Coastal Environmental Management Policy: West Narragansett Bay, Rhode Island

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COASTAL ENVIRONMENTAL MANAGEMENT POLICY:
WEST NARRAGANSETT BAY, RHODE ISLAND
BY
DAVID H. ROGERS

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER OF COMMUNITY PLANNING

UNIVERSITY OF RHODE ISLAND
1970
TITLE ABSTRACT

COASTAL ENVIRONMENTAL MANAGEMENT POLICY
ABSTRACT

The municipalities of Cranston, Warwick, East Greenwich, and North Kingstown, Rhode Island, together control seventy miles of shoreline which comprises the West Narragansett Bay coastal environment. These cities and towns increased in population an average of thirty-three percent between nineteen fifty and nineteen sixty compared to a statewide increase of twelve percent during the same period. Much of the resultant development pressure has been focused on the coastal lands of each town where such location offers a scenic, recreation and industrial potential. The study concentrates on this coastal development; specifically, how the coastal resources are used and the manner in which the four municipalities conceive and formulate their public policy regulating this development. Each town and city operating under differing governmental structures has reacted uniquely toward the regulation of the shoreline. The cities facing difficult problems of high-density development in coastal areas have directed their policy toward ends quite different than the less developed towns. The study area in its geographical and governmental diversity represents one-fourth of the State's salt water coastal resources and thus provides a significant sample of the types of problems and solutions confronting other Rhode Island communities.

The study seeks to accomplish the following objectives: (a) to determine how coastal land use patterns have evolved historically; (b) to determine what local policies are presently employed which direct coastal development; (c) to demonstrate how key local decision-makers in each community weight the importance of the coastal environment as a community asset and what criteria are used by them in the formulation
of their coastal zone management policies, determined by objective (b) above; and (d) to demonstrate how decisions affecting the coastal environment have been made on both the municipal issues and on area issues where municipalities, state and federal agencies and private interest groups have interacted.

Objective A of the study is accomplished by tracing, through the use of maps and historical documents, the development of the seventy miles of coastline within the study area. Objective B is accomplished through the analysis of existing public documents such as the comprehensive plan to determine how coastal environmental resources are recommended to be allocated. This procedure is supplemented by personal interviews with key municipal officials functioning in development activities in each community to determine the actual and probable use of the coastal environment. Objective C is accomplished through the use of personal and mailed interview questions to elected and administrative policy makers. These decision-makers are determined on the basis of both their elected or administrative position within the community as well as their reputation as key decision-makers in past decisions affecting the coastal environment in their community. Objective D is accomplished by analyzing the structure of each local government, by the use of personal and mailed interview questions, and through the presentation of case studies illustrating the resolution of past local and regional environmental issues.

Narragansett Bay is the State's primary natural resource, yet it is viewed by local decision-makers only in terms of local environmental issues. Regional awareness and coordination of coastal development are
limited. The effectiveness of planning as a mechanism for stimulating coastal resource management is related to the pace of urbanization and political and professional leadership. The market factor is the primary stimulus for coastal decision-making processes for coastal concerns. Ecologic considerations are generally ignored in these processes. With the clear exception of Warwick, study area municipalities have no coastal management policy.
MASTER OF COMMUNITY PLANNING THESIS

OF

DAVID H. ROGERS

Approved:

Thesis Committee:

Chairman

Dean of the Graduate School

UNIVERSITY OF RHODE ISLAND

1970
PREFACE

A prerequisite for a study of this type is cooperation from a great many State and local officials. Without hesitation these busy individuals cooperated fully and exhibited a keen interest in this research topic. While shortcomings of this undertaking are attributable solely to the author, any small measure of success must rest with these Rhode Island citizens.

Special thanks are extended to Dr. David W. Fischer, Professor D. Barlow Burke, Jr., and Professor Dieter Hammerschlag for their insight and critical review of earlier drafts of this text.

The patience, encouragement, and financial support provided by Paul Bruce Dowling of the America the Beautiful Fund of the Natural Area Council, Washington, D.C., and the Agricultural Experiment Station of the University of Rhode Island, Kingston, R.I., is gratefully acknowledged.
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INTRODUCTION

Narragansett Bay measured from Point Judith on the West to Sakonnet Point on the East has a total area, including Sakonnet River and Mount Hope Bay, of 174 square miles and a shore line approximately 250 miles long. The Bay is considered Rhode Island's primary natural resource. Historically, urban development patterns have clustered around this major geographic feature rather than in more inland areas. Presently there is increasing public demand for access to the coastline for recreational and residential purposes. Nationally, while the American public has more than doubled from 90,000,000 to over 200,000,000 in the last fifty years, ocean frontage has increased in value more than 10,000% during the same period. To the 1,390,000 persons who will live in Rhode Island in the year 2000, the 250 miles of shoreline on Narragansett Bay will represent a resource of scenic beauty, recreation, and employment potential. Beyond this, however, the Bay poses to public officials, to whom this resource is entrusted, difficult problems in coordinating coastal development patterns among a variety of users. In addition, jurisdictional controls exist on many governmental levels making a unified approach to management of this resource difficult. Inability to effectively resolve these problems is resulting in a change in the Bay's environmental quality.

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1Lewis M. Alexander, Narragansett Bay: A Marine Use Profile, Geography Branch, Office of Naval Research, June 1963, p. 16.
3Arthur D. Little, Projective Economic Studies of New England (Waltham, Mass: U.S. Corps of Army Engineers, 1964), Table A.
Some of the most urgent environmental problems and the most immediate and tangible opportunities for improvement reside in the configuration of coastal land-use patterns. The purpose of this study is to examine the coastal land-use policies and workings of four local governments in Rhode Island. These communities of Crenston, Warwick, East Greenwich, and North Kingstown comprise the majority of the western side of the Bay and represent differing degrees of urbanization. Their actions will determine the form of development on coastal lands in the seventy miles of ocean frontage comprising the West Narragansett Bay Coastal Environment.

Map 1 deliniates the study area, study area municipalities and identifies areas of significance made reference to in the text.

The 1969 report of the Rhode Island Natural Resources Group entitled Report on Administration of Narragansett Bay, states the need for further study into the political structures and management of marine resources in the State. In line with this need, this study explores how local governments through their policies and actions play a critical role in the evolution of the coastal environment.

Chapter I presents methodological considerations. These are in the form of a brief review of published studies on the coastline and general environmental considerations; and a review of planning, public administration, and policy science literature in order to cull useful concepts adaptable to this study. The chapter also shows the methods used in selecting the study area and interviewees.

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Rhode Island Natural Resources Group, Report on Administration of Narragansett Bay, January 1969.
Chapter II deals with the nature of change in the coastal environment. An analytical framework is then established for the discussion of factors influencing local coastal policy formulation.

Chapter III describes the study setting, historical evolution of land-use in the four municipalities under study, and the character of present water front land-uses.

Chapter IV then applies interview data for each town to the analytical framework established in Chapter II.

Chapter V is a case study which shows how the decision-making factors influenced decision-makers and how the final outcome of a coastal environmental issue has regional implications.

Chapter VI discusses these regional implications in terms of the decision-making factors established in Chapter II. This discussion is supported by additional case studies found in Appendix C and D.

Chapter VII summarizes the findings for the individual towns and discusses the implications of these findings on the local and regional scale for the future of the coastal environment of Narragansett Bay.
I

METHODOLOGY
FORMULATING THE STUDY DESIGN

I. Review of literature on Coastal Environmental questions

The initial step in formulating a study design was a thorough review of literature dealing with coastal environmental questions in general and coastal management policy formulation in particular. The coastal environment is defined as all land and sea measured one-quarter mile from the high tide mark. The body of literature found in these areas is limited. Four general approaches can be defined. These are:

1. Those reports, such as the San Francisco Bay Plan, making specific policy recommendations for coastal areas. These reports document what should be done and state specific policies.

2. Those books which deal with the impact (especially the negative impact) on coastal ecology of Man's development activities. These books are concerned primarily with how physical design can be integrated with ecologic considerations. The best example of this type of literature is Ian McHarg's, Design with Nature.

3. Those reports which deal with the economic impact of marine oriented activities for specific coastal areas. Rorholm's study entitled, Economic Impact of Marine-oriented Activities: A Study of the Southern New England Marine Region is one of many studies typifying this approach.

4. Those reports which deal with the broad area of marine resource development. Such studies make reference to coastal development in terms of changes in development type over a period of time. The most comprehensive

---

1 San Francisco Bay Plan, San Francisco Bay Conservation and Development Commission, 1969.


example of this study orientation touching on coastal development problems is, Our Nation and the Sea, a report of the Commission on Marine Science, Engineering and Resources.\(^4\)

In short, these studies deal with what should be taking place on certain coastal areas; what is taking place in a given area and what problems this is creating; what is the economic impact of specific coastal activities; and finally, what are the overall changes occurring on coastal lands. The studies focus on coastal planning, economic, ecologic, and administrative considerations, but do not deal with how coastal policy formulation is currently being accomplished and the policy implications for the future in a limited area of the overall coastal environment of the Country.

II. Review of Literature on Planning, Public Administration, and Policy Sciences

Having found little directly applicable information dealing with coastal environmental management, literature dealing with the achievement of environmental quality was searched specifically in those works which reflected a planning, public administration, or policy science viewpoint. It was felt that a public administration approach might be the best framework for analyzing local coastal policy formulation processes.

Policy making is defined as the setting of courses of action designed to implement the values, usually of a large number of persons, on a given issue without unduly compromising other values on other

issues. Because public policy must incorporate community values to be a meaningful guide, it was recognized that a framework for discussion would have to be constructed which would incorporate a wide variety of factors that reflect these values but which themselves influence decisions. Planning literature, especially Dyckman's article entitled, "Planning and Decision Theory with Extensive Bibliography," helped to define the thought that decision-making reflecting community values occurs most clearly within a local context. Simon's Administrative Behavior and Schickel's book, Agricultural Policy, presented a public administration viewpoint toward the elements which constitute the decision-making process in an administrative organization. Jarrett's book, Environmental Quality in a Growing Economy, helped to synthesize these earlier readings in dealing with a specific subject issue. This book, however, presented only an economic point of view.

Unfortunately, these books, though identifying important conceptual approaches and issues in decision-making focused on environmental questions, failed to show the actual methodology for bringing these

abstract considerations into an empirical evaluation of actual policy formulation processes.

A large body of literature does exist, however, which deals with approaches to studying actual community decision behavior. Mann's article defines three approaches: 9

1. The decision-maker approach which concentrates on the backgrounds and personal attributes of decision-makers, e.g., Robert F. Kennedy, *Thirteen Days*; 10

2. The partisan approach which looks at partisans of a community issue, controversy or conflict, power and influence employed by interests, and personal power, e.g., Floyd Hunter, *The Community Power Structure*; 11

3. The process approach, which follows the course of issues and decision-making embedded in a web of social relationships, e.g., Meyerson and Banfield, *Politics, Planning and the Public Interest*. 12

It was at this point that readings from the new field of policy sciences became applicable. Policy sciences are an interdisciplinary focusing on public policy making and based on behavioral sciences and analytical approaches. 13 To date Yehezkel Dror has provided the most lucid writings on this subject which include the development of a general framework for evaluating public policy and presentation of an

---


optimal model of public policy-making. Using these readings, it was then possible to adapt certain concepts, such as the decision-making field, from Dror's book, Public Policymaking Reexamined, and from his monographs issued from the Rand Corporation.\textsuperscript{14} By juxtaposing those approaches outlined in the Mann article with these ideas presented in Dror's works, a conceptual framework for the detailed discussion of such diverse decision-making factors as politics, planning and the marketplace was created. This framework is discussed in detail in Chapter II.

It was hoped that the integration of several approaches into a new framework might not minimize the effect of the interaction of decision-making factors in discussing real decision situations. Downs' book, Inside Bureaucracy, helped crystalize the idea that because public decision-making deals with problems with multidisciplinary facets, analysis of their decision processes should be from a multi-disciplinary point of view.\textsuperscript{15}

III. Construction of an Analytical Framework

The approach applied in this study draws on selected concepts from the aforementioned sources in the creation of an analytical framework for evaluating coastal policy formulation processes. The central concept used for this discussion is that of the decision-making field, the context in which decisions are made. Although recognized by many authors in the above mentioned disciplines, the best explanation of the

\textsuperscript{14}Y. Dror, Public Policymaking Reexamined (San Francisco: Chandler Press, 1968).

\textsuperscript{15}A. Downs, Inside Bureaucracy (Boston: Little Brown Co., 1967).
way this decision field influences planning actions can be found in Bolan's article, "Emerging Views of Planning." In this study the concept will be applied as a framework for the discussion of not only planning as a decision factor but also for other factors influencing decision-makers operating in the local context or decision-field.

Principle readings used as a basis for these factors are: Planning (Dror, Meyerson, Bolan), Politics (Hunter, Dahl, Wilson), the Market place (Barlowe), the Economic-Ecologic dichotomy (Boulding), and Jurisdictions and Controls (Kumekawa).

IV. Selection of the Study Area

Having established a conceptual approach and organization for discussion of the local policy-making process on coastal issues, the selection of a study area was required. It was felt that only a portion of the Narragansett Bay shoreline could be conveniently handled. In choosing this study area the following criteria were used:

1. The coastline must be a single uninterrupted segment, spanning several municipal jurisdictions.

2. The area must exhibit various stages of development from high intensity to open space.


3. The municipalities controlling the coastline should represent a significant percentage of the State's population, and have different forms of government.

4. The coastline must be in an area of rapid population growth.

5. There must be a professional planning office in at least half the communities.

By applying these criteria it was thought that the study area would be a representative sample of the Narragansett Bay coastal environment and that the sample would reflect some of the changes, issues, and levels of environmental management expertise that the state currently deals with in making resource allocations for coastal land-uses. The study area encompasses over 1/4 of the shoreline of Narragansett Bay, and is located in the cities of Cranston and Warwick, and the towns of East Greenwich and North Kingstown.

V. Selection and Application of Data Technique

Because the analytical framework used for this study (Chapter II) seeks to explain current decision-making processes, it was felt that a prefatory chapter (Chapter III) was needed to trace the historical development of each study area municipality, and to describe contemporary coastal land-use patterns.

To prepare this chapter, historical literature for each town was reviewed, field investigations of current land-use patterns were made, and key officials concerned with local development were interviewed.

In order to build on the framework established in Chapter II, data was needed from each town from specific interviewees.

Selection of interviewees was accomplished through a four phase
approach: (A) newspapers for the previous year were searched for coastal issues and associated participants in each community; (B) the governmental organization and charter for each municipality was searched to identify which board, or body of government was most likely to be legally responsible for coastal concerns; (C) top administrative officials were interviewed to formulate a list of names of those most active and influential in coastal environmental issues; (D) top elected officials were contacted to provide a similar list of names suggested from the community at large. By cross referencing these names a list of key decision-makers for coastal environmental concerns was derived. From this total, a variety of governmental and community positions were defined. In every community a member of the council, the administration, and conservation interests were selected for interviewing. Where possible in these categories individuals were chosen who held multiple positions. Such a position might be a councilman from a coastal ward who was also on the council investment or ordinance committee. The following list indicates the distribution of these positions in the study area.

<table>
<thead>
<tr>
<th>Position</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>City or town councilmen</td>
<td>4</td>
</tr>
<tr>
<td>Administrative Assistants to Mayors</td>
<td>2</td>
</tr>
<tr>
<td>Professional Planners</td>
<td>2</td>
</tr>
<tr>
<td>Conservation or Waterfront Commission Members</td>
<td>4</td>
</tr>
<tr>
<td>Planning Board Chairman</td>
<td>1</td>
</tr>
<tr>
<td>Town Manager or top appointed Administrative Official</td>
<td>2</td>
</tr>
<tr>
<td>Redevelopment Director</td>
<td>1</td>
</tr>
<tr>
<td>Top Local Political Leaders - Democrat and Republican</td>
<td>2</td>
</tr>
</tbody>
</table>

These individuals hold a variety of positions necessitating the inclusion of a variety of questions which would apply to their respective positions. The interview format originally consisted of two parts. A
personal interview (Appendix A) in which the questions were designed
to focus discussion, and a mailed interview (Appendix B) to be completed
and returned in envelopes provided after the completion of the personal
interview. In the questionnaire to be mailed, specific factual or
preference information was sought.

The construction of the interview form went through four revisions
refining the language of the questions. The form and interview format
were then pre-tested on the Newport city manager which revealed several
shortcomings in terms of interview length and the need for specific
examples illustrating the types of information sought. After the
first seven interviews, it became apparent that the mailed interview
questions were not being returned. Because of the restricted size of
the sample (18), it was necessary to sustain a high percentage of com-
pletion in order to have meaningful results. The interview format was
then changed so that the personal interview would include completion of
the questionnaire to be mailed. This ensured a one hundred percent
completion of Appendix A and resulted in an eighty-seven percent com-
pletion of Appendix B. This latter percentage was supplemented by in-
formation from councilmen, administrators, and board members where com-
plete interviews were not possible. Five additional interviews were
partially completed for Appendix B in this manner. Each interview
averaged 1-1/2 hours in length.

VI. Interviewee Bias

Interviewee bias falls into three types. Some of these biases
are outgrowths of the constraints on the local decision-maker. These
constraints are:
1. Limited amount of time to make decisions.

2. That each decision-maker can weigh and consider only a limited amount of information at one time.

3. Officials have multiple involvements therefore cannot consider all simultaneously, hence they tend to focus on one or two areas they know best with the rest remaining uncared for.

From these constraints several biases appear:

1. That interviewees tend to stress aspects of environmental issues which they are most familiar with, but which are not necessarily related to coastal changes occurring in their community.

2. That past programs or actions toward environmental concerns tend to be evaluated in terms of the decision-maker's personal values rather than objective performance standards. What he wanted to have happen is of foremost importance rather than what did happen.

3. Because of lack of technical information or lack of facility in handling it, decision-maker's personal values tend to supplant objective discussion of future coastal environmental issues and their resolution.

