predictive model of potential growth patterns to forecast possible points of conflict between development demands and natural system demands.

A method of predicting those areas where there is likely to be a conflict between natural systems and different forms of development:  
1. selected residential; 2. logging; 3. tree farming; 4. grazing; 5. speciality; 6. applicable natural resources.

Stage 2: Decision Guides

Those plans, policies, budgets, and procedures developed by the planning staff to aid in the decision making capacity.

State 3: Policy Proposals

This process involves the generation of specific policy or project proposals.  
For example:

-acquire land at less the fee simple purchase, or  
-the careful management of flood-plains, steep slopes, and marsh areas.

---

<sup>1</sup>U. S. Environmental Protection Agency, "Managing the Environment", Washington, D. C., 1973, p. 193.

#### Stage 4: Testing Alternatives

Alternatives may be tested for two purposes: First, to determine the general effectiveness of the proposed in achieving the objectives desired, and second, to determine the environmental impact of the proposed action.

#### State 5: Action instruments

This process involves making a decision or choice among the alternatives which have been evaluated. It may be generally stated that no single tool is effective in and of itself. The essence of guidance system planning is the design of a series of action instruments which, operating in concert, create a new set of conditions and roles for development.

Spatial Location and Timing - 1. to economize on the costs of providing facilities and services and to maintain them at a high quality level;

2. to retain control over the character of development by preventing premature and sporadic building;

3. to maintain a desirable degree of balance among various uses of land;

4. to achieve greater detail and specificity in development and use regulation.

Innovating Zoning - innovation in zoning has been characterized primarily by the creation of new types of zones or districts. These include the following:

Large Lot Zoning - technique involves designating areas, which are deemed valuable for their natural resources, agricultural potential, or simply as open space, for very low density single family or agricultural use.

Exclusive Agricultural Zoning - established as a zone in which agricultural and certain related uses are encouraged as the principle uses of land.

Conservation Zones - is established to prevent the construction upon or alteration of rural or natural environments which have natural conditions of soil, slope, susceptibility to flooding, or erosion, geological condition, vegetable, or to prevent an inter-reaction between the aforesaid which makes such lands unsuitable for development. This zone is established to protect areas of the environment, that is altered, would cause health or pollution problems and environmental degradation.

Taxation Innovations - innovations in taxation policy have been used to control the timing and location of development and use. The most satisfactory way to relieve the owner of lands zoned for exclusive agricultural or conservancy use from unrealistically high property assessment and taxation is to remove development potential.

Public Investment Plans - two basic approaches to achieving an interface between public investment planning and land-use planning.

1. Development District Zoning - a technique for utilizing comprehensive capital improvement planning to control the location and timing of development and use. Types of districts could be:

- Urban
- Development
- Rural Holding
- Resource Protection
- etc.

Growth is encouraged in "Development Districts" through the provision of public services based on a five year program and by also rezoning parcels in the area to more intensive uses. (Rural Holding District - placed in "wait-and-see" condition and would be reevaluated periodically).

Development in "Holding-District" would be discouraged through several measures;

- no public service extended for at least five years;
- large lot zoning (minimum 5 acres);
- low tax assessment;
- prohibition of development on sites exhibiting unfavorable percolation;

- agricultural management and assistance programs for farmers; and
- public education.

Development in "Resource Protection Areas" would be discouraged through:

- resource protection zoning of critical areas;
  - official map of protection areas to be acquired within a 3 to 5 year period; and
  - purchase of development rights or easements.
2. Development Timing Ordinance - an approach to coordinating public investments to control the location and timing of development. (Ramapo, N.Y.).

-zoning ordinances which create new kinds of "special permits", called Development Uses. Anyone wanting to use land for development cannot do so without a special permit. A special permit is granted only if standards are met for minimum facilities and services available to the new development. The required services include sewerage, drainage, parks or recreation, schools, roads, and fire-houses. The ordinance sets up a point system of values assigned to these services. A special permit requires 15 development points.

Spatial Design Characteristics - there are three basic ways to protect the environment by controlling the spatial design characteristics of development:

- 1) the use of density zoning or planned unit development ordinances;
- 2) the inclusion of critical environmental provision in zoning, subdivision, building, or health ordinances; and
- 3) the requirement of environmental impact analysis on proposed development as a prerequisite to the granting of rezoning, subdivisions plot, or building permit.<sup>2</sup>

---

<sup>2</sup>Ibid., p. 209.

### State 6: Monitoring

Evaluation of the systems performance is obviously necessary to maintaining an adequate information system for continuous planning. Monitoring, to decision makers, would provide for liaison, consultation and review on plans and programs, for interchange or information, and for the review of plans and programs by all parties concerned.

3. Environmental Impact Statement - An environmental impact statement is a report on potential effects of a proposed land use. The statement seeks to identify the changes in materials balance and the dispersion of residuals into the environment, and must be submitted prior to approval of all public works.

That is, a governmental agency, in planning a new program must submit an impact statement which shows the changes in the environment which could be expected from a new highway, dam flood control, or other public project. This impact statement shows first the physical changes caused by the project, and then the interaction upon the environment in terms of effects on biota, chemical or natural processes, or aesthetics.

Basic components of an EIS are essentially three:

- a. a description of the proposed action and the area or activities affected;
- b. a discussion of adverse and beneficial "environmental" impacts; and
- c. an analysis of available alternatives and their environmental effects.

The way impact statements should be prepared depends on the purposes which they are intended to serve. However, one must keep in mind that one of the main purposes for which impact statements were created to serve was to make mission-oriented planning processes more responsive to other values and missions that might be affected by their action.

If the preparation of impact statements is to serve this purpose, it must emerge from an ongoing process of impact assessment.<sup>3</sup>

---

<sup>3</sup>Gladstone and Witherspoon, "EIS's and Development: Origins, Evolution, Impacts", Management and Control of Growth, Vol. 111, ULI, 1975, p. 141.

### Process of Assessment

1. Predictive Process - The context of impact assessment and impact statements is planning; and planning is inherently future-oriented, trying to forecast future trends and events and formulate proposals for actions to influence them. In this context, the function of an impact assessment is to provide reliable predictions of the significant differential impacts of alternative proposals.

2. Resource Function - The inclusion of the multiple dimensions of environmental conditions that have value for one reason or another, that are in fact resources. These functions include opportunities for direct human uses of various kinds, some of which may be compatible and others conflicting. They should also include, functions that have value in physical and biological systems affecting other human activities, and affecting life support systems; and they should include functions that are significant in social value systems whether or not direct use is involved.

3. Systems Thinking - Items on an environmental checklist interact, sometimes in complex and unforeseen ways, which may either magnify or neutralize the direct impact that is initially apparent. For this reason, impact assessments must include attempts to describe or model these systems of relationships, not simply discrete predictions of direct impacts on individual items.

#### Steps:

- a. identify the system of resource functions that are intertwined with the proposed action;
- b. do baseline studies of the parameter values that define those systems; and
- c. design predictive studies to test systems sensitivity to alternative sets of interventions.

4. Criteria for Analysis - Appropriate criteria must be used for selecting the characteristics and alternative actions that will be studied. Considerations for criteria to be used are:

- a. "Historical Frequency" or characteristics being affected by a particular type of action. (statistical research might provide such criteria: e.g., probability; distributions; etc.).

- b. "Magnitude of Direct Effects" - devoting more attention to the characteristics you think will be affected most significantly by the direct impacts of proposed action.
- c. "Magnitude of Indirect Effects" - the relative significance of the variable for the functioning of systems (regression; generalized systems studies; sensitivity analysis).
- d. "Identification of Functions" - values by affected publics and professionals. Looks at perceived impacts and is based on the involvement of assessments with planning, and thus with choices among alternatives serving differing sets of values. (This criterion might involve some of the techniques mentioned in connection with other criteria, but would also involve heavy emphasis on public involvement programs, and perhaps survey research and simulation garning, from the earliest stages of the planning and impact assessment processes.

5. Impact Assessment and Planning - impact assessment must take place throughout the course of planning as an integral element of the planning process, if it is to improve or even affect the decisions that are made.

The process of planning is shot through from start of finish with judgments, intuitive predictions, and assumptions about the impacts of alternative actions. When planning problems are first defined, the achievement of certain impacts and the reduction of others are established as the goals of alternative plans that may be developed.<sup>4</sup>

6. Benefit-Cost Analysis - a traditional approach of organizations (government), in dealing with resource or environmental problems has been to look at the benefits of public programs in comparison with their costs, an approach which as come to be known as "benefit-cost analysis".

Benefit-Cost analysis is the systematic appraisal of all benefits and all costs of a contemplated course of action, or several alternative courses of action. The criterion for whether to undertake a given course of action is that the additional benefits to be derived from taking the action exceed the corresponding additional costs.

---

<sup>4</sup> Andrews, Richard, N. L., "Impact Statements and Impact Assessment", Management and Control of Growth, Vol. 111, ULI, 1975, p. 149.

Analysis used in public works projects such as:

- dams
- reclamation
- irrigation
- flood control
- navigation projects

The benefit is estimated in terms of economic gains to beneficiaries, such as, 1) the added value of crops by providing irrigation water to farmers, or 2) the prevention of dollar loss by a flood control project to homes built on a flood plain. Benefit cost analysis is an attempt to make a rather straight forward transposition of the market-price mechanism into the field of public goods.