VII. The Case Method

Because the analysis of each town is organized around the aforementioned decision-making factors of planning, politics, the marketplace, and others, it was necessary to present direct observations of how these factors interact in real situations. Chapter V accomplishes this using the case study method. This case study through meticulous description attempts to document this interaction. The main advantages of the case study is that it forms a continuous picture of events as they unfold. The major disadvantage is that cases take too long to prepare, that objectivity is difficult to maintain and that
those interviewed in the case preparation tend to stress unusual events or aspects of the study issue. Case preparation included researching of published documents and interviewing participants. Researchers have found informal interviews encourage freedom of discussion thus yielding the most informative results. This held true for the cases prepared in Chapter V and Appendices C and D.

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II

CHANGE AND THE COASTAL ENVIRONMENT:

DECISION-MAKING
Coastal Land-Use Change

The edge of the sea reflects in its land-uses the diversity of values represented in the United States both in the past and present. These values are expressed in the way communities sanction the use of coastal lands. In the earliest days of this country, small development centers for trade and culture were established at the mouths of rivers and in protected coves. Compact waterfront areas characterized by docks, warehouses, residential and community uses reflected the major societal values of the time. These values were in the ideal of work to translate the raw wealth of the natural environment into commodities for trade which supported the nation's desire for economic, social, and religious independence. Waterfront land in these small cities became valued because it provided a locale for economic and social exchange between land and sea.

As our economy has grown more sophisticated, our institutions for economic growth and sustenance have moved from an agricultural base to an industrial base concerned with the production and transfer of durable goods. The growth of these institutions and their manifest impact on coastal lands has resulted in a segregation in locality of economic and social institutions.

Manhattan Island best typifies in its coastal development this paradox. Because the physical manifestations of large economic institutions such as shipping, warehousing, and manufacturing dominate the shoreline with their massive structures, the great majority of Manhattanites have been excluded from enjoying the major aspect of the natural environment of the city. Social institutions and public places
of interaction are not placed in a location or form which is conducive to enjoyment of this last major natural resource for the area: the waterfront.

As we move into a service economy, such coastal environmental resources are in increasing demand for recreation, reflecting society's desire for leisure activities. To fulfill this need, large areas of coastal lands have become oriented toward a recreational economy and land-use patterns. Such a pattern consists of seasonal homes, marine oriented activities and commercial facilities.

On the metropolitan scale of the coastal Massachusetts region, the Cape Cod National Seashore and Cape Cod itself can be considered as reservations of natural areas of a dimension suitable to serve the rapidly growing residential and transient population of the region.

While the sea coast in its natural state offers exceptional potentials for recreation uses, its scenic qualities offer assets for commercial and high density residential development that are hard to match. Miami Beach, Florida, provides the most vivid example of how the recreational qualities of an area can be used as a nucleus for large scale commercial and residential proposals. In 1913 this strip of mangrove and sand was acquired for 35 cents per acre. Today this value has appreciated to $200,000 per acre.¹

Proximity to the sea for this type of development, however desirable, offers complex problems for designers unless ecologic as

well as economic criteria are recognized. In 1962 the New Jersey shoreline on which random development occurred was laid waste by a violent storm which destroyed several lives, and over 2400 houses with three times that many damaged. In total, over $83 million worth of destruction occurred.\(^2\) In this case the coastal environment was returned to the natural state by man's ignorance of natural processes.

In similar, but in less dramatic ways the coastline of Narragansett Bay has experienced the types of changes experienced in both Miami Beach and the New Jersey Coast. Currently, a large coastal motel in Cranston, R.I., is being expanded by the Hilton Hotel Corporation with facilities for meetings. High income condominiums are being proposed on coastal lands in North Kingstown. In 1954 many homes on Warwick's Conimicut Point were destroyed by a hurricane.

It is possible, and logically desirable to have both economic development through location of commercial, residential and industrial facilities on coastal sites and preservation of natural coastal areas. To do this, a rational and comprehensive approach to coastal environmental management can be employed. By piecemeal development through narrow and overlapping municipal and functional jurisdictions, random coastal development threatens to exclude the great majority of urban dwellers from enjoying the unique qualities of the coastline. In addition, unplanned development affects the environmental quality of the Bay itself. Water pollution is a manifestation of these random

development patterns.

Though man is wholly dependent upon an ecological balance in nature to provide air and water, his technology has allowed him to create the alternate environments of our urban centers. The degree to which man is able to apply this technology in both preserving and using his coastal environment depends on his willingness to accept a role of constraint in a global ecological system of natural resources about which he has much to learn. As our knowledge of these larger ecological systems grows, the folly of smaller localized development decisions often become apparent.

The destruction of shore property on Warwick's Conimicut Point in 1954 had occurred earlier in the hurricane of 1938. It was not until the area had been severely damaged for the second time that development was stopped by law. Clearly such a policy decision as this was reached only after considering many factors. Each factor in this and other local coastal land-use decisions become then a component part of the final decision on a given issue.

COASTAL ENVIRONMENTAL MANAGEMENT: DECISION-MAKING

Local decisions are being made daily which affect the coastal environment in the West Narragansett area. Because considerable development pressure is mounting on the coastline of the study area, local public decision-makers are faced with many difficult development issues to be resolved. The decisions made on these issues are based on both the factors that are perceived and weighted by the decision-makers and on the conditions that prevail when decisions have to be made.
Four conditions interact to affect the manner in which decision factors are considered. First, decision-makers have limited time and information resources available in helping them clarify coastal environmental issues. Second, increased speculation on coastal lands creates pressure for action which does not lend itself to careful appraisal of the regional or sometimes local consequences of private action. Third, conflicts in coastal land-use occur such as major industrial or military facilities which provide economic benefits while also creating new environmental liabilities such as pollution. Balancing the potential for environmental loss to the community against the fiscal benefits of such developments is a difficult task. Fourth, the many issues facing the local decision-makers can best be handled through the coordinated efforts of several governmental levels. But functional jurisdictions and local controls overlap, however, and are often ill suited for dealing with specialized problems in coastal environmental management.

To understand fully the effect of these specific conditions, it is necessary to outline the overall context, or set of characteristics, of the community which interact in defining the decision-making factors which are the basis for development decisions and policy formulation.

THE DECISION-FIELD:
A MECHANISM FOR FOCUSING DECISION-MAKING FACTORS

Unlike the businessman whose primary system of accounting is easily quantifiable into profit maximization or return on investment, the public decision-maker is faced with multiple and often conflicting measures of accountability and public expectation in his attempt to
successfully execute his duties. In addition, each decision-maker is operating in a communications network which is community-wide, though sometimes highly specialized, in the scope of its information content. An example of a highly defined scope of information content might be the views expressed by affected land owners in a coastal urban renewal issue (see Chapter V). A broader scope of information content carried on this communications network might be those views expressed by business or social organizations seeking to improve the physical form of the city through coastal renewal. From this overall network the decision-maker often receives divergent views for policy emphasis.

The decision-field in which he makes decisions can be defined in terms of the interaction of the following characteristics in a given community. These characteristics are expressed in the sources for and in the content carried on the communications network.

1. Functional specialization (both within the local government and in the major institutions of the community).

2. Social differentiation in the community and in the particular political area being represented.

3. The degree and character of leadership. 3

The importance of the decision-field lies in the manner in which it organizes the factors involved in any coastal decision. Not only does it tend to make them fall into a mutually acceptable terminology and levels of complexity familiar to the decision-makers, but also it tends to affect the manner in which solutions are sought. Thus the

decision-field not only creates the forum in which decisions are made but also patterns the group dynamics of the decision-makers seeking to resolve coastal development issues.

Norton Long has defined the interaction of these characteristics of the decision-field in a game metaphor. To these characteristics he has added a consideration of the personal motivating forces which evidence themselves when groups interact to accomplish a given task. Long states his metaphor in the following manner:

Within each game there is a well established set of goals whose achievement indicates success or failure for the participants, a set of socialized roles making participant behavior highly predictable, a set of strategies and tactics handed down through experience and occasionally subject to improvement and change. In such a game there is an elite public whose appropriation is appreciated, and finally a general public which has some appreciation for the standing of the players. Within the game the players can be rational on the varying degrees that the structure permits. At the very least they know how to behave, and they know how to score.\(^4\)

Having broadly defined the decision field or local context in which decisions are made, five factors can be discussed which form the basis for coastal environmental management policy on the local level.

DECISION-MAKING FACTORS:
PLANNING, POLITICS, THE MARKET PLACE,
THE ECONOMIC-ECOLOGIC DICHOTOMY, AND JURISDICTIONS-CONTROLS

PLANNING

The Planning Professional:

The role of the planning professional in affecting community change

has received increasing attention in recent years. Unlike his colleagues in law or medicine, however, there are fewer established limits to the planner's professional responsibilities. In the narrowest view the planner is concerned with the arrangement of land-uses. According to the American Institute of Planners 1968 statement of professional responsibilities, the focus of the profession and its members should seek the following form:

The work of the planning profession is related to the collateral fields of social, economic and fiscal planning. Its accomplishments are expressed primarily through determinations of the comprehensive arrangements of land-uses and land occupancy and through their regulation.

Since the basic objective of planning is the promotion of the general welfare, the professional planner respects this as the paramount consideration in the conduct of his professional activities.

The professional planner recognizes all land as a natural resource and acknowledges the primacy of the public interest. Guided by these basic principles, he will seek, in advising on comprehensive arrangements of land-uses and occupancy and their regulation to promote and protect both public and private interests as may be proper and appropriate to each situation.5

Because the planner has no sanctions by which to enforce his opinions, he must be a skillful manipulator of people to achieve his goals. This end is sometimes reached through action as an agent of change in creating conflict and conflict resolution through the use of plans and the legal tools which are the primary forces behind implementing planning proposals. These tools are the zoning ordinance, subdivision regulations and the capital budget, each of which the planner

prepares but must depend on others to adopt. Because the profession can be seen from widely differing viewpoints the planner's role is further complicated by a lack of precision in the technical language of his trade. The combination of these elements tend to create heterogeneous views in the professional planning ranks as to what planners do and to whom they are responsible.

The Planner and the Comprehensive Plan:

Planning is viewed as a series of related actions and decisions that are organized around and moving toward the accomplishment of objectives. It is usually accepted as a continuing process rather than the construction of a comprehensive planning document. A comprehensive plan is an official public document, encompassing all geographical parts of the community and all functional elements which bear on physical development. It is adopted by a local government as a policy guide to decisions about the physical development of the community. Local government is the only body now capable of coordinating the overall pattern of physical development. The plan in text and maps acts as a framework in which daily public and private development decisions can be organized.

Three elements are usually included in the plan. These are proposed land-uses, circulation, and community facilities. In addition, other considerations such as urban design, population and economic

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7 Ibid., p. 349.
studies; and development goals and objectives are usually included.

Preparation of the plan is usually the primary task of the planner. When this is accomplished, implementing and interpreting the plan for specific public and private development activities becomes his major pre-occupation. In order for a comprehensive plan to be considered meaningful as a document guiding coastal development, five minimum standards must be met. These are:

1. Clarity in terms of defining coastal resources and development objectives.
2. Internal consistency.
3. Scope, in terms of time span.
4. Comprehensiveness, in terms of variety of coastal activities it deals with.
5. Operationability, in the sense of being concrete enough to be a meaningful guide to action.²

No matter how high the quality of the plan itself, it will have little impact as a guide to decision-making unless the planner continually makes the plan the foundation of the community planning process. While this process may differ widely in sequence and content from place to place, five key functions can be used to appraise the effectiveness of the planner in keeping the planning process as a forceful factor in the decision-field. These functions are:

1. Central intelligence function.
2. Pulse-taking function.

²Standards used are based on concepts incorporated by Y. Dror, Public Policymaking Reexamined.
3. Policy clarification function.
4. Detailed development plan function.
5. Feedback function.  

The Planner in Government:

While the planner is not sure what he is, or what he wants his role to be, those allied professionals in government often view the planner with reservations. A key point in this real or latent antipathy is that the planner seldom works his way up through the ranks to his position near the top of the governmental hierarchy, but instead achieves his status by lateral entry. To obtain such a key position in this manner rankles the civil service advocates. Planners are selected by top decision-makers and deal primarily with them and with the top administrative agencies of government. In addition their province is not limited to their own department, but demands them to cut across departmental jurisdictions in devising plans for community development.

The debate resulting from the confusion over the correct role of the planner in government has resulted in several variations of the placement of the planning function in government. Four generalized positions are definable, each of which offers a differing impact on the decision-maker according to his own position in the governmental hierarchy and with the complexity, size and perception of the environmental issue to be resolved. The positioning of the planning function

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will vary from town to town depending on historical factors as well as on the degree of professionalization and centralizing of authority. Although the impact of planning, especially in smaller communities, depends on professional competence and personal communication ability to function smoothly with decision-makers in the decision field, its location in the governmental structure has a significant effect on the planning strategy employed by the planning function to bring plans into reality. Four positions for the planning function have been defined although others are recognized and offer variations on these. These positions are:

1. Robert Walker (the Walker position) has suggested that the planner be employed directly by the mayor and by this proximity will thus be in a position to directly implement the Comprehensive Plan. He can, therefore, contribute to the effectiveness and pace of municipal development in the strong mayor form of government. The Walker position is demonstrated in this study by the role of the planning function in Cranston and Warwick (See Chapter IV).

2. T. J. Kent (the Kent position) stresses the effectiveness of the planner as the employee of the legislative body. Bolan notes that this position appears to work well in Council-Manager forms of government, but in the larger cities with highly diversified representations in Council, reconciliation by the planning function of inter-ward conflicts becomes an Herculean task. (The best case example of this position has been documented in Banfield and Meyerson; Politics, Planning and the Public Interest.) The position is demonstrated in the study by Warwick's Waterfront Development Commission (See Chapter IV).

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12 T. J. Kent, Jr., The Urban General Plan (San Francisco: Chandler Publishing Co.), 1964.
3. The Goodman position (described but not advocated by that writer) describes a position of the planning function as directly under the governing body as a whole or one of its committees. This form is usually found in municipalities with weak executives or those with a board of supervisors where no single member has strong voice in making decisions. Where decisions are made by a group there is no single point, such as the mayor’s office, where planning decisions can be taken. This position is exemplified in the study area by East Greenwich's planning function.13

4. The fourth position is that of planning by Ad Hoc committees created by town meeting to deal with special problems. This planning pattern is used in North Kingstown as an auxiliary information source to the Planning Board and also as a means of deriving community consensus and maximum interaction and participation in arriving at policy positions. This type of positioning of the planning function is often used in New England where town meetings still prevail.

The Planner in the Community:

As a result of the planner’s imprecise role and ability to draw on the resources of many governmental agencies he is often required to bargain and arbitrate among the various interest groups within government and the community. More often than not it is through the use of zoning that such arbitrating roles occur.

The evolved rationale of zoning has been based on the protection of the single-family home and local business. Though zoning is not commonly viewed as tool for economic development, it is often employed to limit competition. Through application of the police powers the planner, knowingly or not, is maximizing certain values of segments of

the community such as the decision-makers who hired him. It has been said that a planner is never hired by a community until the community wants to limit population size or competition from outside sources. Because interaction of factors in the decision-field of a given community may result in the emphasis of certain strongly held values, the planner is often tacitly expected to have these reflected in his plans. To the outsider these values are sometimes synonymous with local prejudices. ¹⁴

These community values can be expressed in many forms. It has been argued that the planner should also fairly represent those values which may not be as widely held or vocally supported. In some instances environmental quality has been sacrificed because values which hold higher esteem for economic development prevailed over values which favor ecologic considerations. For the public decision-maker without facts on the ecological benefits of coastal environmental preservation, traditional values favoring economic development on coastal lands may seem more valid and bring greater returns to the community than coastal environmental preservation which entails maintaining rather than creating a new community resource.

Often the planner is expected to counterbalance the economic values expressed by the market place. Of course, in those instances where government reserved certain coastal resources they have exercised their inherent powers to purchase through the market, condemn market

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judgments, or direct market valuations by use of the police power.
Zoning, the primary tool in the exercise of this power, remains re-
stricted in application because of its evolved rationale which has no
recognition of ecological principles. Rarely has zoning been success-
fully employed as a means of bringing about desired change in an area
which has already suffered from environmental abuses. Provisions re-
quiring discontinuance of non-conforming uses are subject to prolonged
legal battles, while being politically unpopular with legislators
sponsoring environmental improvement.

Clearly local decision-makers must be concerned with defining
which development choices reflect economic values and those which
reflect other social values. This can be accomplished by improving
the connection between ecological and aesthetic responses and market
responses. It is for the planner to make the distinction between
development proposals reflecting different values clear to decision-
makers. He must make the consequences and benefits of each explicitly
known if he is fulfilling his role in the community as defined by his
professional society.

If community values for coastal economic development are expressed
in the interaction of the factors in the decision-field, who then is
responsible for the equitable redistribution of resources that accrue
to the community through this economic growth? Clearly, the leaders
of government and their associated planning staffs represent the near-
est thing to a "social diseconomies board". Their role is to repascal
the gains and losses emanating from their consent to changing land-use
and environmental patterns. In the allocation of coastal land and
environmental resources this role is especially important because of
the limited supply base.

Planning Strategies:

To carry forward planning development proposals, the planner must
not only be sensitive to the community values that manifest themselves
in the decision-field but also must have a conceptual approach to the
task of implementation and community change. The ability of the plan-
ning function to have a meaningful impact on coastal management policy
depends on the administrative and professional strength, degree of
diffusion of power in local government and the position of the planning
function in the governmental structure. Clearly a coastal development
plan which demands a consistent schedule of land acquisition, federal
participation, facilities programming, and involved municipal regula-
tion cannot hope to be realized in a governmental structure, both
political and administrative, which is incapable of handling such a
complex approach to environmental management.

Friedmann defines two generalized categories which encompass six
planning strategies. Planning strategy means the manner in which the
planner attempts to direct community change which is occurring because
of his efforts or outside forces. Friedmann's categories are named
adaptive and developmental planning and are defined as follows:

Adaptive planning is interested chiefly in qualitative
adaptations to the changing interplay of economic forces
within an area; while developmental planning is concerned
with achieving a high rate of cumulative-investment for a
given area by activating unused resources capabilities.15

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15J. Friedmann, "Regional Development in Post-Industrial Society,"
Adaptive Planning is commonly found in smaller communities where weak or low professional input is present and where there is diffused authority. The Goodman position and Ad Hoc Committee position described on page 29 usually are the basis for this approach. Developmental planning is best operable where strong professionalization and centralized authority are present. The Walker position and to a lesser degree the Kent position make this approach possible, although certain positions are not prerequisites to using these approaches.