A. Problems in Application:

1. Public projects, particularly large dams or water systems, have fixed investments with a total capacity beyond current use.
2. Many projects are characterized by multiple use, particularly land and water developments. (e.g. a watershed may be used for recreation, water storage, flood control, irrigation, potable water, and electric power.)
3. Public projects frequently change the income distribution and crop yields may then cause in demand. This redistribution of income may in turn alter prices, which could then modify the original calculation as to the worth of the project.
4. Some public goods are non-marketable and have no price equivalents; rather they are based purely on a subjective social choice (education, defense).
5. Public projects frequently have large investments and long service lives of 50 to 100 years. This raises a serious question of people's time preference for present consumption over the value of future benefits.
6. Benefit-cost ratios cannot readily be compared with the average rate of return on investment, which is common criterion for private capital allocation.<sup>5</sup>

---

<sup>5</sup>Edmunds and Letey, Environmental Administration. McGraw-Hill Book Co., 1973, p. 225.



## B. Process for Development

Perhaps these examples, however brief, have been sufficient to suggest that the measurement and allocation of both cost and benefit will be difficult and certainly to contain a number of problems. These problems and difficulties, however, may be neutralized if the right criteria for operation is selected. To aid in the development of a cost-benefit relationship the following suggestions are listed:

- Care should be taken in breaking down a problem to make it more manageable, so one does not end up with a piecemeal analysis which results in suboptimization.
- Caution should be taken to avoid inconsistency of a piecemeal solution with higher-level criteria.
- The spillover effects of a project should be carefully studied to be sure that secondary interactions do not result in unknown costs or biological effects.
- Neglect of spillover effects, higher-level gains, or valuable inputs may lead to wrong definitions of cost and gain.
- The most appropriate criteria are the measurement of maximum gains minus all costs, with either gain or cost fixed.
- Alternative courses of action should be compared with costs calculated by at least two discount rates so that a realistic measure of present worth is reckoned under differing social preference as to the value of a future time stream of benefits.<sup>6</sup>

Those 4 strategies listed above represent a cross-section of strategies that are available to a natural resources organization. Other strategies are to include:

- 1) Materials Balance
- 2) Systems and Information Theory
- 3) Market Simulation
- 4) Trade-off Analysis
- 5) Dispersion and Circulation Systems

With these techniques some of the obstacles to the decision process in land use planning could be avoided by shifting from exhortation to analysis.

---

<sup>6</sup>Dorfman, Nancy-Robert, Economics of the Environment, Norton & Co., New York, 1972.

## APPENDIX 6

## INNOVATIVE EFFORTS IN LAND-USE MANAGEMENT

Today, many communities desire to reconcile new environmental and even newer resource conservation ethic with a number of other important and sometimes conflicting concerns. At the same time, the areawide nature of many of these concerns has prompted the innovative efforts in land use management at the state level and raised a number of critical issues on the proper division of labor in planning and directing growth within the state system.

Thus far, the more sophisticated innovative efforts at comprehensive growth management have usually been used by communities on the urban periphery that are primarily residential in character, composed of a relatively affluent, well educated population and subject to intense growth pressures. Examples of these techniques, which may certainly be considered for use in a natural resource program can be categorized in terms of their primary purpose:

1. Purpose: To immunize certain land uses such as open spaces, farm land, and districts of historic or architectural interest from development pressures.
- 1a. Measures: Transfer, purchase, or donation of development rights, tax inducements such as tax on present use; roll-back penalties; contracts to provide preferential tax relief for nondevelopment guarantees.
2. Purpose: To limit, delay, or control the rate and location of development.
- 2a. Measures: Development timing ordinances, conditional zoning moratoria on sewer and building permits, growth ceilings, rationing of building approvals.
3. Purpose: To make zoning a flexible tool for negotiating a high urban design in large scale, privately financed development and to grant local officials more, yet structured, discretion when making, planning decisions in areas undergoing rapid and unpredictable types of change in their land use.

- 3a. Measures: Planned unit development (PUD) ordinances, planned commercial districts, contract zoning, incentive zoning, interim zoning controls, new community development districts, design review and site plan review procedures, environmental performance controls.
4. Purpose: To increase housing opportunities for low and moderate-income families.
- 4a. Measures: So-called "inclusionary zoning" techniques such as requiring residential developments above a given size to include a given percentage of units for lower income occupancy.
5. Purpose: To insure that new development pays a fuller share of its own infrastructure and public service costs.
- 5a. Measures: Mandatory dedication of sites for public facilities, requirements of capital facility advances or equalization fees, special policies for utility connections.

These comprehensive programs seek to integrate the types of legal techniques described above with advanced impact assessment and development information systems, with traditional planning and regulatory activities, and most important, with the programming of major public investments which shape the pattern of private development decisions.<sup>1</sup>

The states which have asserted their authority over use, development, and conservation through land use controls have invariably done so in reaction to the threat or actually of major adverse environmental and economic impacts from rapid, unfettered growth, growth that local government was either unable or unwilling to regulate. In fact, the constituency for state action has often included local government officials faced with unmanageable burdens on their highway, education, water and sewer systems. They have been joined by farmers worried by conversion of crop land, rapidly rising land prices and the threatened loss of the critical mass of farm units required to support a regional agricultural infrastructure. The alliance has been rounded out by environmentalists concerned with air, water and aesthetic quality; by businesses with economic interests in resource conservation, tourism and recreation; and, by outdoor

---

<sup>1</sup> Bowman, George A. Land-Use: Issues and Research Needs for Planning, Policy, and Allocation. Washington State University, Pullman, WA, February, 1976.

sportsmen, campers, hikers and nature lovers.