Adaptive Planning:

Strategy (A) The Catalyst-Coordinating Stance. - The purpose of the planning is to respond by minimizing the disruptive aspects of community change and to control private developmental impact through the coordination of community expenditures. An example of this approach might be the extension of municipal sewer services to alleviate ground water pollution in an unplanned subdivision location.

Strategy (B) Ad Hoc Opportunism. - Though not widely acknowledged as an operational method of decision-making in the planning function, this approach involves the pursuit of idealized end states about which widely differing perceptions may be held, but toward which no concerted schedule for accomplishment if framed or program set. In short, it is a highly flexible approach not prone to arousing community antipathy, or interest. An example of Strategy B would be the plan of creating strip commercial development near public beaches as a means of encouraging economic development. Such a strategy seeks to rationalize through public sanctions the forces of political and economic factors in the decision-field.
Developmental Planning:

Strategy (C) Systems Analysis and Simulation. - This technical approach seeks to re-create in mathematical models the integrated systems or functions in the community, which through projective computer analysis will provide the planning function with detailed information on the effects of alternate investment or developmental strategies. Ideally by being able to explore more options better decisions can be made now without foreclosing critical future choices. While its operative use is currently limited as a method it has proven an invaluable aid to institutional development for corporations with their emphasis on internal systems control. Simulations of coastal recreation demands through extrapolations of current origin and destination studies in conjunction with attitudinal studies can be considered an example of this strategy. Because of the complexity of the systems being dealt with on an urban scale, such as the Providence SMSA, this strategy has to be considered more theoretical than practical.

Strategy (D) Cost Effectiveness and Program Planning. - Burton H. Klein of the Rand Corporation has been credited with defining this approach to planning. It is based on the postulate that all information needed in the formulation of policy cannot be gathered in the initiation of formulation phases, but instead must be determined as

16 This concept was documented by R. S. Bolan, "Emerging Views of Planning", p. 240, and originally elaborated by C. J. Hitch and R. N. McKeen, The Economics of Defense in the Nuclear Age (Cambridge, Mass.: Harvard University Press).

17 B. H. Klein, "The Decision-making Problem in Development", in National Bureau of Economic Research, The Rate and Direction of Inven-
the process is carried through. It is necessary, therefore, to delay decisions on policy matters until alternative approaches can be conceived and tested from information culled during the process itself. This planning strategy is extremely well suited to policy which deals with easily quantifiable costs and benefits that can be agreed upon and translated into some sort of utility unit or measure that is applicable to computer handling. Such well known techniques as PERT (Program Evaluation and Review Technique) and the Critical Path Method are now being modified for use in urban planning decision-making. The application of this method though operationally limited is one which progressive and well staffed planning offices are moving toward. An example of this strategy might be in determining the best approach or policy for sewer and water line extensions into coastal areas by quantifying costs to the community and those passed on to the developer. Such an approach might provide a fiscal criteria in determining sites for coastal development.

Strategy (E) Strategic Service Allocation. - This approach holds that the strategic placement of public investment and controls can act as a fulcrum to direct private investment to accomplish the purposes of area redevelopment plans. In describing this approach Doebele suggests,

that the planner might exercise an influence over development of the metropolitan regions far greater than ... resources would seem to make possible.\textsuperscript{18}

The strategic services to be used as the lever in conjunction with the fulcrum of public investment are accessibility to highways and public transit, basic utilities such as water and sewer, and detailed applications of regulatory tools under the police powers. By using such a method through the application of programmed six year capital budgets which span several political terms, a consistent program of community improvement can be implemented. This creates a framework organizing the day to day choices made by elected decision-makers attempting to resolve the atomistic requests of the public. The acquisition of coastal open space, then the introduction of utilities, road improvements and recreation facilities would be an example of encouraging the private sector to invest using phased public services as incentives. This strategy differs from C above in its attempt to direct the market influence toward accomplishing public policy. Unlike C it places less emphasis on rigorous analysis of urban systems and in the formation of predictive models.

Strategy (F) Coordinated Design Approach. - This strategy holds that a planned design for the form of this city which we can perceive in the interrelationships of physical structures can be part of the functional-economic growth process of urban development. This strategy seeks to relate economic and social activities with the geographic and topographic forms of the urban site. Implicit to this approach is the assumption that social and economic functions when expressed in a coordinated design process excite the senses and reflect the character of the city. The most effective approach for implementing this strategy for urban development is to erect a basic design
framework that is simple enough to be comprehended, strong enough to withstand the inevitable variety of architectural styles that are the components of the framework, yet flexible enough to adjust to necessary changes. 19

To successfully execute this approach a high degree of professional competence and executive authority is required. This approach has been used in Philadelphia by Edmund Bacon in a design approach he entitles Simultaneous Movement Systems. It was actually carried out in the Philadelphia Center City Plan. Such an approach might be applied in revitalizing commercial marine facilities such as Pawtuxet Cove in Cranston (see Chapter V).

Having examined planning as an important factor in the decision field in which coastal development policy is created, it is necessary to examine another factor, that of politics, which often contends with planning to sway the decision-maker.

POLITICS

There are five traditional interest groups on the local level who most often attempt to influence the decision-makers on coastal environment issues. The key decision-makers on coastal matters vary in number and position from town to town. Usually, however, it is one or more members of the Council, the Mayor or top planning official, plus others who have a concern for coastal matters. The five interest groups are:

1. The conservation commission.

2. Landowners - residential or small business.

3. Promoters - developers, or real estate interests.

4. Influential citizens or institutions (which may be part of 1-3).

5. The elected and administrative members in city government.

The Conservation Commission interacts with decision-makers via the unique custodial role of the maintenance position. The preservation of natural areas and stringent control of development in or near these areas is desired. Traditionally this group desired leaving land completely in its natural state. More recently conservation interests have stressed ecological criteria which do not prohibit human use but carefully attempts to avoid conflicts among the biological systems of an area and those potentially harmful aspects of human use.

Because such commissions are usually a duly constituted part of municipal government they interact directly with decision-makers. This differs somewhat from an outside lobby which may seek to influence individual councilmen through communication channels outside the formal procedures of local government. Because of the Commission's position in government, individual councilmen are required by procedural mandates to respond to their recommendations.

The Commission's effectiveness, however, may rest more on the decision-makers' perception of the Commission's "Correct" sphere of concern or authority on environmental matters than on the particular issue in a decision situation.

If decision-makers in a local community view the Commission's proper function as watershed preservation, arguments dealing with
aspects of a particular proposal under discussion based on preservation of scenic vistas, for example, may be discounted by decision-makers as being outside the Commission's sphere of expertise. This sphere of expertise may also be perceived by decision-makers as being geographically based. Thus focus of Commission activity in rural parts of a town or city may cause decision-makers to seek advice of other boards or commissions in dealing with issues of open space in more highly developed parts of the community. (See East Greenwich, Chapter IV).

How conservation groups interact with decision-makers, and conversely how decision-makers are influenced by the Commission's position depends, in part, on the Commission's own conception of their function. Also contributing is the perception of decision-makers toward the importance of conservation to a given town and its problems. This perception may exist quite independent of conservation enabling legislation and may be based more commonly on the persuasiveness of individual commission members.

The Landowners' breadth of interests seldom spans much of the spectrum of environmental concerns. The strength of his position in the decision-making field lies in the fact that he is a voter from whom the bulk of municipal revenues are drawn in the form of taxes. He views the role of the elected official as spokesman for, or steward of, his rights, being so authorized by his election. Municipal officials are sensitive to the views of landowners and are prone to weigh heavily their sentiments in deliberations.
The position landowners take on a given issue depends on many unpredictable variables. For some instances they encourage expenditure of public funds near their property in order to appreciate property values; while another group may strenuously oppose it for fear of the opposite effect. (See Chapter IV - Warwick.) The owners of coastal property tend to view their land as separate from the larger issues of coastal environmental management. Indeed they show little evidence of awareness that their property is part of a larger unified geographic boundary. In their interaction with decision-makers their views tend to be expressed in terms of public action toward "their land" as opposed to public action toward a segment of coastline (see Chapter V).

The landowner's sphere of influence tends to be defined to specific aspects of programs or issues rather than to influencing entire development objectives. If a town seeks more public coastal recreation areas, for example, key decision-makers are likely to weigh heavily the views of landowners near a proposed site, but will not necessarily consider their views as questioning the value to the community of coastal recreation areas. Contrarily, however, when landowners organize into a group their effectiveness as a political force gains stature in the eyes of decision-makers who then must be responsive to the political implication their opposition may mean in a coming election. While individual landowners interact with decision-makers, this interaction may occur informally with individual representatives. When unified into a group, however, which petitions decision-makers, their impact and validity of their views on coastal development decisions are greatly increased.
Promoters or spokesmen for a particular land-use type can be classified in the majority of cases as the primary reason for governmental coastal policy formulation. Their manner of interaction with decision-makers on the municipal level is usually as official petitioner for governmental approval. Such petitions might be for zoning changes, variances, exceptions, or subdivision approval (see Chapter IV - Cranston). Their appeal to decision-makers rests largely on the argument of immediate increase in the community tax base through new construction, and through the multiplier effect that new business or residences will have on existing businesses. Their appeal to the decision-maker compliments both the traditional view that a growing city is a prosperous city; and the desire of decision-makers to show tangible results for their work in elective office. For the decision-maker whose full-time occupation is business, the conception of increasing current assets (tax base) through development of resources (undeveloped or poorly developed land) for the greater return (votes and tax revenues) on investment (public services) seems most natural. The fact that such development occurs on a limited resource base (the coastline) and is random in location and quality may be of less importance to the decision-maker than the tangible accomplishment that he can point to at the end of his two year term.

Developers are perceived by decision-makers in many ways. In some instances he is viewed as attempting to take advantage of the

20 Unofficial interactions are difficult to categorize. In Cranston for example, one of the heads of the largest real estate and development agents in the State is a near relative of the Mayor.
public. The decision-maker, in this case, may view himself as a sentinel against such action. In another case the decision-maker may view a developer as a political benefactor whose product reflects well on elected officials during election time. In a third instance the decision-maker may view the relationship between public decision-makers and developers as an adversary system in which municipal administrators and planners and developers contend development issues equally with the Council acting as the final arbitrator.

That certain individual citizens influence public decisions more than others is an established fact. In some areas such as the prestigious Potomcot Point in North Kingstown, the quality of development reflects the tastes of the owners and is far superior to that demanded by local decision-makers. In some cases such qualitative changes are brought about by the spending of private funds. In other instances powerful individuals, not necessarily wealthy, have a great impact on the location, quality, and nature of coastal developments.

The behind the scenes role and communication system of powerful individuals, families, or institutions representing them in influencing coastal land-use allocations can be so subtle that it is all but impossible to trace the actual means of interaction (see Appendix C). Often it is a single individual, who either through the impact of his personality or efforts, that directs a course of action on environmental questions. In other instances, a group of individuals sharing similar interests and attitudes tend to set a course of action through a common method of problem definition and resolution (see Chapter IV - E. Greenwich). By such group interaction in the decision-field, a
pattern of decision-making tends to emerge especially in politically and ethnically homogeneous towns with traditionally slow growth rates. In many cases this pattern of action is expressed in a "what's good for the town" articulation. Where such a group exists the maintenance of amicable relations among the participants is often more important to them than the manner in which a particular problem is resolved.

**Elected and Administrative Officials in Local Government:**

Elected and administrative officials in local government form an influential group whose views affect the ultimate form coastal policy may take. In many cases these individuals respond to the pressure brought to bear by the aforementioned groups. But in addition to this they respond to their own and the views of their colleagues on coastal environmental issues. In short, the actual decision-making process tends to affect what policy position these key decision-makers take. Banfield and Wilson have noted:

> The function of politics in the small town is less to resolve issues than be suppressing them to enable people to get along with each other while living together in very close personal contact.\(^{21}\)

While this may not be necessary in cities, it is clear that issues can be either minimized, or become the medium of exchange in the bargaining process which characterizes local decision-making. In such a process the merits of a given development proposal may be of a secondary importance when two or more factions are contending in the exercise of power. Two such groups are often the Council and the Council and the Council.

Mayor's office. Administrative groups may also greatly influence decision-makers when a given issue involves the allocation of funds to resolve it. When beach facilities are proposed, for example, the recreation and public works departments could easily contend with each other for the construction funds. Such funds might be seen as adding to the stature of that department who uses them. In this case inter-agency competition may motivate these influential bodies rather than a desire to resolve the issue itself. When such a situation occurs Norton Long's game metaphor (page 23) is particularly appropriate.

**MARKET PLACE**

Local government coastal policy is directly related to land resource allocations in a market system. This market system is a major factor in the decision-making field. Governmental policy is expressed legally through land development regulations which restrict market judgments as to how land is most profitably used. The market place shapes the type and intensity of land usage, while governmental regulation seeks to coordinate this force of change to have it conform with the physical and social development objectives of the community. Often these objectives are not explicitly stated but are reflected in the values of the decision-makers in government. Such an objective might be to maintain universally high land values throughout the community.

The marketplace is concerned with the operation of a price system as it affects the individual in his attempt to make profitable use of his land resource base. The spokesmen before government for the market system of land allocations are usually realtors and developers.
Coastal land, because of its unique location and amenity value, is particularly susceptible to exchange in the market. The marketplace can best be described within an economic framework. This framework is based on three general assumptions. These are: (1) that man is a rational being; (2) that man attempts to maximize his self-interest; and (3) that prices tend to allocate resources.22

Two basic economic concepts have been developed from these assumptions. The explanation of these concepts is necessary to appreciate how the market system operates. These concepts are: land-use capacity and the highest and best use of land.

Land-use capacity refers to the ability of any given unit of land resources to produce a net return above the production costs associated with its use.23 In the case of an apartment complex land-use capacity means the ability of the complex to generate rents which exceed such costs as amortization, insurance and maintenance. In such a case governmental policy regulating population density has a major impact on the profit the owner receives. Clearly land-use capacity depends on the location of the land in relation to other uses. A coastal residential lot surrounded by the natural environment and bought in an undeveloped state, for example, may increase in value several times if the immediately adjacent land is converted into a golf course, or municipal open space, thus guaranteeing the present amenity quality


23Ibid., p. 12.
of the area. Location of a dump nearby, instead of a golf course, would have the converse effect.

Highest and best use is another closely related concept. In the economic sense the highest and best use of land means the use that brings the highest return to the owner, or society. This concept requires a consideration of land-use capacity and the demand for uses. These uses tend to change through time in response to technology. Coastal lands which in the past were best used for agricultural purposes have shifted in many areas to intense commercial and industrial uses as urbanization occurred. This evolution results from the interaction of supply and demand. Market decisions reflect in this interaction of societal values. Because of the high amenity value of coastal lands, buyers representing certain land-uses seek to use this characteristic of the land to their own economic advantage. This desire to use coastal lands is expressed in the terminology of the market as supply and demand. The supply of coastal land is limited as a general rule to that land which is in immediate proximity to the sea or which is visually linked with the ocean. Supply can be defined as the quantity and quality of land resources available for use. Demand is defined as the growing need for land and land products and our ability to provide for this need.25

The supply and demand function are kept in balance by a pricing

24 Ibid., p. 13.
25 Ibid., p. 17.
mechanism. Prices allocate production and determine the distribution of resources. Because the supply base for coastal lands is limited in amount and location, increased demand results in an increased price. This price is synonymous with economic value. This value is established because the land has utility to the owner; because there is scarcity in supply to command a price; and because the owner holds a concept of futurity. He expects a return or satisfaction from the use of the land. 26

The more the buyer bids the greater the expression of personal satisfaction or expectation of return on investment he is making. In order to generate this investment return, the potential land-use capacity must warrant the risk inherent to the purchase. As prices rise so must the land-use capacity in order to make the buyer's investment profitable. In this manner supercession of land-uses occur. Owners of coastal land-uses, such as single family homes, find that increased taxes which are based on market valuations make this type of use expensive to maintain. Because single family residential use produces no revenues for the owner and indeed consumes his resources by increased taxes, it can be termed a consumption use. A coastal apartment use, however, though residential in nature is a production use because it produces revenues for the owner.

With the supply of coastal lands remaining constant, yet in increasing demand, competition occurs between consumption and production uses. Such consumption uses as recreation areas, open space, and

26 Ibid., p. 166.
single family homes, and institutional uses such as private schools or wildlife sanctuaries must pay increasingly high carrying charges to maintain themselves. Where demand and prices increase markedly some of these uses change to a higher and better use as owners capitalize on the appreciation of their property values while avoiding the cash drain of the carrying charges. It is in such a manner that coastal land-uses intensify as a result of the market system. It is when change occurs between land-use types increasing land-use capacity that the greatest profit can be made.

It is for the local decision-makers to determine whether this movement toward a change in intensity brought about by market activities is compatible with the coastal land-use objectives of the community. Thus the market place attempts to influence coastal policy formulation. How decision-makers reconcile the market influence with ecologic considerations is central to the maintenance of coastal environmental quality. This economic-ecologic dichotomy forms the next important factor to be discussed as it influences decision-makers in the decision field.

THE ECONOMIC - ECOLOGIC DICHOTOMY

Thus far decision-making factors in the decision-field have been discussed independently. The market influence and ecology, however, while seemingly operating independently of each other share many characteristics. By juxtaposing these characteristics, the similarities and differences between these systems can be illustrated as they affect the coastal management decision-making process.
Kenneth Boulding in an essay entitled, "Economics and Ecology," notes that other than the fact that both sciences share the same Greek etymological root there has been little effort to bridge the chasm between these two systems of viewing the world. Evolution, in the ecological sense, differs from economics where evolution occurs in the form of technological innovation. Land forms such as the coastline and the marine environment peculiar to it are fixed both in size and quality when compared to the rate of technological evolution capable of being employed in the coastal zone. The slower rate of change in nature is easily altered by the impact of technology on the coastal zone.