Where the disaster dimension is lacking, this coalition has proved difficult if not impossible to create. The guardians of local prerogatives, the farmers, the environmentalists, the resource users, the recreation interests and the wilderness protectors are defining their own interests against the others and, often, against any state intrusion. "Land-use" has, if anything, become a negative rallying point creating opposition of such virulence in some states that land use planning is not included as an element in the state planning program of those states.

Whether or not land use planning is identified as an activity in the state planning process, it is done (Table 1). In his presentation to the Minnesota Horizons Conference in January, 1975, Joe Sizer of the Minnesota State Planning Agency described the situation in that state:

In the past, government has taken a band aid approach to problem solving in designing separate programs to deal with each problem after that problem occurs. Minnesota has created a host of separate statutory authorities, resulting in a vast array of functional programs and responsibilities under the jurisdiction of numerous state agencies, units of local government, and special purpose board, districts, and commissions. Recent research has disclosed that 679 land-use related powers now exist among six state agencies. The Department of Natural Resources, Department of Aeronautics, Pollution Control Agency, Highway Department, Department of Administration and Environmental Quality Council have impact on the use of the state's lands through a variety of means. These include acquisition or disposal of land; the setting aside of certain lands, waters and resources; regulations and standards, permits and licenses; development, maintenance, financial assistance, enforcement, and taxation. . .

To date, we have not successfully knitted these various state and local programs together, nor have we provided any pattern to guide program administration or to determine program effectiveness and accountability. Our approach to problem solving, in many instances, still relies on a case-by-case determination of good versus bad, where we win some and lose some. The trouble is both sides may lose the really crucial cases which should have

been decided in their behalf--not so much for their sake, but for society's. . .

In the 1974 Congress, Section 701 of the Housing and Urban Development Act was amended to require recipients of 701 planning funding--states, regions and local governments--to include a land use element in their planning program. The act specifies that the land use element include (a) studies, criteria and procedures necessary for guiding major growth decision and (b) general plans with respect to the pattern and intensity of land use for residential, commercial and other activities. Broad goals and annual objectives, programs and evaluation procedures must be explicit. Recipients who fail to satisfy these requirements will be ineligible for further 701 funding after August, 1977. The specificity of these mandatory requirements, coupled with what are generally regarded by the states to be currently inadequate funding levels, in causing considerable concern to state government. Many of the states have been giving priority, in recent years, to the use of 701 funds to strengthen their capability to coordinate and manage federally funded categorical programs, including land use related programs, and to improve their operational relationships with regional councils. One interesting fact is that the state planning and community affairs agencies which are 701 fund recipients have often not been nor do they wish to be assigned the responsibility for the functional aspects of land use planning such as inventories of existing uses and studies relating to growth decisions.

Only in light of the relatively recent emergence of natural resources and environmental concerns has the inherent authority of states in the area of land use control revealed its true significance. In the past, much of this authority had been delegated by the states to local governments who used it to enact zoning and subdivision regulation. While this former delegation of authority does not prevent or preclude a state's ability to deal with the issues of land use, it may indicate lack of a ready made structure at the state level wherein such activities could be located.<sup>2</sup>

States must now take the lead in bringing policies for the development and use of land into line with current natural resource and environmental realities and with the changing public attitudes which reflect these realities. The planning and regulatory procedures which have been in effect for five decades have not changed in response to changing needs and cannot serve contemporary concepts of the public interest in land management. In an effort to meet changing needs and contemporary concepts the state of Kansas must consider six basic elements or areas of concern in establishing a land use program.

---

<sup>2</sup> U. S. Department of Housing and Urban Development, "State Planning: Intergovernmental Policy Coordination", Washington, D. C. August, 1976, p. 18.

These six elements must certainly be incorporated into any state enabling legislation regarding this land use function. The elements are as follows:

1. The State of Kansas would assume responsibility for identifying areas of 'critical concern' and regulate these areas in the interest of the public.
  - a. Areas of natural resource concern.
  - b. Commercial/Industrial/Residential development of a greater than local nature.
  - c. Service and utility developments.
  - d. Areas of 'critical concern' currently uncontrolled or ignored/ neglected by local units of government.
2. The development and maintenance of a State land use plan in conjunction with a State urbanization plan.
  - a. Actual elements to be contained in each plan.
  - b. Agency responsible for date presentation.
3. The establishment of a proper land use policy to be used by Federal, State, Local and Private concerns. This policy statement would contain elements of a impact statement system.
  - a. Major Impacts - Those activities deemed of greater than local impact would require a project notification to appropriate State, Local and Regional agencies and mandatory impact statement requirements for projects in critical areas and/or projects of a predetermined size which exceed a minimum impact standard. These would be considered Type I impacts.
  - b. Intermediate Impact - Projects of this

type would require a notice of intent sent to appropriate agencies for projects in critical areas or of greater than local impacts which occur in a multi-jurisdictional area or in an area which is uncontrolled or unregulated by government controls. These would be considered Type II impacts.