For economics the value of innovation to the possessor lies in the utility of the innovation to him. The return or benefit to the possessor can be measured in dollar values through the market demand for the innovation or in the savings he receives in applying the innovation to his own operations. Thus, economic evolution is directed largely by the market. Ecologically speaking, very little is known about why organisms evolve except in response to their environment. The sanction of this evolution lies not in growth of dollars, but in survival potential.

In both the ecological and the economic purview, determining the relation of evolution or technical innovation to the larger ecological and economic system is essential in establishing the significance of local changes in survivability and utility. It is essential then to

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examine local and metropolitan economics and ecologies in light of their position in a regional system.

For the local decision-maker faced with increasing demand for more public expenditures determined to a large extent by the nature of the larger economic system; decisions which effect local ecological qualities may be seen as being completely divorced from the quality of services being demanded. Yet when each system (economic and ecologic) is viewed as a parallel form of organization, each having immediate and long term effects on community evolution, it is clear that the vocalized demands of the economic system is likely to receive a higher priority when the two systems conflict. When viewed in terms of their relative time scales, economic criteria offer immediate, quantifiable benefits to the community while the ecological time table offers no clear quantifiable value to the municipality. In addition, experience with the economic system is well known, predictable and offers universally accepted rewards. The ecologic system is less well-known, poorly understood and holds an unquantifiable promise for new payoffs.

When the economy of the Narragansett Bay region was agriculturally and sea based, the ecological qualities of an area had immediate impacts on the economic return of the farmer and fisherman. The quality of the soil, estuary, water supply and timber made the difference between prosperity and failure. It is here man has applied his innovative techniques to special advantage for increasing his resource base. He has both improved artificially the quality of the land through the use of technical innovation such as irrigation and chemical application and increased the carrying capacity of the land's spatial
characteristics through the development of the urban structure.

Land values no longer reflect land as a producer of basic resources in the form of crops and livestock. Now land is valued for its location. The extent to which dollar values for location can be determined is through such indicators as proximity to public services, concentration of population, accessibility to transportation, suitability of the land for development, public demand, and finally, amenity values. In short, land value is currently measured on the basis of spatial and locational qualities rather than traditional productivity. In fact as our cities grow, the amenity value of raw land, when compared to built up areas, often is reflected in the sale price. This view of land has shrouded its role in the ecological system, distorted the impact of the two systems and allowed the local economic system to dominate the local ecological system. Just as certain land on highway intersections and elsewhere has unusually high economic value, there are natural areas such as marsh lands and estuaries which possess equally high ecologic value. The ecological values of the sea itself in its marine environments directly relate to market values. The ecological quality of shellfish beds, and fishing grounds is directly correspondent with the supply and price on the market for these products of land-sea ecology. Unfortunately, these areas are not so readily perceived so as to retain their potential in the ecologic system.

In an urban society clustered around the coastline, as is the Providence metropolitan area, coastal land values are rising because proximity to the sea also means propinquity to urban services, and a
high revenue-producing capacity for coastal sites in addition to high amenity value. The natural environment of the coastal zone while giving rise to increases in land value is not particularly economically valuable in generating revenues if it remains entirely in a natural state. Modifications for services such as roads, water, and sewer are required before occupancy for residential or active recreational uses can result.

The primary demand for coastal land is for residential development. As a result only the owner of coastal land receives the benefit of this amenity value which in turn is reflected in both his purchase price and assessed valuation. This practice has a parallel in the rental fees levied on those lessees of the upper stories of high rise apartments in the city. The cost is based on the assumption that the freedom from noise, the view and in some cases the cleaner air represent environmental values which are no longer distributed equitably to all citizens; therefore those that wish to benefit from these amenities should pay a price.

In the transfer of coastal property as a residential commodity in the market system government has ignored the differences in market values and has taken the position that coastal land should be treated as any other parcel of land in the community; and further, that the distribution of the visual and psychological assets inherent in the coastline should be subject only to the distributive mechanism of the

\[28\] Assessors in Warwick and Cranston both feel coastal land values are among the fastest rising of any in their respective cities.
Market determinations of coastal land allocations. The ecological system as such has not received strong local government recognition or sanctions. Without adequate funds local conservation commissions remain weak in attempting promote local ecologic awareness and preservation.

That the market mechanism can equitably determine the best use of the land using the broad community values as criteria is doubtful. Though a foundation to community well being, economic growth or evolution makes little contribution to the solution of what may be loosely termed "the urban crisis." John Kenneth Galbraith states the paradox in this way:

Economic growth does not provide the public services which mark our progression toward a more civilized existence and which are also made necessary by a higher level of private consumption. Economic growth does not help those who, because of careless choice of birthplace, or parents, poor early environment, absence of educational opportunity, poor health, mental retardation, racial discrimination, or old age are unable to participate fully in the economy and its gains. On the contrary, it makes these disadvantaged more visible and obscene. And economic growth, we have learned does not solve the problems of our environment, and especially our urban environment. On the contrary, it makes these problems infinitely more urgent.

Central City sprawl typified by the development of Cranston and Warwick, Rhode Island, are clear examples of the markets' power to influence public decision-making as well as its ability to create a matter of environmental urgency. Profit maximization serves as the

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guide for private economic decisions, and therefore land-use patterns become responsive to changing costs and demands. Land-use patterns subject solely to economic criteria allow a divergence between private costs and social costs where the difference is attributable to external diseconomies that cause society to bear the costs of benefits it does not receive. In short, maximization of profit is only one criterion to be viewed in devising a regional policy for environmental management.

In Cranston, for example, large, single family, coastal homes are being replaced with luxury apartments. This development indicates that a form of economic Darwinism is at work in the market system which parallels ecological evolution. In ecological systems growth in number of organisms occurs until an optimal level is reached. Growth beyond this level results in over population causing stress and shortages which result in an adjustment of the number of organisms downward until a balance is again achieved. Farmers have long recognized this problem and have resolved it in domestic animals and in crops through the use of artificial feeds and fertilizers to avoid over grazing and the need for crop rotation.

On the shoreline the development process of intensification of coastal land use works against the maintenance of low intensity uses such as open space and low density residential properties because of the cash flow necessary to meet such fixed costs as taxes and amorti-

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zation based on the market's valuation of coastal assets. There is no natural self-adjusting mechanism to control optimal densities.

For the local decision-maker charged with the task of devising a community-wide land-use strategy it becomes increasingly difficult to balance the explicit forces of economic gain against the implicit viewpoint inherent in the social values of the community. It is such intangible goals which are often sacrificed incrementally across the community as the externalities become a potent force complicating the jobs of the local decision-maker. Unless specific environmental and ecological analysis of community coastal resources take place and use objectives which reflect the social and ecological values of the community will continue to play a minor role in day to day decisions which are needed as a result of market influences. Increased understanding of the ecological system will give decision-makers a long-range standard by which to judge development alternatives.

A second demand on the decision-maker rests in assaying the validity of his tools of measurement in making decisions. The developer proposing a coastal development scheme, for example, is able to state in exact terms the benefits of such a plan to the community: specific returns in the form of taxes; high degree of predictability for assessment; and his capital investment in the project as proof that the venture is viable. To reserve open space on the coastline, the public decision-maker must pay a market price, expend funds for maintenance annually, forego taxes, and act on the assumption that people will benefit directly from such action and return him to office. In addition, by allocating funds for coastal acquisition he is making a judg-
ment on the social need for public access to the environmental qualities of the shore. Against this are placed the vocally supported and explicit benefits of allocations of the same money for such demands as education, welfare and a higher level of public services. Even if public action in coastal environmental preservation is only to increase public access through the acquisition of rights of way on the shore, as in the laying out of streets; legal entanglements and suits for inverse condemnation awards make this a poor second alternative.

The accelerating deterioration of the coastal environment demonstrates that the advocates of market criteria for land-use choices have prominence. It is equally clear that the handling of the externalities of such market-oriented land-use decisions have been either overlooked or badly handled by local decision-makers. The granting of public sanctions for development of coastal assets in return for tax dollars has an enormous potential for overwhelming the local decision-maker because of the pressures for increasing expenditures in existing public services. The public, in effect, lives with the environmental consequences of such trade-offs. Once coastal land-use patterns have been established by such a process there is little social recourse for improving the quality of such a decision, regardless of the sacrifice of ecological resources. In most instances such decisions are final.

Local decision-makers have yet to maintain a broad scope of reference in garnering information for coastal land-use decisions. By maintaining an economic-ecological balance in the weighing of information he will not be overwhelmed by the demands of economic
"reality" in expense of less obvious, but no less meaningful aesthetic and ecologic considerations inherent in environmental preservation.

EXISTING JURISDICTIONS AND CONTROLS

Before any local decision-maker can act intelligently toward the formulation of a policy toward the use of the coastal zone in his municipality, he must be aware of the distribution of jurisdiction and controls which form a network confining the scope of his potential activities. This network of jurisdictions and controls constitute a constant factor in the decision-field.

Mr. Glenn Kumekawa, Planning Director for the City of Warwick and one of the original initiators of the Natural Resources Group as a potent force behind the establishment of the Department of Natural Resources in the early 1960's and more recently, the Governor's Technical Committee on the Rhode Island Coastal Zone, summarized the legal and administrative organization of the use of Narragansett Bay in this way:

"Two major types of jurisdiction and controls are presently exercised over Narragansett Bay. They are:

a) territorial controls
b) functional controls, or
c) a combination of the two.

These include:
1. The jurisdiction of the Federal Government over "navigational waters" through the Coast Guard and the implementation by the Coast Guard of the Boating Act of 1965 as well as construction

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and navigable waters through the Corps of Army Engineers.

2. The territorial jurisdiction of the State of Rhode Island over all Narragansett Bay through the "doctrine of territorial waters extending one marine league off the mean high water" (approximately 3 miles).

3. Jurisdiction of various agencies of the State of Rhode Island for different functions:
   a) Shell fishing and fishing under the Fish & Game
   b) Pollution of Waters by the State Health Department
   c) Use of Hydrofoils or other means of transportation by the Public Utilities Division
   d) Construction of Navigation by the State Division of Harbors and Rivers; and since 1967
   e) The filling of Marshlands by the Department of Natural Resources.

4. The jurisdiction of local communities adjacent to Narragansett Bay with their powers of zoning and licensing. In addition, such municipal agencies as the Port of Providence Authority also exercise certain powers.

5. Property rights of individual owners of land and parcels as it extends off shore through "riparian rights".

In addition, dominant land uses along the Bay exert considerable influence on existing and potential uses of the Bay without statutory jurisdiction. For example, the Navy installation at Quonset and Newport will exert a great influence as to what can and will occur in Narragansett Bay because of what may be termed the "negative jurisdiction" of the threat of closing these bases. (See Appendix C.) Similarly, The University of Rhode Island, with its major investment in the oceanography and Narragansett Marine Laboratory, will exert great influence over the uses of the Bay.

Clearly, while regulatory agencies provide controls over such problems as pollution, the controls are so specific and segmental that not even larger functional categories of the Bay's users are effectively controlled. These categories include:
a) Narragansett Bay as a port of entry or as a shipping lane.
b) Narragansett Bay as a recreational and/or conservation area.
c) Narragansett Bay as a drainage basin both of surface drainage as well as for industrial and residential effluents.
d) Narragansett Bay as a source of extractive resources, fishing and shell fishing.
e) Narragansett Bay as a determinant of land use patterns or adjacent land.
f) Narragansett Bay as a potential source of water supply."

What Kumekawa has suggested can be portrayed graphically in the form of concentric squares over which is put the functional controls of special interest agencies. These are depicted on Chart A.

Interaction of Factors in the Decision-field:

Factors in the decision-field interact in a manner peculiar to each municipality to be studied. While each factor is responsive, to some degree, to regional and national trends, each in its own manifestations react with the other factors on the local level to affect coastal policy formulation. Two of these factors, the economic-ecologic dichotomy, and jurisdictions and controls represent passive influences in the decision-field. While their presence affects decision-makers, they are unrepresented by spokesmen and are themselves subject to small incremental change, if historic patterns hold true.

Planning, politics, and the marketplace, however, are active factors in the decision-field. Each is represented by spokesmen and each tends to offset the full impact of the others. The market factor carries behind it perhaps the greatest institutionalized force. The market system of exchange acts as a major organizing force in society for it defines roles and procedures between individuals and institu-
Jurisdictional Controls Affecting Narragansett Bay Coastal Lands
tions involved in commerce and economic development activities. The market place has a pervasive influence in the degree of functional specialization evidenced in the major institutions of the community. These specializations are an important characteristic shaping the form of the decision-field.

Politics in its institutionalized form of government reacts to the market factor through sanctions and regulations. Interest groups present viewpoints which reflect certain values. These values are enunciated in the hope that they will be reflected in governmental policy which stimulates or retards the marketplace. Though such enunciated values may be directly in opposition to each other (as in the case of the developer seeking to increase coastal land use capacity through filling of marshes while the conservation commission seeks to retain such a low intensity use), each is responding to the influence of the market factor.

Planning, unlike politics and the market factor, carries behind it no institutionalized force. It can be both a reactive or initiating factor in the decision-field. It seeks to influence decision-makers as well as the market factor. When forcefully articulated in the decision-field it can harness the market factor and political groups to accomplish community development objectives. In most cases these objectives are defined by the planning function. When weakly presented, spokesmen for the market factor attempt to negate or direct the impact of the planning factor to sanction their point of view.

Though each of these three active factors offset one another, their relative strengths and weaknesses vary through time. Because
of their institutionalized basis, the market and political factors are likely to vary least in their position in the decision-field. Planning, whose effectiveness depends greatly on the organizational and professional competence of the function, is subject to significant variations in its relative influence in the decision-field. When viewed historically, however, the impact of planning is increasing. Because these three active factors are the dominant forces in the decision-field, they will be used as a framework for discussion in the analysis in Chapter IV of coastal environmental policy formulation for each of the four municipalities in the study area.
III

HISTORICAL SETTING

Cranston, Warwick, East Greenwich, and North Kingstown, Rhode Island
The Study Setting:

The seventy miles of shoreline composing the West Narragansett Bay coastal environment offers a full array of man's activities on the waterfront. Some of these activities are the result of historical trends while others have been the result of direct and indirect governmental policy on either the Federal, State or local level. Each city and town government is approaching the management of its coastal resources from a different point of view. Land use patterns established in the most urbanized areas, however, are now beginning to be repeated in less urbanized parts of the study area. Taken as a whole the process that is occurring in the Narragansett Bay region may reflect in a limited area what is occurring along our entire national coastal continental boundary.

Together these four towns and cities represent 20.2% of the State's population (1965) and a total growth rate averaging 14.5% above the average growth rate for the Providence-Pawtucket-Warwick SMSA for the 1960-1965 period and 15.4% above the State increases for the same period. Correspondingly the resident civilian labor force in the study area increased 15.5% over the State totals for this period.  

While these selected indicators suggest the growing pains which these towns and cities have experienced over the last 15 years, it is necessary to have a longer historical perspective for each town in order to understand the evolution of coastal land use changes in each

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municipality as a platform for present and future environmental policy. The following pages outline the historical development of these municipalities, the character of present waterfront land usages. The potential for governmental change is explored in detail in Chapter IV. The sum of these configurations set to a large degree the pattern of development and future of over 1/4 of the entire Narragansett Bay area. By their activity and evolution these communities will influence by their decisions a far greater area than their actual jurisdiction might suggest.
CRANSTON

Historical Development

From the earliest days of Rhode Island history it has been Cranston's proximity to Providence rather than to the sea that has stimulated its population growth and intense development. Early settlement occurred on the Pawtucket River in the 1630's because it was a convenient middle point between the hub of the Providence Plantations to the north at the mouth of the Blackstone River and the more remote outpost to the south along the Bay. By 1774 the population had grown to 1884 souls who were employed in various agricultural and small locally oriented manufacturing concerns. This number held steady until the 1820's when the cotton boom dominated the economy of the area. Immigrants to the town during the centennial between 1820 and the nineteen hundreds were the primary source of population growth. Mills exploited this new source of labor. These impoverished people represented many nationalities.

The English appeared between 1820-1890, the Irish and German between 1840-1880 and the Italians between 1900-1915. To this day there is a strong representation of those of Italian descent in the Cranston Government. By 1910 the population had swelled to 21,000. This figure was more than tripled by the 1960 census. The year 1939 saw a doubling of building activity over 1938 as the initiation of

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2 General historical background for Cranston is from the following sources: J. Earl Clausen, Cranston--An Historical Sketch (Providence: T.S. Hammond Co., 1904); Cranston Bicentennial 1754-1954, Cranston Bicentennial Committee, 1954.
the war stimulated rapid development in such previously distinguishable village nuclei of Edgewood, Eden Park, and Auburn. Development since has occurred in a predictable yet unplanned manner as large grid patterned subdivisions filled in the open areas between these early villages unifying them by strip commercial development along the major street networks. The present focus of development has shifted, by necessity, to West Cranston, the last remaining reservoir of undeveloped space in the city.

Cranston's economic backbone has always been and continues to be its manufacturing enterprises which, when compared with other cities in the state, are larger than average in employment size. Diversification in retailing employers which occurred during the rapid growth of the community during the last twenty years has accounted for less of a dependence on the traditional textile industries than other Rhode Island cities. Despite the advances in economic development that have occurred as a result of the modernization of old firms as well as the establishment of new industries, Cranston's government has been hard pressed to maintain municipal services without a rapid increase in the property tax. The tax rate in 1960, for example, was 160% over that of 1950.

The demand for new housing is expected to continue well into the 1970's with 4,300 new dwelling units projected requiring 1,100 to 1,400 acres of land to support an estimated population of 84,000 in 1975 (an annual increase of 1,100). Most of this development is

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3 City Planning Department, City Hall, Cranston, R.I., 1969.
predicted to occur in the West Cranston area. The highly urbanized character of the City has already been well established and promises to intensity. Average gross density stands at 3.9 persons per acre as of 1965 with a projected gross density of 4.6 persons per acre in 1975. With the completion of Rt. 295 as a circumferential route around Providence, much industrial and commercial development can be expected to occur in the Western part of the city. Indeed several key members of the City Administration as well as local realtors in viewing this potential see the undeveloped land to the west as the City's major resource and are fostering plans for a 600 acre industrial park, community shopping, school and recreation facilities. Seven and a half million people reside within a 75 mile radius of Cranston. Plans underway presently encompass 1,360 acres where Rt. 295 passes into Cranston.