- c. Minor Impact - These projects would be activities considered as greater than local in descriptive type but would be smaller in scale. These would be Type III impacts and require notification but no impact statement be done, unlike Type I and II impacts.
4. Provisions for State review of Type I and II impact and intent statements. These provisions would also be intended to monitor State activities impacting land use and State land acquisition programs as well.
5. The revamping and reconstruction of existing State valuation procedures with emphasis placed on the preservation of agricultural land as well as the tax program's relation to other State land use management goals and objectives.
6. Provisions for effective institutions to implement established State Land use policies and plans. Also included in this area would be the effective update and review of such plans, programs and policies.

To determine the method of implementation for a land use program the following structural considerations should be looked at:

State Structural Considerations:

1. The State Legislature passes enabling legislation which embodies all six previously outlined elements.
2. The Governor designates a newly created agency called the Kansas Department of Natural Resources (KDNR).
3. The KDNR is assigned the following functional tasks:

- a. Established Statewide goals and objectives as well as developing overall State operational policy which is periodically submitted to the governor and legislature for approval.
  - b. Reviews and monitors current State land use programs and land acquisition policies.
  - c. Defines critical areas for State preemptive activity with the approval of the governor.
  - d. Defines greater than local impact activities for the impact notification and review process. Also provides impact definitions and develops permit process and approval. Also State tax policy.
  - e. Assists in the development of regional land use plans and help in establishing review policies for regional bodies.
4. The KDNR is outlined with the following internal structures:
- a. The KDNR is allowed to develop an independent staff and director.
  - b. The KDNR is accorded 'cabinet post' status.
  - c. The KDNR has an advisory group with the power to review and comment on the KDNR's policies and land use programs. This advisory group consists of members from: State functional agencies with land use impact, State Planning and Research, State Budget Office, and representatives from State regional agencies.

Regional Considerations:

1. Regions are charged with the task to monitor and review all major developments in the State defined functional areas.
2. Regions are charged with the task of preparing and completing a land use inventory for their individual region which must be compatible with State land use data base and definition.



3. Regions are charged with preparing and adopting land use objectives that are consistent with State policies in land use.
4. Regions are responsible for periodic update of their plans, policies and programs in line with similar State efforts.

Regional and State Linkages:

1. The regions assist the State in identifying the areas of critical concern and help in the determination of what constitutes a development of greater than local concern.
2. The State develops guidelines for use by the regions in preparing overall plans and development policies.
3. The State supplies the guidelines and technical assistance for the implementation of the impact notification and statement system.

In the end, the development of a usable technique, whether this one or a better alternative, for arriving at natural resources decisions is crucial, not only to the prevention of biological damage, but also for the stability of the political structure.



5. What is the role of your program in a total program of regional development? Please explain.
- 
- 
6. What person or position is responsible for the administration of your natural resources program?
- 
7. Do you feel that a continuing training program is a necessary entity for administrators and staff personnel?
- \_\_\_\_\_ A. very necessary                      \_\_\_\_\_ C. unnecessary  
 \_\_\_\_\_ B. necessary                              \_\_\_\_\_ D. very unnecessary
8. What types of training programs are presently being provided by your department for administrators and staff personnel?
- 
9. In relation to the following listings, do you feel your department's budget is sufficient to carry out its program and to attract qualified applicants?
- \_\_\_\_\_ A. very sufficient                      \_\_\_\_\_ C. less than sufficient  
 \_\_\_\_\_ B. reasonably sufficient                      \_\_\_\_\_ D. very insufficient
10. How would you rate the support by local community organizations and citizens for natural resources planning and management activities?
- \_\_\_\_\_ A. very good support                      \_\_\_\_\_ C. poor support  
 \_\_\_\_\_ B. reasonably good support                      \_\_\_\_\_ D. no support at all
11. Is there a need for strong citizen participation within your program?
- \_\_\_\_\_ A. very necessary                      \_\_\_\_\_ C. unnecessary  
 \_\_\_\_\_ B. necessary                              \_\_\_\_\_ D. very unnecessary
12. What geographical area (s) will your agency serve? Will the management area be the same as the planning area?
- 
-