Character of Waterfront Land Use

Land-use patterns for the 3.5 mile coastline of Cranston were firmly entrenched by the year 1891 and have changed little since. With the improvement of roads between Providence and the Pawtuxet River during that decade the outcroppings of land which rise 35-40 feet over the shoreline were soon sold as suburban home sites to wealthy Providence residents. As the Edgewood section of the City developed into one of the more fashionable residential areas around the Bay, the coastal land usage was locked into a single family residential

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\(^\text{4} A\) Development Concept for Western Cranston, City of Cranston and Universal Engineering Corporation, November 1968.
pattern interspersed with yacht clubs and marine oriented facilities. Unlike the estates of Newport or the large salt water farms of Bristol, development occurred in relatively small blocks of land with large individual houses sited on parcels seldom exceeding 3/4 of an acre in size. Public access to the marine environment is available at only 3 points: the Providence-Cranston boundary where a boat launching site is located; the Still House Cove Reservation which offers a public beach on 1.9 acres of land; and the Pawtuxet River area, a narrow yacht anchorage. All three areas offer little in the way of scenic amenities because of their size and upkeep. Water off these facilities is presently classified SD, the fourth lowest of five classifications, making the area unsuitable for bathing, fishing or wildlife habitat. The Pawtuxet River which dominates the Cove area is Class E. (Nuisance, unsuitable for most uses.)5 Despite the relatively low quality of the water and public facilities, the visual space that proximity to the Bay offers has kept the Edgewood section of Cranston, and specifically the land which abuts the shore, at a continuously high value in relation to more inland parcels.6 As densities across the city increase, the visual impact of the marine environment has made the demands for these older established coastal homesites a significant factor in the evolution of man's intensifying impact on

5Department of Health, Division of Water Pollution Control, Map. Present Classification of Water Quality--Sources of Pollution, State of Rhode Island, 1967.

6Office of Assessor, City Hall, Cranston, R.I., 1969.
MAP II

LAND USE

INDUSTRIAL

COMMERCIAL

MILITARY-NAVY

SINGLE FAMILY

MULTI-FAMILY

INST. - SEMI PUBLIC

PUBLIC-RECREATIONAL

OPEN-NATURAL

CRANSTON R.I.
the seascape. *Map II* illustrates the configurations of land use in the coastal area.
Historical Development

There is a marked resemblance between the development patterns exhibited in the evolution of Cranston into one of Rhode Island's largest cities and those undergone by Warwick. Each originated as a small settlement in the 1630's along the Pawtuxet River which separates the cities. Each had inland villages that slowly grew together as urbanization occurred creating older commercial centers amid extensive areas of strip commercial development. Both experienced an influx of immigrants of the same nationalities during the same periods. Each city has experienced the same evolution in their economic base through the turn of this century and up to the First World War. But as Cranston has looked to its western extremities as its major land resources for the future, Warwick seeks to balance its development focus geographically for three principle reasons: 1) the town possessed 39 miles of varied coastline including ocean frontage, bays and coves, which offer sites for a variety of uses from heavy industry to wildlife sanctuaries; 2) the mid-city area dominated by the Green State Airport has provided an intense focus for a great number of service industries; and 3) the western section of the city, dominated by the Upper Pawtuxet River basin, has been oriented toward Route 95 which has stimulated the development of major regional retail shopping centers which serve the rapid suburban growth that has affected the city in the last 20 years.

The urban sprawl which accounted for a loss of 9.8% of Providence's population during the first five years of this decade also accounted for a 13.3% increase in Warwick during the same period. The city
experienced a phenomenal 47% increase in the number of dwelling units between 1950-1960. With a projected population expected in 1980 of 120,000 the city will have gained 51,400 residents over a 20 year period. The 1960 census of housing documented the suburban character of the city by finding that 92% of all its dwelling units are single detached structures. This emphasis in development has resulted in an average density per gross acre of 3.4 persons which will increase to 5.6 persons as the city approaches the 1980 projection point. With the added emphasis on the development near the airport, the growth of large regional shopping centers in Western Warwick, and the impact of the completion of Route 295, the continuation of this building boom can expect only to be influenced by New England and national economic fluctuations. With a history of increases of retail sales between 1962-1967 of 111%, surpassing the next Rhode Island city by more than 84%, it is clear that Warwick's economy is growing rapidly.

Character of the Waterfront Land-Use

The abundance of shoreline in Warwick makes the City's window on the bay one of the community's greatest resources. The single family residential patterns which dominate the city have been well established along the coastal zone in varying densities from estates controlling large expanses of frontage to converted seasonal dwellings on one-

7 United States Bureau of the Census 1960.
8 Warwick Master Plan: Recreation, Open Space and Waterfront, Warwick City Plan Department, Adopted by Council 1964, PA-7.
9 Rhode Island Development Council, Research Division.
eighth acre lots. Between 1959-1963 permits for marinas and marine construction increased the available boat slip facilities by more than 1,000. In 1963 more than 1,300 boats moored or stored in Warwick resulted in an income of $163,000.\textsuperscript{10} Sales attributable to the shore-front averaged better than $1.2 million in each year from 1960-1962.\textsuperscript{11}

Having experienced severe hurricane damage in 1938 and 1954, several areas (e.g., Conanicut Point) which were previously residential in nature have been returned by the devastation to their natural setting.

Separated from the City by East Greenwich, Goddard Memorial State Park occupying 1,72 acres and 8,100 feet of natural shoreline provides a regional recreation area which is supplemented by many smaller facilities on Greenwich Cove and on the Upper Bay area abutting the City. As the pressure for available space continues unabated, multi-family housing units are beginning to supplant many of the smaller older units near the Pawtuxet Cove Area. In the most scenic area such as Warwick Neck and Sandy Point high quality subdivisions dominate the coastal land use patterns. Map III illustrates the wide variety of coastal land uses. Chart 3 denotes the relative front footages these dominant land uses represent.

\textsuperscript{10}Warwick Master Plan: Recreation, Open Space and Water Front, Warwick City Plan Department, Adopted by Council 1964, p. 52.

\textsuperscript{11}N. Borholm, Economic Impact of Narragansett Bay (Kingston, R.I.: Agricultural Experiment Station, 1963).
The abundance of ground water and game that originally attracted the Narragansett sachems to the forested hills overlooking the southern extension of Greenwich Bay did not escape the notice of early English settlers to the region. In 1676 the pioneers established a heavily fortified trading center in what is now downtown East Greenwich. Since that time the growth of the town which separates Kent and Washington counties has made up in quality what it has lacked in numbers. The secluded harbor with easy access to the coastal trading routes developed into a major Rhode Island port for continental and international shipping concerns carrying sugar, molasses and rum as well as the "Black Wealth" of Africa. Many of the sea captains built homes along prestigious Kings Street which overlooks the Bay. The wealthy character of the town has been maintained through the years as population grew from 240 in 1708 to 3,842 by 1890. \(^\text{13}\)

During the last two decades of the nineteenth century East Greenwich established itself as the State's leading producer of scallops and other shellfish, and since that time has maintained a strong orientation to the sea in growth of their boating industries. The small population has historically been supported both by the town's dependence on the sea as well as traditional manufacturing pursuits. Many of the older industries were located near the water-

front below the sharply rising hills which separate the harbor area from the western section of the city which is dominated by the Maskerchugg River basin emptying into the innermost extension of Greenwich Cove.

Today the local economy is anchored by the Bostitch manufacturing plant which employs over 700 residents. Other major regional employers are the Quonset Naval installation which accounts for 21% of the local labor pool, Browne and Sharpe manufacturing, also in North Kingstown, and the twenty manufacturing industries of the town which produce metal fabrications, machines, food and beverages.

A town of only 16 square miles, East Greenwich has attracted many residents with high incomes. 15.1% of the families have incomes of $10,000 or over as compared with the State average 11.7%. This distribution of income is reflected in the quality of the housing that is being erected to meet the demand of the rapid population growth which began during the 1950's. Building permits show that the average dwelling unit being constructed in East Greenwich is worth 60% more than the average dwelling unit under construction across the state.

Of the four cities and towns in the study area, East Greenwich has experienced the most rapid growth in population. Between 1960 and 1965 population increased 34.9%. Chart 2B summarizes comparative

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15 Rhode Island Development Council, Research Division.

16 United States Bureau of the Census, Special Census, October 1, 1965.
development in the towns and cities study area. By 1980 it is projected that population will be more than 50% above the 1965 figure of 8,228. Density based on the 1980 projection will be 8.1 persons per acre compared to 5.8 persons density per gross acre in 1965.

The Character of the Waterfront Land Use

East Greenwich's coastal zone on Greenwich Cove has been dominated historically by intensive marine oriented land uses. The expansion of the downtown area of settlement through the years has accounted for a large number of older structures present in the mixed land use pattern of the shore area. With the central business district within 1/4 mile of the shore, many of the historical development patterns of residential and manufacturing uses still remain as delapidated relics of the past, unfit for the demands of the twentieth century. The first 2,500 feet of coast in the northern most shore within the town is devoted to intense marine recreation activities: boat yards, yacht clubs and docking facilities. Uses become less intense moving up the bay with the final 3,300 feet being utilized as the approach to the municipal dump which is located at the mouth of the Maskerchubb River drainage basin and Greenwich Cove. The remaining 4,700 feet in the mid cove area of the 2 mile coastline is devoted to the outlet and leaching fields of a municipal sewage treatment station, a public boat launching site, bait shacks, and older multifamily housing overlooking the Cove.

The single dominating cultural feature that has isolated the

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shore area from the rest of the town is the Penn Central railroad line which traverses the entire coastline of East Greenwich. The rail line varies in its proximity to the high water mark from distances of 750 feet in the center of the downtown area to as little as 20 feet on the northern Warwick-Greenwich town line. Despite the disheveled and dilapidated condition of many of the structures in the coastal area, the overall environment of the area has a high amenity value. This amenity rests in the character of the opposite shoreline, Goddard Memorial State Park, which acts as a natural backdrop to the harbor anchorage. The Cove itself is more than 1,300 feet wide in its farthest point from Goddard State Park. For those on the Greenwich side of the harbor the presence of this natural area adds measurably to the view of the harbor. For those viewing East Greenwich from the Park itself, the haphazard development and filling of the town's waterfront marks an abrupt end to the amenities of the park area.
Historical Development

Of the 70 miles of shore line in the study area 41% (29 miles) fall under the jurisdiction of the town of North Kingstown. Like East Greenwich and Warwick to the north the town (originally) developed because its harbor offered a combination of resources which were essential to early settlers: safe access to and protection from Narragansett Bay, the major transportation link between trading posts; a rich source of shell and fin fish; and easy proximity to fresh water, forests and some of the finest agricultural lands in the entire bay region. From the original settlement in Wickford cove established in 1639 secondary development occurred in the form of agricultural villages to the west and south. Their names of Slocum, Allenton, and Saunderstown honor some of the pioneering families whose presence helped shape early Rhode Island history.

For the next two hundred years development in North Kingstown mirrored the economic trends which shaped the New England region. Agricultural trade both to coastal ports such as Boston and Providence and internationally to the West Indies and South America sustained the town until new technologies in the 19th century established the steam ship as the most economical means of commercial transportation. The stability of the area's textile and water oriented industries, however, provided the impetus required to maintain a slow growth rate

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18 Daughters of the American Revolution, Petchquamscutt Chapter, Facts and Fancies Concerning North Kingstown, 1941.
in to the twentieth century.

Within the last thirty years the contemporary pattern of both coastal and economic development for the town has become manifest. The Navy, recognizing the strategic location of Narragansett Bay on the eastern coast as well as its natural advantages as a training area near two major urban areas (Boston and Providence), acquired nearly 6,000 acres of the 44 square mile township to establish in 1941 the Quonset Naval Air station and the Davisville supply depot. With this acquisition of large farms just north of Wickford Harbor extending to well beyond Calf Pasture Point, 4.6 miles of coastline was converted to military use. The displacement of the original seventy residents of this area has since been offset by the growth of this naval installation to a compliment of over 14,000 military personnel and an industrial plant which employs over 5,000 civilian workers contributing to the region in 1967 an annual payroll of over $77,000,000.19

The sharp decline in textile manufacturing enterprises coupled with the growth of machine and service industries in the State's economy has again placed North Kingstown in an era of substantial change.20 The relocation of Brown and Sharpe Precision Tool Company from Providence to a modern plant in North Kingstown in 1961 provided the second column of economic support for the town.


Pleasure boating and seasonal homes are the third pillar providing economic strength. Of these three major influences, it can be effectively argued that it is the proximity to the sea which has been the underlying determinants in these historic and contemporary developments which account for a 75.5% increase in population to 26,000 between 1950 and 1968 and a 221.7% increase over the decade prior to 1950.21 The bulk of this added population has distributed itself in the northern part of the town near the Navy installation and the Brown and Sharpe plant where there is quick access to Route 95. The continuing improvements on the southerly extensions of this interstate highway have reduced commuting time to major areas of industrial employment in the Warwick-Cranston-Providence area to not more than 30 minutes.

It is clear that the residential growth of North Kingstown can be attributed to more than the town's economic base. The still rural environment of the town with an average gross density of 1.2 persons per acre and the easy access to both the regional shopping and employment centers to the north and the recreational areas to the south, have made North Kingstown's historical advantage of geographical location a still potent force behind the rapid suburban development that is taking place.

Character of Waterfront Land Use

Compared to the other towns and cities discussed, the waterfront

21 United States Bureau of the Census, University of Rhode Island, Curriculum in Community Planning and Area Development, North Kingstown Report, Fall 1968.
development patterns of North Kingstown are of low intensity and irregular proportion. While commercial and recreation orientations dominate the coastal environment in East Greenwich in such intensive uses as marinas and yacht clubs, the extensive shoreline of North Kingstown remains in low density single family housing or in its natural state except the two areas of major activity, Wickford Harbor, and the Quonset Naval facility. Map V indicates the existing land use (1969) of the shore line of the town. The large unmarked areas reflect land which has been left undeveloped. Chart A summarizes the distribution of land uses for the town’s coastal areas. With the exception of three coves, one of which is located in the Naval installation, the long shoreline offers poorly protected anchorages thus discouraging commercial development of marine oriented activities. The gently rising coastal escarpment, however, affords many areas of easily developed land for residential purposes. Those areas that have not yet developed are either presently inaccessible, low, held in large ownerships or held by institutions. Such a configuration of restraint has not proven in the past to be a long lasting inhibition to developers as the pressure of suburban development continues to rise.
MAP V

LAND USE

INDUSTRIAL
COMMERCIAL
MILITARY - NAVY
SINGLE FAMILY
MULTI-FAMILY
INST. - SEMI PUBLIC
PUBLIC - RECREATION
OPEN - NATURAL

ORTH KINGSTOWN R.I.
# Chart B

Comparative Development of Study Area Municipalities

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<td>30</td>
<td>28.6</td>
<td>1.4</td>
<td>66766</td>
<td>71913</td>
<td>7.7</td>
<td>3.9</td>
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<td>49.1</td>
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<td>18977</td>
<td>23013</td>
<td>21.3</td>
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**Sources**


Rhode Island Development Council - Research Division

CHART C

Coastal Land-Use West Narragansett Bay  
(percentage of coastal land-use for each town)  
Based on primary land-use within  
½ mile of high tide mark

<table>
<thead>
<tr>
<th></th>
<th>Industrial</th>
<th>Commercial</th>
<th>Navy-Military</th>
<th>Multi-Family</th>
<th>Single Family</th>
<th>Institutional Semi-Public</th>
<th>Public Recreation</th>
<th>Open</th>
<th>Total miles of coastline per town</th>
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<td>*Cranston</td>
<td>0</td>
<td>15.5</td>
<td>14.1</td>
<td>15.2</td>
<td>47.3</td>
<td>3.2</td>
<td>4.1</td>
<td>0</td>
<td>3.5 mi.</td>
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<tr>
<td>**Warwick</td>
<td>1.1</td>
<td>5.6</td>
<td>0</td>
<td>.2</td>
<td>49.1</td>
<td>3.1</td>
<td>8.4</td>
<td>31.1</td>
<td>38 mi.</td>
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<tr>
<td>*East Greenwich</td>
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<td>67.3</td>
<td>0</td>
<td>9.5</td>
<td>0</td>
<td>2.8</td>
<td>2.8</td>
<td>17.5</td>
<td>2 mi.</td>
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<td>**North</td>
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<td>1.1</td>
<td>14.1</td>
<td>6.8</td>
<td>32.7</td>
<td>.1</td>
<td>2.7</td>
<td>40.8</td>
<td>29 mi.</td>
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<td>Kingstown</td>
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<td>4.13</td>
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<td>29.24</td>
<td>1.40</td>
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<td>74.46</td>
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<td>3.2</td>
<td>41.3</td>
<td>1.6</td>
<td>4.6</td>
<td>34.4</td>
<td>% of total coastal land use</td>
</tr>
</tbody>
</table>

Total miles of use classification

Percentage of total coastal land use for each town
*Source - Field survey 1969
**Source - Warwick City Plan Dept. 1967
APPLICATION OF THE ANALYTICAL FRAMEWORK
This chapter will examine each community in the study area in order that the specific nature and impact of decision-making factors can be explored. An attempt will be made to show how these factors express themselves to decision-makers. Because the economic-ecologic dichotomy and jurisdictions and controls factors play a passive role in the decision-fields of these communities, reference will be made to these factors within the context of discussions of the active factors of planning, politics and the marketplace.

I. Cranston, Rhode Island

The Evolution of Government and the Distribution of Legal Authority: A Synopsis

On November 6, 1962, the City of Cranston adopted the home rule provision of the 1951 Home Rule Amendment to the State Constitution.

Freed from the burden of preparing Special Acts for submittal to the legislation for changes in daily operation, Cranston could adopt its own charter, enact and amend local laws relating to the municipality. The result was the creation of a strong mayor form of government within a mayor-council format. The mayor appoints and removes all city department heads with the exception of the City Clerk and Judge of Probate.

The current Democratic Mayor is the first and only mayor to serve under this charter and has held office for as long as any of the twelve mayors that preceded him dating back to 1910.¹

The Council is composed of one elected member from each ward with three members elected at large. It has investigatory powers over all departments, fixes salaries, makes appropriations, levies taxes, grants licenses, and appoints members from its own ranks to boards and commissions. The city is divided into six wards. Each party has a nine-member ward committee. The coastal area of the city is encompassed by the first ward.

The broad grants of power residing in the Mayor's office are reflected in the organizational structure of Cranston's government. This is depicted in Chart D. There appears to be an equitable, logical and efficient allocation of authority among the three branches of the municipal government—the administrative and operating responsibility resting under the jurisdiction of the Mayor; legislative and fiscal control as a prerogative of the Council; and the related but independent function of public education in the School Department. It is clear, however, that the Mayor's office with its appointing powers and ability to interlock administration officials with appointed officials, especially on the Planning Commission, can foster excellent coordination of ideas and proposals among departments and commissions.

**Identification of Key Coastal Decision-Makers:**

The Planning Department, the Public Works Department, the Finance Department and the Redevelopment Authority serve to give the Mayor's office a great deal of leverage in directing community growth and public expenditures. These functions under the mayor have an important role in determining the definition and distribution of projects carried forward in the operating and capital budgets. Because of
this administrative control and legal prerogative, a significant amount of authority is centralized in the Mayor's office.

With all of these key administrative and planning officials with the exception of the Redevelopment Authority required by charter to be on the Planning Commission, this arm of the Mayor's office plays the primary role legally and in actuality in the formulation of development policy. Those elected and appointed officials interviewed in Cranston felt that the combination of the Mayor's office and the Planning Commission outweighed in importance all others including the City Council in the formulation of overall development policy for the City and for coastal areas (Appendix A. Q. 1).

The Planning Factor in the Decision-Field:

The Comprehensive Plan: The Official Policy Document for the Management of Cranston's Coastal Environment

The only policy document concerning the coastal environment is the Comprehensive Plan prepared for the Cranston Planning Commission by Blair Associates of Providence in May, 1961. The plan deals specifically with the Edgewood Section (the coastal area) by reference to the general development goal of conserving residential areas and redeveloping Pawtuxet Village. (See Chapter III, Map II). No other coastal goal or development alternatives are discussed in the Report.

The Comprehensive Plan is the only policy document capable of dealing with Cranston's coastal environment, yet it makes no direct reference to Cranston's relationship to Narragansett Bay. In drawing any conclusions about the adequacy of this document as a useful tool in shaping public coastline environmental policy, five standards of
analysis will be applied. These are:

1. clarity,
2. internal consistency
3. scope in terms of time span
4. comprehensiveness in terms of variety of coastal activities
5. operationability in the sense of being concrete enough for action.

Clarity - clarity in dealing with coastal issues must be present in terms of direct reference to Cranston's relationship to the Bay. The forward to the Comprehensive Plan outlines the purposes and the level of specificity the plan seeks to achieve.

(The Plan) presents a framework in policies and plans, supported with detailed information, to guide the city in developing its resources effectively. The Comprehensive Plan... (presents a) systematic and harmonious development for the city. It has been made with due consideration, among other things, to existing and projected factors such as population, land-use, and municipal economies, and is designed to lay the basis in city policy for the use of Cranston's resources for the general welfare of all its citizens. (The Plan is) designed to serve as a general guide... (it) comprise(s) a concise statement of municipal policy toward development, spelled out in sufficient detail to guide city agencies that regulate land development, and to serve private investors seeking to determine when to develop land in the city. 2

With the exception of reference to marina and beach facilities on pages 1-60, and apart from recommendations dealing with the redevelopment of the Pawtuxet Business Center, no reference is made to Narragansett Bay or Cranston's coastal areas.

A Plan for Recreation and Open Space (1960), also prepared by

2 Comprehensive Plan, the City of Cranston, 1961.
Blair Associates, makes no mention of the State-owned Stillhouse Cove reserve as well as no mention of any potential for the coastline as an open space resource or possible location for open space acquisition. The 1961 Capital Improvements budget recommended by Blair Associates included $62,000 as the City's share in dredging Pawtuxet Cove, but no reference was made in any plan to improving land areas or stimulating redevelopment of anything but the commercial area. This area is the center of what was the previously distinguishable village of Edgewood. It now provides limited neighborhood shopping facilities. Based on these findings it can be said that Cranston's Comprehensive Plan lacks clarity in regard to coastal environmental issues and policies for it makes no distinction between coastal land and any other land areas of the city.

**Internal Consistency** - In lieu of the lack of clarity in dealing with coastal environmental issues it is advisable to ascertain why Cranston would consider investing $62,000 for dredging Pawtuxet Cove without direct reference being made to the effects this development might have on the Pawtuxet Cove Commercial Center. The Plan recommends the Pawtuxet Commercial district to be established as one of four major community business centers in Cranston. This would be accomplished through the use of renewal activities. The plan offers no guidelines as to the type of facilities, be it shopping centers, office buildings, roadside commercial or wholesale that should be encouraged, nor does the plan

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3Capital Budget for the City of Cranston, prepared by Blair Associates, Providence, R.I., 1962, p. 18.
attempt to direct any new housing into this area which had been established as the nucleus of Cranston's development evolution. The Plan itself concentrates on development of new housing units in Western Cranston, but it does not deal with the adequacy or demand for rental units. In no case does it recommend sites for public or private housing projects.

The plan appears remedial in nature. It seeks to stimulate redevelopment but not to deliniate types of development. No apparent consideration was given to questions of development quality, potential users or beneficiaries from the Pawtuxet Cove improvement. No consideration appears to have been given to Cranston's relation to Warwick either as a related land jurisdiction to the commercial area or the cove, or to Warwick as a governmental institution with which joint planning for the cove and commercial areas might logically occur.

It can be concluded that Cranston's attempt to stimulate redevelopment of Pawtuxet Cove was made without regard for or realization of its total coastal environment or relation to regional coastal considerations. Indeed, with the exceptions of the thoroughfare plan, the Comprehensive Plan is completely inward looking and does not draw reference to Cranston's relationship to larger cultural or natural features such as the Providence SMSA, the Pawtuxet River Basin or the Bay.

Scope - Cranston's plan makes reference to a cutoff date of 1975 for the Plan. Despite the statement in the foreword of the Plan quoted on page 96, no priorities or dates were documented for completing proposed land-use changes or redevelopment. Indeed other than renewal activities no guidelines or actions were mentioned for directing this intensi-
ification of land-usage. The stating of 1975 as a target date for completion of the Plan appears arbitrary without detailed proposals to justify this date.

Comprehensiveness - A low rating must be given to Cranston's Plan in terms of its comprehensiveness in dealing with coastal environmental issues. No reference is made to water pollution (although all those interviewed felt this to receive the highest priority among local environmental issues), open space preservation or creation, public access development or any of a host of coastal environmental concerns (Appendix A, Q. 6). Stillhouse Cove, a state facility, was neither mentioned as a potential community resource or area for recreational development. Recreational development in the Cranston Plan appears to be defined in terms of active participation needing major facilities and space with little regard for individual passive enjoyment which might serve a larger segment of the population.

Operationability - Page I-75 of the Cranston Plan states the following:

The Comprehensive Plan map should be distinguished from other, more specific plans, such as engineering drawings, architectural plans, urban renewal plans, or the zoning map. It is, rather designed to serve as a general basis for such specific plans, each of which will require further interpretation and study to be formulated.  

Using this statement as a guide, it is clear that the authors of this report view the plan as being a passive document which is well removed from the action phases of community development. While it states how

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4 Comprehensive Plan, the City of Cranston, 1961, p. I-75.
implementation might occur, i.e., renewal and public expenditures, it makes neither strong specific statement to zoning changes nor mentions zoning as an implementation measure for the plan. The very broad conception of the function of the plan offers little useful guidance in the creation of a coastal environmental policy.

Summary: The above analysis indicates that Cranston's Comprehensive Plan has several major shortcomings as the only technical and policy document dealing with the community's coastal areas. The Plan offers little guidance for either short or long range investment decisions for private enterprise and lacks the specificity required to be a meaningful guide to daily public decision-making.

City Planning Organization and Position:

Though the formal organizational chart does not tell all, it does tend to position people and groups in a way which implies roles and lines of communication. In Cranston this is an important consideration in determining the position of the planner, and hence planning in this case, in the governmental hierarchy. The close lines of formal communication are shown in the requirement that the Finance Director, Public Works Director, and a member of Council shall be a member of the Planning Commission. The physical proximity of the Planning Office next to the Mayor's suite in City Hall (the Redevelopment Agency is isolated five miles away) serves to demonstrate the close physical, legal and psychological linkage among the planning and implementation agencies and the Mayor's Office. In Cranston the Planning function holds the Walker Position described in Chapter II.

In an interview, the Planning Director indicated that he felt
the Planning Commission should act as an advisory body to the Mayor and Council. He personally viewed his Department as being an adjunct to the Mayor's Office where he served as a member of his "cabinet" on planning and other matters. The Planning Department with an annual budget of $68,000 consists of the Director and six sub-professionals. Major planning studies such as the comprehensive plan and capital improvements program have been completed by consultant services. The most significant weakness in the planning performance appraised by the Director and two other decision-makers was lack of internal technical ability (Appendix B, Q. 39).

The Planning office, which should be the locus of coastal policy formulation, has only one planner, the Director, who may qualify as a professional by the standards set forth by the American Institute of Planners. 50% of his time is spent handling routine planning tasks (Appendix B, Q. 31). Environmental approaches such as definition of areas of environmental quality or liability are not actually undertaken by his office. The Director who handles all administrative work for his office isolates planning employees from whatever planning conflicts might arise (Appendix B, Q. 32) and seeks new employees through civil service advertisements and examinations (Appendix B, Q. 34). All promotions come from within rather than outside his department (Appendix B, Q. 34). If he were to hire new employees which he has not in the last three years, he would seek "average or better ability in reading, writing and arithmetic", despite in his opinion that his department lacks internal technical ability (Appendix B, Q. 35, 36, 39). Internal training is given by the Director plus extension school
courses at the University of Rhode Island. In recommending these courses the Director stresses the achievement of basic verbal and mathematical skills (Appendix B, Q. 37, 38).

The close legal and administrative ties between the Mayor's office, which possesses a high degree of authority, and planning function indicates that the planning department in Cranston is well positioned to assume a developmental approach to its activities (see Chapter II, p.32). The professional weakness of the planning staff and shortcomings of the Comprehensive Plan pose limitations, however, on assuming this generalized approach to the planning task.

Planning Strategy:

To determine how the planning function, in this case the Director, attempts to influence decision-makers operating in the decision-field, the approach applied by the department in carrying out its duties must be examined. Because the planning factor usually competes with other factors in the decision-field conflict situations often arise. In such instances the planning function usually pursues a policy leading toward community change, while often the political factor seeks stability.

In the view of the Planning Director and other decision-makers observing the planning process in Cranston, the tension between the planning process pushing for change and the counter-stabilizing force of political accountability is not in existence. The Director, when queried on how the Department reacted to public criticism (Appendix B, Q. 40) in conflict situations felt that there was no significant public criticism to his planning proposals. He believed his actions
were supported by the electorate in returning the Mayor to office in 1966. He expressed the need for planning to respond to market and political factors. These factors were beyond the capacity of planners to greatly change, he believed.

Over the course of two interviews, it became apparent that the Director viewed planning as a mechanism of coordination, and that his own role was one of acting to remove the rough edges of the forces of economic change which he felt could not be significantly altered in the case of coastline development. He felt that while coastal land-use evolution would accelerate, there was no specific deadline or schedule to be imposed on such a transformation.

The Director viewed the Comprehensive Plan as a broad and agreed upon document for stimulating economic growth (Appendix A, Q. 11). This position was seconded by all interviewed in Cranston although they questioned the usefulness of the plan in light of its vagueness in dealing with specific development proposals for coastal as well as other areas of the City. When queried on this point, the Director said that the Comprehensive Plan should set broad guidelines to be acted upon by more action oriented agencies such as the Redevelopment Authority. Such an agency, on a project basis, would make detailed proposals dealing with density changes and new land-use configurations. The Redevelopment Director's views reflected these attitudes as well but felt, as did others interviewed, that the Plan only reflected existing land-use and offered no clear criteria to be acted upon by his agency in dealing with change in the coastal areas (Appendix B, Q. 12).
These opinions cast the Planning Director, and he felt his views generally represented the Planning Commission, as favoring the ad hoc opportunist strategy defined in Chapter II, page 29. Though this strategy is adaptive in approach and implies a weakness in the planning function as a factor in the decision-field it is not, in itself, sufficient evidence to judge the planning function's capabilities as the primary agency for coastal policy creation, implementation and adjustment. To make this assessment five standards, established by Meyerson, for making planning more effective will be applied. 5

(1) Central intelligence function - to facilitate market operations through the issuance of market analysis and similar technical reports.

(2) Pulse-taking function - to alert the community through quarterly or periodic reports to danger signs in environmental deterioration, economic changes and population shifts; also to be sensitive to social pressures and hostility in the community.

(3) Policy clarification function - to help frame and regularly revise development objectives.

(4) Detailed Development Plan function - to phase specific private and public programs as part of a comprehensive course of action covering not more than five years.

(5) Feedback and Review function - to analyze through careful research programs and projects activities as a guide to further action.

(1) The Central Intelligence Function - The Planning Department to date has issued no known technical reports. Consulting planners and engineering firms have been responsible for the preparation of all major plans. The Director expressed an apparent intuitive feel-

ing for changes in the economy of his city, but showed very little awareness of regional or economic trends which might affect Cranston. No official market reports have been issued by the Planning Department even though groups such as real estate developers, business and residential owners, and conservation groups regularly demand services of the planning function and receive advice (Appendix B, Q. 17, 18). Such advice usually consists of suggested locations for development permitted under the zoning ordinance. In addition the office provides maps and acts as a clearing house for citizen requests regarding tax assessment practices. The Planning Department also acts as the main link between city government and federal funding sources for such programs as OEO and education. In these instances the Department serves as a technical resource in application preparation but apparently does not initiate action. The Department seeks to promote industrial and commercial expansion by supplying site and cost information to inquiring concerns but has no program for attracting these concerns to Cranston. None of these sites is on the coastline, even though the Director acknowledges the potential for commercial growth in this area.

(2) Pulse-taking Function - Despite the addition of the functions of environmental quality, open space, and recreational parks during the last two years (Appendix B, Q. 11), the planning function has no systematic mechanism for ascertaining qualitative changes in the coastal areas. Even though these new function have been assumed in name, there is no evidence that they are being applied in shaping the planning viewpoint on coastal environmental management policy. Con-
sistant with the Planning Department's lack of interest in sustaining the pulse-taking function in the area of coastal environmental quality was the Director's appraisal of the public concern about the coastal areas of Cranston. He felt Cranston's residents were more urban-service oriented and less concerned with coastal natural areas than perhaps the more rural oriented populations in towns to the south. All of those interviewed felt that the city's greatest resources were in western Cranston for every type of development.

(3) Policy Clarification Function - In light of the lack of direction provided by the Comprehensive Plan in guiding coastal development, it could logically be expected that in the eight years since that plan was written development objectives for the city's coastal lands might be defined. This has not been done by the Planning Department.

Zoning for the 3.5 mile coastal area which in theory should reflect the Comprehensive Plan spans seven of the City's fifteen zoning categories permitting a total of thirty-nine uses and representing twenty-seven additional stated uses under which special permits can be received. These uses range in intensity from general industry (M-2) to uses containing a high proportion of open space (S-1). The zoning conforms to the land-use pattern and in some cases (A-12) permits smaller lot sizes than existing land-use patterns. The zoning code was adopted by referendum after the plan had been approved by the Council. The satisfaction of the Planning Department with present zoning classifications for the coastal area accentuates the Department's weakness in the policy-clarification function.
(4) Detailed Development Plan Function - There is no detailed development plan prepared or being prepared by the planning function for the coastline. The Comprehensive Plan which the Director views as fixed and well agreed upon but which others feel is revised according to circumstances (Appendix A, Q. 13) serves as the only guide. There appears to be no coordination in this planning function between the Redevelopment Agency and the Planning Department, even though the Director of Planning feels the Redevelopment Agency should make projects conform to the guidelines set forth by the Comprehensive Plan. One reason for this lack of cooperation appears to be a personal tension between the Planning and Redevelopment Directors. This is the result of a major confrontation (see Chapter V).

(5) Feedback and Review Function - For coastal areas all feedback appears to be political in nature and bears no reflection on professional planning criteria for environmental management. The Planning Director is a relative to both a former Governor of the State and a present City Councilman in Cranston. He is a long time resident of Cranston, residing there while employed as a consulting engineer before assuming his present position in 1960 before the Comprehensive Plan was published.

Because the Planning Director appears to have a narrowly defined view of his job, he apparently seeks to solve immediate problems without developing larger range objectives for either his Department or the City. Without stated goals or a program for achieving them, it becomes most difficult to meaningfully appraise the effectiveness of any coastal policy positions. Though the Director was aware of the
economic forces being focused on coastal land in Cranston, he did not consider real and proposed changes in coastal land-use particularly significant (Appendix B, Q. 24). One might conjecture that because the Director views market and political factors as undeniable determinants in the decision-field, the feedback and review function in his view means assessment of the positions of spokesmen for those factors. Those positions appear to serve more as a guide for his personal action than as a point of mediation between planning, political, and market factors in the decision-field.

Summary: The Potential Impact of the Planning Factor

Although the real impact of the planning factor in the decision-field will depend on the relative strength of competing factors, it is possible to assess the planning function in Cranston on its internal capabilities discussed above. The greatest strength of the planning factor lies in its close administrative and legal position near the executive authority of the Mayor’s office. Despite this proximity, the adaptive approach and weak strategy for coastal policy formulation applied by the Planning Department offsets the advantage of the position of the planning function in municipal governmental organization. The Department itself suffers from weak professionalization, and poor technical data and documentation for creating and judging coastal policy alternatives, and weak capability and procedures for focusing the planning process on coastal environmental concerns. As a result the planning factor has no coastal policy or method of devising one for presentation to decision-makers who are also considering the positions advocated by spokesmen for other factors in the decision-field.
The Political Factor in the Decision Field

Five traditional interest groups seek to express in the decision-field their viewpoint for the final coastal environmental policy adopted by a given municipality. Though their views often contradict each other, their combined interaction with decision-makers constitutes an important factor to be explored in Cranston's decision-field.