13. What services will your department provide?
- |                                                    |                                                    |
|----------------------------------------------------|----------------------------------------------------|
| <input type="checkbox"/> A. water supply           | <input type="checkbox"/> D. land use regulations   |
| <input type="checkbox"/> B. air pollution control  | <input type="checkbox"/> E. land use management    |
| <input type="checkbox"/> C. solid waste management | <input type="checkbox"/> F. others; please explain |
- 
14. Is financing adequate and assured for all needed actions, including overhead and administrative costs?
- |                                           |                                             |
|-------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> A. very adequate | <input type="checkbox"/> C. inadequate      |
| <input type="checkbox"/> B. adequate      | <input type="checkbox"/> D. very inadequate |
15. Is financing of any organization or services adequately self-sufficient to assure a regional perspective?
- 
16. How are key management agency decision-making officials selected?
- |                                                |                                                     |
|------------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> A. appointed          | <input type="checkbox"/> C. elected (by districts)  |
| <input type="checkbox"/> B. elected (at-large) | <input type="checkbox"/> D. others, please explain. |
- 
17. Organizations in the areawide management program will bet their powers from:
- |                                                |                                                     |
|------------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> A. state legislation  | <input type="checkbox"/> D. interstate compact      |
| <input type="checkbox"/> B. local referendum   | <input type="checkbox"/> E. delegation of authority |
| <input type="checkbox"/> C. service agreements | <input type="checkbox"/> F. congressional action    |
18. Will new powers be assigned to existing agencies or will new organizations be created?
- 
19. How will the natural resource planning and management functions be coordinated with other environmental and social activities and governmental programs in the same region?
- 
- 
20. How will functions coordinate with efforts of geographical areas outside the region?
-

21. Who will require compliance with the natural resource plan and how will this compliance be achieved?
- 
- 

22. How will conflicts be resolved among management agencies within the same system?
- 
- 

23. How will conflicts be resolved between management and planning functions?
- 
- 

24. How will conflicts be resolved between the natural resources management systems and other systems in the same region?
- 
- 

25. Do you feel the selection of personnel must be a result of careful study of personalities and abilities in order to get the right people for the jobs.

     A. very necessary

     C. unnecessary

     B. necessary

     D. very necessary

NOTE: If you feel that this questionnaire has not fully provided for your expression of ideas and opinions, please feel free to submit any and all information you may find pertinent.

Return to: Wilford R. Melton Jr.  
601 N. 16th Street  
Manhattan, KS 66502

## RESPONDENTS

to

## Questionnaire

1. Division of Environment  
Kansas Department of Health and Environment  
Topeka, Kansas 66620  
Melville W. Gray, Director
2. Kansas Water Resource Board  
109 W. 9th Street  
Topeka, Kansas 66612  
Keith S. Krause, Director
3. Kansas Forestry, Fish, and Game Commission  
Box 1028  
Pratt, Kansas 67124  
Richard D. Wettersten, Director
4. Division of Water Resources  
State Department of Agriculture  
1720 S. Topeka  
Topeka, Kansas 66612  
Guy E. Gibson, Chief Engineer
5. Kansas Geological Survey  
Moore Hall - University of Kansas  
Lawrence, Kansas 66045  
Dr. William W. Hambleton, Director
6. Kansas State University  
Agricultural Programs  
Manhattan, Kansas 66506  
Dr. Roger Mitchell, Vice President
7. Kansas Department of Economic Development  
503 Kansas Avenue  
Byran Woods, Director
8. Highway Commission of Kansas  
3th Floor - State Office Building  
Topeka, Kansas 66612  
G. A. Sutton, Engineer of Planning and Development

9. State Corporation Commission  
State Office Building  
Topeka, Kansas 66612  
Ray R. McKinley, Director
10. Park and Resources Authority  
801 Harrison  
Topeka, Kansas 66612  
Lynn Burriss Jr., Director
11. State Conservation Commission  
109 W. 9th Street  
Topeka, Kansas 66612  
Charles F. Bredahl, Executive Secretary
12. Department of Administration  
Architectural Services Division  
12th Floor - State Office Building  
Topeka, Kansas 66612  
Louis J. Krueger, Director
13. Kansas State Historical Society  
120 W. 10th - Memorial Building  
Topeka, Kansas 66612  
Nyle H. Miller, Executive Director
14. Kansas Advisory Council on Intergovernmental Relations  
701 Jackson Street - Room 300  
Topeka, Kansas 66603  
Harold E. Riehm, Executive Director
15. Institute for Social and Environmental Studies  
University of Kansas  
607 Blake Hall  
Lawrence, Kansas 66045
16. League of Kansas Municipalities  
112 W. 7th Street  
Topeka, Kansas 66603
17. Community Development Department  
City Hall  
City of Manhattan  
Manhattan, Kansas 66502  
Marvin Butler, Director

601 North 16th Street  
Manhattan, Kansas 66502

Dear Gentleman:

I am a graduate student at Kansas State University and am presently completing all department requirements for the Masters degree in Regional and Community Planning. I am now in the process of making a study of the numerous elements which relate to the feasibility of creating a "homogeneous department of natural resources" and of the administrative structure necessary for its attainment.

One of the important parts of this study is the continuous input from administrators, engineers, planners, managers, etc. who are involved in natural resource planning and management in the State of Kansas. This input will allow for the obtainment of information concerning a (1) department's adequacy to meet the needs of its target group and its' programs' effect upon the participants and beneficiaries; (2) the need for a 'program's' existence or non-existence; and (3) the determination of factors related to the department's high level of performance or its poor level of performance.