The Conservation Commission in Cranston is directed by an energetic state employee who is chief of the Division of Conservation in the State Department of Natural Resources. The City's Commission is the only authorized group in the governmental structure whose sole responsibility is to advocate the conservation and ecologic point of view. He lives in the still rural atmosphere of the western part of Cranston, an area undergoing rapid development. The major focus of his activities during the last three years has been the reservation of greenways along water courses in that part of the city. He viewed the function of his Commission as providing more life amenities (Appendix B, Q. 22). He was aware of the mounting market pressure for change that was occurring in coastal areas (Appendix B, Q. 24) and felt that the only way they could be controlled to preserve or improve coastal environmental quality was to add a constitutional amendment guaranteeing the average citizen the right to a clean environment and to authorize greater public control over development (Appendix B, Q. 42). He viewed present development regulations useful but far too weak (Appendix B, Q. 38).

The commission chairman rejected the Planning Department as the best agency to determine coastal land-use policy, because of "their
proven inability to conclude what they start." He favored instead a Bay Authority which was geographically based and empowered with authority to adjust taxes and impose fines to that activity pursuing or working against public development objectives for the coast. He felt that state-wide taxation and zoning powers were a necessity (Appendix B, Q. 51, 52, 55). The City Council, he believed, saw Cranston's Comprehensive Plan as a mechanism for stimulating growth, but felt the Plan had no defined objective for the coastal area (Appendix A, Q. 15). Local residents were seen as the greatest determinants to the final public policy position taken for coastal areas. He felt satisfaction with present levels of performance was the greatest constraint to pursuing new ideas for coastal management (Appendix A, Q. 23). He expressed a need for more money to be spent on coastal programs, although he could not specify which programs in particular (Appendix A, Q. 25).

When queried on what activities his Commission was currently undertaking in coastal areas of Cranston, he replied none. He felt that the low water quality, both on the Bay frontage and in the Pawtuxet River as well as the highly developed nature of the area precluded the type of major improvements that he viewed were needed to upgrade the area.

He thought only a significant commitment of the local government could make a lasting impact on the area. He felt the principal environmental liabilities of the coastal environment were: water pollution, deteriorating buildings and public services, mixed land-usage and over development of shore frontage.

With only a few hours weekly to devote to the Commission's work, he believed he could make the greatest overall contribution to the
city's conservation program by focusing on the yet undeveloped land in western Cranston. He felt the lack of interest expressed by the Planning Department on environmental concerns as well as the sensitivity of the Mayor's office to the local landowners' views precluded the Commission making any meaningful impact on the environmental problems of the area. The Commission would, however, actively support any group interested in coastal environmental improvement. He thought such a group would have to be state or nationally based to exert much influence.

Taking into account these views, the impact of the Conservation Commission on coastal policy formulation can be appraised as low.

Landowners, especially residential landowners, have a significant impact on the position decision-makers take on sanctioning coastal land-use change. One group sensitive to landowners' views and sometimes acting as an articulator of these views in the community communication network is the local ward committees. When strongly contested issues arise, however, landowners interact directly with the Mayor and Councilmen.

Many of the large residences of the 1890 vintage which characterize the coastal land, referred to as the Edgewood section, remain in excellent condition. Owners of these homes are in upper income brackets and represent the high income residential character which established the Edgewood section of the City as a prestige address similar to those found in the East Bay region in such towns as Newport and Little Compton.

These high-income individuals though fewer than in the past have frequently expressed their opinions on market or planned change in the area. They have hired lawyers to represent their view-point when zoning
changes have been requested by developers and successfully stopped the Redevelopment Authority from developing plans for the Pawtuxet Cove commercial center (see Chapter V). The Planning Director described these residents as very influential with the Mayor's office, although he would not speculate on the source of this influence.

On one recent occasion these residential owners successfully defeated a developer's bid to have part of the area rezoned to permit apartment units, even though the developer was able to acquire six adjacent parcels from other landowners. In another instance local residents successfully stopped an attempt by the Redevelopment Authority and local businessmen who had recently become aware of their drop in sales volume, to revive a once defeated development plan for the area.

All those elected and full-time city employees interviewed expressed the view that though few in number these landowners possessed the resources and political impact to thoroughly arouse the community about proposed changes in the area. Politically sensitive Councilmen felt that once such a controversy was initiated it became particularly difficult to appease the many divergent positions that became strongly expressed. From their point of view it was far better to keep such controversies from arising than suffer the turmoil that resulted from public sanctions for change in the coastal areas.

It appears on the record of decisions made by the Council reflecting the position toward change held by local landowners that this group has a great impact on the position finally adopted by Council.

Developers were seen to present persuasive views to decision-makers (Appendix A, Q. 4). This assessment was made by the Planning...
and Redevelopment Directors in appraising the political impact of developers. Although their desire to change the coastal land-uses has been denied by Council in recent cases it is clear that the supercession of land-uses recognized by all those interviewed is occurring gradually in Cranston's coastal areas. This is increasing the frequency of the developers' appeals for greater land-use capacity to be sanctioned by local zoning laws.

Developers to date are favoring only certain types of land-uses. High density residential uses such as apartments are most vocally advocated. Commercial facilities such as motels are also seen as economically justifiable types of development. There appears to be little interest expressed by commercial developers, however, in up-grading the Pawtuxet Cove commercial area. Because developers act as spokesmen for market influences their impact on decision-makers is increased by the force of the market place in affecting change. This market factor interacting in conjunction with developers is discussed as a decision-making factor in Cranston on page 116.

Based on the increasing number of petitions by developers for changes in the coastal area, the impact of developers and the market factor they represent appear to be rapidly increasing.

Influential Citizens and Institutions in the description of the political factor prove difficult to define empirically. Apart from those individual landowners who were described above only the institutionalized views of the membership of the two yacht clubs located on the shoreline can be said to be expressed under this category. Historically these clubs, especially the Edgewood Yacht Club, served as a
social gathering place for Cranston's most influential and wealthy citizens. That was in an era when the quality residential character of the area was intact. Because these institutions acted representing the consolidated views of many powerful citizens who desired to maintain the prestigious character of the coastal area. Those board members of these institutions once had a substantial impact on coastal public policy.

Today, however, these social clubs no longer exercise a discernable impact on public policy. The low water quality and deteriorating condition of the physical structures of these yacht clubs demonstrate the degree of change that these institutionalized uses have experienced in recent years. These spokesmen within the large political factor no longer have a visible effect in shaping coastal policy.

The elected, appointed and administrative staff can be considered a significant potential force shaping the final public policy position. Leadership in government embodied in these officials has not only the potential for arousing community support for coastal programs and policies, but also the legal authority to recommend and carry through the budgeting process a consistent approach to coastal environmental improvement, if so inclined.

Those elected and administrative officials interviewed, such as the Conservation Commission chairman, all possessed the academic qualifications to support such a leadership role. All have advanced degrees in such fields as law and public administration (Appendix B, Q. 2). By professional background each had sufficient experience to have a thorough grasp of coastal ecologic and development problems.

Elected officials showed an inclination to actively pursue the
implementation of desired objectives despite obstacles, and to increase their own influence where possible (Appendix B, Q. 46, 47). Each felt on coastal matters the advice of planners and ecologists would be most useful (Appendix B, Q. 48). All favored better coordination of programs in government for the coastal environment (Appendix B, Q. 51). Zoning and performance standards applied with the use of easements and cluster zoning were seen to be the best way to control coastal development (Appendix B, Q. 52, 54). All agreed more money should be spent on coastal problems despite increased taxes on all levels of government (Appendix A, Q. 25, 27).

Despite these views and qualifications, only the Redevelopment Director attempted to show any leadership in attempting to improve coastal environmental quality (see Chapter V). All felt that protection of existing uses was the development objective that appeared to be the actual policy in effect as a result of council actions (Appendix A, Q. 25) and that property owners views were the most carefully considered force of those present in the decision-field (Appendix A, Q. 16).

It can be concluded that despite personal qualifications and the positioning in or near real positions of power; and regardless of views expressed as to how alternative coastal measure and land configurations might be employed, no elected or administrative person is now assuming a leadership position sponsoring coastal environmental procedures. It is evident that these officials are not playing an active role in directing coastal environmental change in the community.

Summary: The Potential Impact of the Political Factor

Despite the disparate views expressed by spokesmen within the
political factor, it is clear that local landowners are able to present
the most forceful arguments for their views. The action of the city
council in zoning questions has reflected their sentiments. The land-
owners represent the dominant land-use of the coastal area. Because
this residential use appears to be in a period of supercession, the
views expressed by developers are being presented more frequently. It
appears their voices for change will soon equal in impact those of the
landowners. With landowners willing to sell their properties to develop-
ers, as has been the case in several instances, the developers will
undoubtedly receive the sanctions they seek from public authority as
the strength of the landowners position is diminished.

The Market Factor in the Decision-Field

One of the first indications that market forces are actively shap-
ing land-use patterns are requests for zoning changes. One way to
project where petitions for land-use intensification might logically
occur is to analyze the amount of vacant land available for development.
The Planning Director in making such an analysis estimated gains in
population of only 9% in the period from 1965-1985 for Ward 1 compared
with 28% for the entire City for the same period. Despite this low
estimate of projected population change in the entire Ward, requests
for zoning changes and variances have numbered 15 for the immediate
area of the coastline during the past year. These requests were for
changes in yard requirements and for increasing density of single
family units to multiple family units.

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Division of Inspection, City of Cranston, Jan. 1970.
Developers have also petitioned for zoning changes to permit apartment construction on land abutting the ocean. The major commercial use on the coastline has been acquired by the Hilton Hotel Corporation and is seeking room to expand this motel's meeting and convention facilities.

John Picerne, a principal in Kelly & Picerne Realtors and Developers of Cranston, one of Rhode Island's largest real estate firms, stated during an interview that the national trend in apartment living was just beginning to reach Rhode Island and that coastal areas offering an expanse of visual space "enormously enhanced" the value of such a development from a realtor's point of view. He felt this was the logical land-use for Cranston's coast, but felt with good transportation access apartment complexes of 100 units or more could be profitably built on any coastal point in the study area. He noted that tenants for such units were usually young married couples without children, providing two incomes. Forty percent of these family incomes exceeded $10,000. He felt on account of the quality of amenities these tenants were seeking, e.g., swimming pools, tennis courts, etc., complexes of less than 100 or more units were not economically justifiable.

The greatest problem facing the developer in Cranston lies first in acquiring two or more adjacent sites with land-use capacity capable of returning a profit and second receiving governmental sanctions for his proposals. Developers have been able to make the acquisitions necessary for such higher use proposals. Because of the many zoning classifications applied to this short coastal area, the developer has many strategy choices available in whether to seek outright changes
or exceptions or variances.

On account of the small anchorage size of Pawtuxet Cove, re-
development of this area for marina use as suggested by the Compre-
hensive Plan cannot easily occur by the private sector because of the
mixed land-uses and lack of both water and shore areas for ancillary
uses. In this area small lot sizes and variety in zoning classifica-
tions makes this transition difficult to contemplate for developers
because of high development costs and difficulty of persuasively
arguing for zoning sanctions.

Apartments, however, are in national and local demand. They can
be built on one or more of the single-family residence sites which
away from the Cove area average nearly 1/2 acre each. Such units are
considered by tenants as highly desirable because of their visual
rather than actual access to the coastline. It was this type of land-
use which was seen by all interviewed as being the most likely mani-
festation of the market influence. Because of the age and marital
characteristics of the tenants, developers can persuasively argue that
they are providing housing for Cranston’s middle and low income work
force without adding to the City’s educational expenses. It has been
argued that such new uses actually add to the City’s housing stock by
replacing inefficient older units, such as victorian houses, with new
units which serve a greater segment of the population.

The change of older units classified as consumption uses to pro-
duction uses, such as apartments and commercial facilities, results in
not only increased real property valuation, but also an assurance of
more expendible income being pumped into the local economy. These
occurrences can be seen as desirable facets by decision-makers. Negative facets can be accounted for in the need for public expenditures for increased services such as roads and sewage facilities for such land-use changes. Unlike schools, however, the impact on these services is gradual unless the scale of the developer's proposal necessitates major changes.

**Summary of the Potential Impact of the Market Factor**

Coastal land is in a period of transition from single family consumption uses to multi family production uses. Developers are advocating higher and better uses while a decreasing number of land owners seek to maintain the status quo. Demand for increased land-use capacity is affecting land prices. Turnover of coastal parcels of land is at a higher rate than more immediately adjacent inland parcels. Assessing evaluation based on re-evaluation base year rather than on current sales makes comparative land value changes difficult to determine. The increasing demand, however, indicates land prices are rising. As this demand continues more petitions will come before Council. It appears that the market factor will have an increasing impact on coastal environmental issues as they are acted upon by decision-makers in the decision-field.

**Summary of the Potential Impact of Passive Factors: Economic-Ecologic Dichotomy and Jurisdictions and Controls**

There is no evidence that the ecologic viewpoint is represented in the decision field in Cranston. Economic and political considerations dominate all conservation and ecologic facets of coastal areas. These latter facets of Cranston's coastline have no spokesman in the
decision-field.

Jurisdictions are recognized most universally by officials in protecting individual property. Municipal controls such as zoning appear to be adjusted to reflect the desires of local citizens whose political impact is considered great. Controls do not appear to inhibit decision-makers because they seek to maintain existing land-use patterns which have local political impacts.
CHART 1A

PROPOSED ORGANIZATION, CITY OF WARWICK
II. Warwick, Rhode Island

The Evolution of Government and the Distribution of Legal Authority: A Synopsis

City government in Warwick has evolved through three definable periods. (1) **From Settlement - 1933** - During this formative period of development town government functions were distributed among a large number of boards and commissions. Decision-making was accomplished first through town meetings and later by a town council. (2) **From 1933 - 1960** - The City of Warwick was incorporated in 1933. The Charter provided for a strong council-weak mayor form of municipal government. The Mayor served as the ceremonial and political representative of the City, while the Council committees supervised administrative agencies. Gradually administrative responsibilities were added to the Mayor's duties during the 1950's. Attempts at Charter reform failed, however, and the strong mayor movement weakened in 1958 when a semi-autonomous Waterfront Development and Park Commission was established. This Commission answers to the Council. (3) **From 1961 - Present** - The moving forces behind Charter reform activities during the 1950's finally succeeded in having a new Charter enacted in 1961. The effect of this change was to foster greater professionalism in the City and place executive and administrative authority in the Mayor. In 1969 yet another Charter study was undertaken as part of the Community Renewal Program sponsored by the Mayor's office. City government was

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reanalyzed and a report issued. Present municipal organization is shown on Chart E. "The Slavet Report" recommended that the City government be reorganized around a policy council which would be directly responsible to the Mayor. This proposed organization is shown on Chart F. It was felt this arrangement would permit the greatest impact of governmental development policies on municipal problems. It was also thought that such an administrative organization would overcome the basic problems of the present governmental organization. These problems are: proliferation of narrowly-defined, single function agencies; inadequate full-time staff; part-time administrative boards and commissions responsible for major operating responsibilities; and semi-autonomous agencies undermining the Mayor's responsibilities as chief executive and administrative officer. 9

The Charter reform issue was defeated in Council by three votes. The major reason for these negative votes expressed by Councilmen interviewed was that the proposal placed too much power in the proposed Department of Planning and Development. The Planning Director felt, however, the negative votes were resulted from fear of losing Council patronage privileges.

The grants of power to the Mayor's office recommended in the Slavet Report are based on the concept of increased efficiency in government through professionalization and delegation of authority to

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9Ibid., p. 10.
these professionals. The attempt here was to create a clear legal and real distinction between the decision-makers on policy on the Council level and the policy initiators and implementors residing under the Mayor's office. The fact that the proposal was narrowly defeated indicates the community's willingness to seriously consider such major structural changes in Warwick's government.

Identification of Key Coastal Decision-Makers:

Inherent to the concept of governmental reorganization supported by the Mayor is a necessary close working relationship among staff professionals and the Mayor's office. As in Cranston, the Planning Department acts as the key development policy locus in aiding the Mayor's office in creating programs for community development. These alternatives are made on professional planning criteria but without the Planning Board acting as a political lightning rod in this process. Thus the Mayor and his staff agencies such as the Planning Department, are the primary initiators of general development policy. Those administrative and planning interviewees associated with the Mayor's office and planning function thought the Mayor and his staff had the greatest impact on coastal development decisions, while the Council and appointed personnel indicated that the Council and Waterfront Development Commission were the prime coastal policymaking body. (Appendix A, Q. 1).

These divergent views were made compatible in subsequent discussions. Because the Mayor and Planning Department defined the issues and alternatives for decisions to be made, they felt they had the greatest effect on determining coastal policy. Because the Council made the actual choices among policies presented and left the programming of the
specific coastal policy to the Waterfront Development Commission, they believed they had the greatest impact on coastal policy formulation. On the basis of the Charter reform proposal it is clear an attempt was made to increase the authority of the Mayor's policy formulation function to include detailed programming of implementation phases.

The present capacity of the Planning Department as the initial formulator of coastal policy makes it the primary decision agent in the municipal government's approach to coastal environmental management.

The Planning Factor in the Decision-Field:

The Comprehensive Plan: The Official Policy Document for Management of Cranston's Coastal Environment -

The primary policy document for articulating the City's position toward the coastal environment is entitled: Master Plan - Recreation, Open Space, and Waterfront (MP - ROW) prepared by the Planning Department and adopted by Council in May 1964. The plan documents the needs and programs for recreation, open space and waterfront development in the City. The objective of the Plan relating to the coastal environment is:

the maintenance of wildlife conservation areas and the development of opportunities and suitable locations for further private commercial development along the City's 39 mile shoreline.10

This objective was thought to meet some of the City's recreational needs as well as expanding the economic base of the community (Appendix B, Q. 22). The plan includes for the coastline a development approach

using the following methods:

(1) land acquisition for future needs
(2) strategic capital investment
(3) development of land for immediate use
(4) retention of open spaces.