Please find enclosed a questionnaire prepared for your participation. We hope that you would be patient and understanding while completing all information, for it will allow us to pinpoint those "problem" or "strong" areas in natural resource programs and to provide information that can be used in guaranteeing the safety of life, health, environment, property, and public welfare throughout the State of Kansas.

Your cooperation and understanding would be greatly appreciated. Please complete the questionnaire and return by August 4, 1977, so evaluation can begin.

The return address is:           Wilford R. Melton Jr.  
                                          601 N. 16th Street  
                                          Manhattan, Kansas 66502

Thank you very much for your cooperation.

Sincerely yours,

W. R. Melton Jr.



## BIBLIOGRAPHY

Books

- Adrian and Press. Governing Urban America. New York: McGraw-Hill, 1972.
- Babcock, R. F., and F. P. Bosselman. Exclusionary Zoning. Washington: Praeger Publishers, 1973.
- Barlowe, Raleigh. Land Resource Economics: The Economics of Real Property. New Jersey: Prentice Hall, 1972.
- Bauer, Theodore W. Natural and Energy Resources. Industrial College of The Armed Forces, Washington, D. C., 1968.
- Bowman, George A. Land Use: Issues and Research Needs for Planning, Policy, and Allocation. Washington State University, Pullman, Washington, 1976.
- Claire, Wm. H. Handbook on Urban Planning. New York: Van Nostrand Reinhold Co., 1973.
- Clawson-Held-Stoddard. Land for the Future. Baltimore: Johns Hopkins, 1960.
- Cooley, Richard A. Congress and the Environment. Seattle and London: University of Washington Press, 1970.
- Council of State Governments. The Book of the States. Lexington, Kentucky, 1974.
- Council of State Governments. The Book of the States, 1974-1975, CSG, Lexington, Kentucky, 1975.
- Council of State Governments. Land: State Alternatives for Planning and Management. Lexington, Kentucky, 1975.
- Coyle, David Cushman. Conservation, An American Story of Conflict and Accomplishment. New Brunswick, New Jersey: Rutgers University Press, 1957.
- Drury, James W. The Government of Kansas. University Press of Kansas, 1970.

- Edmunds and Lety. Environmental Administration. New York: McGraw-Hill, 1973.
- Greene, Lee S. Resources and Policy: Current Issues in Conservation. Kallman Publishing Company, 1951.
- Gallion and Eisner. The Urban Pattern. 3rd ed., D. Van Nostrand Co., 1975.
- Hopkins, Edward S. The Practice of Sanitation. Williams and Wilkins Co., 1970.
- Konkle, Ward W. Providing Quality Environment in Our Communities. U. S. Department of Agriculture, Washington, D. C., 1968.
- Kroll, Lyden, and Shipman. Policies, Decisions, and Organization. University of Washington, ACC, 1969.
- McAllister, Donald M. Environment: A New Focus for Land-Use Planning. Washington, D. C.: National Science Foundation, October, 1973.
- Mandelker, Daniel R. "New Developments in Land and Environmental Controls", supp., Managing Our Urban Environment, 2nd ed., Bobbs-Merrill, 1974.
- Norton, Hugh S. Modern Transportation Economics. Merrill Publishing Company, 1971.
- Reitze, Arnold W., Jr. Environmental Planning: Law of Land and Resources. Washington, D. C., North American International, 1974.
- Schulz, William F. Conservation Law and Administration. New York: Roland Press Co., 1953
- Sharkansky, Ira. Public Administration: Policy-Making in Government Agencies. Markham: University of Wisconsin, 1970.
- Smerk, George. Urban Mass Transportation: A Dozen Years of Federal Policy. Indiana University Press, 1974.
- Smith, Guy-Harold. Conservation of National Resources. Toronto: Wiley and Sons, 1971.
- Wengert, Norman. Natural Resources and the Political Struggle. Doubleday & Co., Inc., 1955.
- Wengert, Norman. The Administration of Natural Resources. Bombay: Asia Publishing House, 1961.

Winfrey, John C. Public Finance: Public Choices and the Public Economy, Washington and Lee University, Harper & Row Publishers, 1973.

#### Reports

Advisory Commission on Intergovernmental Relation (AICR), "American Federalism: Toward a More Effective Partnership", Washington, D. C., 1975.

Advisory Commission on Intergovernmental Relations (AICR), "Urban and Rural America: Policies for Future Growth", Washington, D. C., 1975.

Advisory Commission on Intergovernmental Relations (AICR), "Pragmatic Federalism: The Reassignment of Functional Responsibility", Washington, D. C., July, 1976.

American Institute of Architects (AIA), "A Plan for Urban Growth: Report of the National Policy Task Force", Washington, D.C., May, 1973.

Environmental Protection Agency (EPA), "Alternative Futures for Environmental Policy Planning: 1975-2000", Stanford Research Institute October, 1975.

Kansas Department of Economic Development, "Kansas Growth Policy Study: A Survey of Legislation and Agency Policy", Institute of Social and Environmental Studies, University of Kansas, August, 1974.

League of Kansas Municipalities, "An Informational Guide to State Services and Technical Assistance", LKM, June, 1973.

Morton, Rogers CB, Secretary of the Interior, "Rigorous Conservation, Responsible Development, Our Natural Resources: The Choices Ahead", U. S. Department of the Interior, Conservation Yearbook Series No. 10, 1974.

Ruckelshans, Wm. D., "The Challenge of the Environment: A Primer on EPA's Statutory Authority", U. S. EPS, Washington, D. C., December, 1972.

- Special Committee on Energy and Natural Resources, "Committee Report", Proposal No. 14 - Ground-water Use, Topeka, 1975.
- Urban Land Institute, "Management and Control of Growth", Federal Environmental Regulation, ULI, Vol. 111, 1975.
- U. S. Department of Housing and Urban Development, "Urban Growth Management: Summary Evaluation of Research", HUD, May, 1976.
- U. S. Department of Housing and Urban Development, "State Planning: Intergovernmental Policy Coordination", Washington, C. D. August, 1976.
- U. S. Department of Housing and Urban Development, "A Guide for Local Evaluation", HUD, U. S. Government Printing Office.

#### Journals

- Burch, Wm. R. Jr., "Who Participates? A Sociological Interpretation of Natural Resource Decisions", Natural Resources Journal, U.N.M., School of Law, Vol. 16, No. 1, January, 1976.
- Sewell, W. R. D. and T. O'Riordan, "The Culture of Participation in Environmental Decision-Making", Natural Resources Journal, U.N.M., School of Law, Vol. 16, No. 1, January, 1976.
- Wengert, Norman, "Citizen Participation: Practice in Search of a Theory", Natural Resources Journal, University of New Mexico, School of Law, Vol. 16, No. 1, January, 1976.

#### Address

- Jackson, Senator Henry M., "Environmental Quality: Progress and Prospect", Address to the National Council of State Garden Clubs, Biloxi, Mississippi, April 3, 1968.

#### Federal Statutes

- 92nd Congress, 2nd Session, House of Representatives, "Federal Water Pollution Control Act Amendments of 1972", Report No. 92-1465, Washington, D. C., September 28, 1972.

Environmental Protection Agency, "The Clean Air Act", (42 U.S.C  
1857 et. seq.), Washington, D. C., December, 1970.

An Abstract of

ALTERNATIVES FOR REORGANIZATION OF THE NATURAL RESOURCES  
PLANNING AND MANAGEMENT PROCESS IN THE STATE OF KANSAS

by

WILFORD R. MELTON, JR.

B.S., Prairie View A&M University, Prairie View, Texas 1972

Bachelor of Science, Architectural Engineering

---

A MASTER'S THESIS

submitted in partial fulfillment of the  
requirement for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING  
Department of Regional and Community Planning

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1979

---

Prof. Vernon P. Deines  
Major Professor

## ABSTRACT

This report has been prepared to analyze the effectiveness of current natural resources planning and programming processes within the state of Kansas, and to use this analysis as a tool to make recommendations for the improvement, strengthening and broadening of those natural resources activities being carried out in the state.

Major emphasis was placed on the structure and methods for effective natural resource planning and programming by analyzing:

1. the administrative machinery's (planning, programming, and policy-making) ability to carry out natural resources activities of the state and its regions and the necessity, if any, to strengthen, improve, and/or broaden that machinery;
2. the relationships among the functions of policy and program development, implementation, and effectiveness between the various agencies concerned with natural resource use, development, and conservation within the state; and,
3. those actions necessary for carrying out any changes in existing natural resource structures.

At stake in this effort to attain comprehensive planning, administration, and management of natural resources are all of those things which add to a rich and full life for individuals and society. Not only must firm basic decisions now be made which will provide everyone guaranteed food, income, shelter, and mechanical devices but interrelationships must be understood and decisions made that will provide those qualities of life not easily defined in economic terms. Such as: environmental enhancement, open space, wild and scenic views, recreation, aesthetic values, etc. Pointed out are intimate relationships between politics, planning, and administration and the extent to which program decisions and public policy involve the bureaucracy in a comprehensive matrix of these relationships.

The ways in which institutional decisions are made concerning natural resources use and the allocation of natural resources among users occur at many points in the organizational structure, and often in striking contrast to formal patterns which constitutions and laws set up. Actually, there are many policies of differing levels of importance, thus making knowledge and organization effectiveness at its best fragmentary and in some cases severely limited. In relation to these facts, the study will explain the general inability to develop areawide plans and programs to meet regional and local needs. This inability has caused fragmentation,

duplication, and overlapping of plans and programs and has been a basic cause of fiscal and social disparities within an area. It has also in many cases prevented effective planning and land use regulations.