The overall objective of the plan is incorporated by the development strategy defined in the 1968 CRP, to be discussed in the following sections. Seven explicit recreational open space and waterfront goals are stated which serve as the basis for the aforementioned implementation methods. Though all relate to the coastal environment, one makes specific reference to coastal development. This states:

Facilities for public waterfront activities should be maintained and developed. They should be complemented by opportunities for private development, particularly for development of marinas.\footnote{Ibid., p. 7.}

In creating a plan to accomplish these goals the City was divided into seven districts. Five districts encompass the coastal areas. The geographical bounds of each district is described in terms of population change and is subdivided into neighborhoods. Each neighborhood is described in terms of population change and existing recreational facilities. A summary is then presented for each district with specific recommendations for added land or facilities in each district. Maps show existing facilities, areas for expansion or development and specific sites for proposed new facilities.

Major open spaces are mapped for the City with four existing areas
shown on coastal land. Municipal open space policy is then stated.

These explicit statements in effect since 1958 are:

1. to acquire through gift, dedication, easement for drainage, park or for other purposes or by other means the streams, brooks, swamps, marshes and other areas which comprise the natural drainage system of the City.

2. to retain ownership of tax delinquent lots. Lots will be withheld from tax sale wherever drainage, recreational or educational purposes are to be served.\(^\text{12}\)

The implementation of these policies in coastal areas has been supplemented by the development of specific waterfront development plans.

Citing the economic importance of the waterfront to Warwick's economic base, the plan summarizes past efforts and financing in six coastal areas: Apponaug Cove, Conimicut Point, Oakland Beach, Warwick Cove, Pawtuxet Cove, Buttonwood Park.

Eight specific coastal development policies are then proposed:

1. Through public investment, provide opportunities for private capital investments along the shore-line to broaden the economic basis of the community.

2. Provide adequate municipal public facilities along the shoreline.

3. Provide neighborhood bathing facilities along the shore wherever possible.

4. Assure existing and future rights of way to the shoreline for fishing, bathing, and other waterfront activities.

5. Provide public launching ramps for small boats.

6. Control the use of land along the shore front through zoning.

\(^{12}\) Ibid., p. 36.
(7) Reserve areas along the shoreline for conservation purposes.

(8) Explore the possibilities for further navigational improvements in other coves of Warwick's coastline to meet the needs of increased boating activities.\(^{13}\)

In addition to these policies for controlling coastal development in general and the aforementioned projects in particular, eight new projects are recommended. These are located at: Bruch Neck Cove, Passeonquis Cove, Occupasstuxet Cove, with additional development at Apponaug and Warwick Coves. A neighborhood beach concept is also developed for the following locales: Nausauket Beach, Capron Farm Beach, Longmeadow-Bayside Beach, and Sandy Point.

The report concludes with specific implementation measures based on two major concepts: (1) a systematic program of public land acquisition; and (2) a systematic program for development of public facilities. Five specific guidelines are presented to focus concept one. Detailed programs, budgets, proposed legislation, and outside sources for funds are cited to accomplish concept two.

Though such legislation requires changes in zoning in certain locales, it is clear that preservation and enhancement of the coastal environment depends primarily on strategic acquisition of land and strategic placement of public services in conjunction with zoning rather than through primary reliance of zoning to shape or encourage new development (Appendix A, Q. 14). In terms of agents most likely to reshape this policy and program approach, developers were seen as

\(^{13}\)Ibid., p. 59.
the group outside government most likely to influence policy formulation. (Appendix A, Q. 4)

To judge the quality of the Plan on coastal matters, five criteria will be applied:

(1) **Clarity** - The Master Plan—Recreation, Open Space, and Waterfront should rate high on the criterion of clarity for the plan. It presents explicit goals, objectives, policies, detailed analysis and plans for coastal development, implementation costs and programs. It recommends legislation on the local level and proposes regional cooperation to unite Warwick with neighboring towns to solve problems that are regional in nature. In addition, the Slavet Report proposes a program of community renewal and governmental reorganization to help achieve coastal programs and policies.

(2) **Internal Consistency** - The proposals in the MP-ROW are outgrowths and expansions of some of the major concepts and policies originally presented in 1956 and after. Many of the basic proposals date as far back as 1940 when the Planning Board recommended a Maritime Commission to deal with coastal concerns. In addition, the Report presents new policies and proposals which are consistent with past policies and the changes in Warwick. While maintaining continuity with past efforts these policies are designed to meet the needs of increasing population growth. In many instances existing areas are recommended for improvement, but in each case these improvements are based on projected population increases in each neighborhood as well as overall demand for coastal uses. The clear and logical arrangement of the Report links the concise goals and policies to individual proposals.
and site plans. In addition, it stresses the desirability of linking Warwick's development plans with East Greenwich and Cranston.

Initial movement in this direction has been evidenced by joint appropriations with these municipalities for channel improvements in both the Pawtuxet and Greenwich Cove. The major reason for such improvement was seen as strengthening Warwick's economic base through additional marina development and appreciation of coastal land values. The Report presents a consistent approach to coastal development. The only shortcoming of the report is that it does not delineate specific areas of ecologic importance, nor does it attempt to demonstrate in any other than economic terms what the relationship of Warwick's coastline is to the rest of Narragansett Bay.

(3) Scope - 1980 is the target date for this plan. All proposals for expenditures and additional regulations are based on the projected population size and demands as of this date. The CRP is also projected to be completed by this date. Though behind schedule the implementation of the plan is being accomplished.

(4) Comprehensiveness - With the exception of not dealing with ecological concerns, specifically (though marshland protection is noted) the plan and approach to coastal development is inclusive. Within the plan specific programs and actions are designed to relate pollution abatement, residential growth, regional cooperation, and commercial development to the goals of the plan. Implementation measures are equally comprehensive in defining public and private roles in ownership and operation of municipal areas and in the manner in which these roles are achieved. These measures include proposed controls of off-
shore waters.

(5) **Operationability** - It is clear that the plan seeks to establish a broad conceptual approach to coastal development in its statement of goals and objectives, but also to present a detailed plan and implementation program suitable to be immediately followed. The report outlines development areas which serve existing neighborhoods as well as the city as a whole. Though renewal of some areas is advised, this activity is presented in terms of a city-wide program for community improvement. In approaching the question of implementation maximum use of matching funds is advocated. The history of the community's interest in the waterfront as well as its past achievements in coastal improvements, such as channel-dredging and beach creation, indicates that this plan is both realistic in its approach and use of federal funds, but also operational in terms of appeal to the local populace who would be expected to vote on bond issues. Such bond issues had been approved in the past.

**Summary:** Warwick's Master Plan--Recreation, Open Space and Waterfront clearly presents strong guidelines for both public and private action. It shows where specific public investments should be made and how these investments will be funded. This plan in conjunction with the Slavet Report indicates how the government in Warwick can achieve its municipal goals for the coastline. These interrelated plans present not only a feasible proposal for the coastal lands, but also recommend a lasting mechanism for monitoring coastal change. It has high capabilities for influencing municipal policy.
City Planning Organization and Position:

Unlike Cranston where the Charter requires the interaction of administrative personnel such as the Finance and Public Works Directors with appointed members on the Planning Commission, the Planning Department in Warwick acts as the main technical resource and research department for the municipal government and specifically to the Mayor. By divorcing the Planning Department from immediate accountability to the Planning Board the Department is able to set and pursue development goals and to maintain long range programs of community improvement within the jurisdictions of its departmental authorization.

The Slavet Report proposed the reorganization of the planning and development function in response to the weakness in the Department's present ability to deal effectively with the City's problems of growth and development and for making maximum use of Federal assistance in carrying out the City's physical, economic, and social goals. The new Department of Planning and Development would absorb the responsibilities of the following agencies: City Planning Department, Warwick Development Commission, Warwick Housing Authority and Department of Building Inspection. This new Department would also assume the responsibilities of a redevelopment agency under State law. It would have jurisdiction over the following general areas: comprehensive planning; renewal project planning; social planning; physical and economic development, including renewal, rehabilitation, conservation, commercial and industrial development; planning, development and operation of public housing; family and business relocation services; building and housing inspection. The head of the new department would serve as Warwick's coordinator for Federally-assisted programs. 14

Although this proposal was narrowly defeated, it indicates the

14 Ibid., p. 12.
important role a strongly based professional planning office is viewed as playing in Warwick's municipal government. The current Planning Director would have headed this Department.

Being closely associated with the Mayor's office, the Planning Department seeks to supply the chief executive with the technical support necessary to conceive, develop, present, and finance development plans for Warwick. To accomplish this the Planning Director, in addition to his departmental duties, acts as an advisor to the Mayor on planning and other matters. Though a close working relationship is necessary for program effectiveness, the Planning Director cited administrative staff functions for the Mayor as an activity he would willingly give up (Appendix B, Q. 41). During interviews the Director stated that he considered time spent in this manner less productive than comparable time spent in Departmental Planning activities.

The movement toward Charter reform in Warwick was based on the concept of the Mayor's office being the decision-making center for community development. Historical trends in governmental evolution attest to the centralizing of authority in the chief executive's office. The proposed Department of Planning and Development reinforces the Planning Department's close affiliation with the executive office and demonstrates the validity of the Walker position (see Chapter I, p.28) as a mechanism for increasing the impact of municipal development policies. The model for the proposed department was the Boston Redevelopment Authority. Edward Logue, former Director of that agency, was a consultant to Slavet and Levin, authors of the Slavet Report.

The willingness of the Planning Director to shed some of the ad-
ministrative burdens of the Mayor's office indicates a desire on his part to maintain a degree of independence from the workings of the Mayor's office which must by necessity deal extensively with political matters. Unlike the Planning Director in Cranston, Warwick's Director feels the need for independence in formulating development plans and policies before the political implications are thoroughly assessed. By maintaining a discrete distance between political and planning activities, plans are able to be developed without being unduly compromised. In remaining in contact, however, the Director has excellent feedback on the political feasibility of his proposals and the most advantageous position for assessing the best timing in making his presentations.

It appears from discussions with the Director that he uses the natural tension existing between the planning function designed for change and the political function based on stability to advantage in achieving the acceptance of his plans. Because of the centralizing of power in the Mayor's office and the current Mayor's interest in City development, the Director is able to harness the substantial political force of the Mayor's office to carry through his plans. In this sense the Mayor becomes his primary clientele. When conflict arises, the Director has the independence necessary to present his plans without compromising the Mayor's political stature. In such debates planning professionals under the Director are not isolated from conflict (Appendix B, Q. 32). If proposals are unacceptable to the council or public, planning functions and solutions are redefined (Appendix B, Q. 40).

The effectiveness of planning proposals depend to a large degree
on the communications skill of the planning professional. In Cranston, the Planning Director was able to maintain an excellent rapport with the Mayor and Councilmen because he was keenly attuned to the political ramifications of his role as he saw it. He lacked, however, either the desire or skill to communicate or translate technical planning proposals into a meaningful guide to coastal policy formulation. The result was a low professional planning input in decision-making on coastal matters.

The technical planning input into coastal policy formulation in Warwick is high. It demands a high level of communication efficiency among the Planning Department and other governmental agencies and the public. Failure to have clear communications between operating agencies and boards in Warwick prompted the Chairman of the Waterfront Development Commission to feel competition existed between his and the planning function. All those interviewed recognized the communications gap among these and other governmental agencies (Appendix A, q. 23).

This was one reason the Slavet Report recommended changes in Warwick's governmental structure. The nature of the breakdown appears to result from the inability of non-professionals familiar with communication patterns of individuals and groups in the political context to grasp the technical terminology and concepts of planning professionals. This gap is especially evident between the lay boards such as the Waterfront Development Commission and the Planning Department. Professionals, on the other hand, appear to place very little value in creating more efficient communications networks with these lay boards and commissions because they feel their existence creates inefficiencies which the
Slavet Report documents and which the proposed Department of Planning and Development would avoid. Inherent to this position appears to be an unstated desire to minimize the relevance of these lay boards by taking over their functions.

Despite the fact that there is clear evidence of the Planning Department's activities being separated from the Planning Board, the function of the Planning Board remains authorized under State enabling legislation. In Warwick this function appears almost entirely limited to dealing with subdivision layout and administration. This could easily be taken over by the Planning Department. In the proposed reorganization, the Planning Board would exist more as a citizens task force on subdivision matters supporting the Department of Planning and Development, rather than having the Planning Department support the activities of the Planning Board as is now constituted.

In developing a policy for the coastal environment, the semi-autonomous Waterfront Development Commission was viewed by the majority of interviewees as the agency most competitive with the Planning Department (Appendix A, Q. 2). One basis for this competition comes from the Commission's independent source of revenues in their authorization to issue bonds and from their position in the governmental organization. This Commission lacks any technically trained staff and reports to the Council, while the Planning Department with a strong professional staff reports to the Mayor. The normal friction that exists between the Mayor and Council seemingly is expressed on coastal development policy through the relationship of the Waterfront Development Commission and the Planning Department. Conversely the motivation of these two bodies
concerned with coastal development seems to reflect the basic split between the position of the executive functions of the Mayor's office and those of the Council.

The Waterfront Development Commission (WDC) sees its function as improvement of existing services rather than creation of new services which is accepted as a planning function (Appendix B, Q. 22). The chairman of this Commission would depend on outside advice in attempting to devise new approaches to the gradual change he sees his agency making (Appendix B, Q. 42, 47). The services he seeks to provide are additional facilities such as park playground equipment and parking spaces within existing public coastal areas. The limited planning approach used by the WDC typifies the Kent position (see Chapter I, p. 28).

The WDC appears particularly responsive to requests from councilmen to perform special tasks for constituents. Such a task might be cleaning up of litter on roads approaching public beaches. In opposition the Planning Department sees its tasks as creating new public areas and services in coastal lands through a systems approach to community facilities allocations (Appendix B, Q. 42). This aspect of planning policy formulation will be discussed in detail on the following pages.

The difference between these approaches to their functions seems to reflect both a strain between the WDC and the Planning Department as well as the City Council and the Mayor. On one hand there is the WDC and Council representing the traditional care-taker approach to municipal government, while on the other hand there is the Mayor and
Planning Department seeking to actively manage municipal governmental resources.

The Planning Department was established in 1952 at the urging of citizen groups within the city. The Department seeks to apply a Comprehensive Planning approach. This broad term includes environmental quality, and marine and water resources and covers the City's entire land and water areas. 50% of the working budget is supplemented by Federal Funds. The complement of personnel of three planning professionals is augmented by as many as five graduate planning students from the graduate planning program at the University of Rhode Island (Appendix B, Q. 22, 30, 36). Employees are recruited through national planning societies and are selected on the basis of professional qualifications. Internal training is non-systematic (Appendix B, Q. 33, 35, 37).

The current Planning Director who brought the Department to its position of prominence in Warwick's governmental structure has an academic background in ecology and is past president of the New England Chapter of the American Institute of Planners. He was a moving force behind the creation of the Natural Resources Group which was largely responsible for the establishment of a State Department of Natural Resources and more recently the Governor's technical committee on Narragansett Bay. This group is charged with the responsibility of studying the need for a regional management mechanism for the uses of Narragansett Bay.

Many of the proposals presented in the Slavet Report are the outgrowth of concepts urged by the Planning Director in his attempt to
utilize a systems approach in solving urban problems. The Slavet Report represents one of the few examples of planning reports which have been prepared outside the Planning Department.

The major strength of the planning function can be broadly defined as the high caliber of planning professionals on a full or part-time basis; the degree of receptiveness of the Mayor's office to advanced management and planning proposals; and the public support of planning function in conflict situations (Appendix B, Q. 19). The major weakness of the function, in addition to those inherent to governmental organization, are low technical ability in dealing with the many problems the city, especially environmental and ecologic concerns (Appendix B, Q. 39); and the rapid rate of growth in the community with which the Department must contend. The town increased its number of dwelling units by 47% between 1950 and 1960. Retail sales increased 111% between 1962 and 1967. (See Chapter III - Warwick)

The proposed organization, and to a lesser degree the present organization of the planning function working in close affiliation with the Mayor's office indicates that this department seeks to utilize its high professional capabilities in concert with the centralized authority of the executive branch of government. Such organization makes possible the department's developmental approach.

Planning Strategy:

Overall development strategy to date has been succinctly defined by the Slavet Report. This report is based on analysis of the City's development activities over the last several years as well as on a detailed understanding of the operation of the Planning Department and
the Mayor's office.

In recent years Warwick has followed a strategy which has given top priority to providing a high quality of public school education and a high priority for selected public services such as sewer and water facilities for incoming industry. As a result of this investment and the rapid rate of industrial and commercial growth, Warwick will be reaping a tax surplus from these investments.\(^{15}\) The task ahead as seen by the Mayor's office is to maximize existing resources so services to the community can increase while increasing taxes a minimum amount. To accomplish this, maximum use of Federal and State funds must be used. The availability of these funds depends primarily on the effectiveness of the planning function. The Slavet Report was the first step toward increasing the effectiveness of the Planning Department and city government, especially the executive branch.

Geographically Warwick's development strategy has been directed toward two areas: commercial and industrial growth along Rts. 95 and 295 in western Warwick; and commercial and service industry growth in proximity to the expanding Green State Airport in the center of the City. A third area, the 39 mile coastal zone, is the other locale in which municipal development will certainly occur.

The Community Renewal Program (CRP) developed by the Planning Department represents the implementation measure and development strategy for enhancing existing development and resources, especially in coastal areas. The explicit goal of the CRP relating to Warwick's

\(^{15}\)Ibid., p. 12.
coastline arc:

To fulfill non-residential as well as existing and new residential needs and balance development of the City's 39 mile shorefront. 16

Warwick's primary human resource development goal is:

providing all people and families of the City with a greater variety and quality of living, including a basic parity of municipal services for all neighborhoods and residents, and meeting the needs of disadvantaged groups through specialized services. 17

To achieve these goals the CRP places strong emphasis on the improvement of housing available to low income families, through the elimination of blight, and through the construction of new housing by the use of available public subsidies. Other implementation measures include encouraging the establishment of representative neighborhood groups, especially in low income areas, and establishing communication links between such groups and an agency within the municipal government which would be responsible for social planning (see Chart E).

The total implementation of the CRP is based on the concept of coordinating city services with the private sector. The Planning Department's strategy is built into the program itself rather than being a separate device for program acceptance. By accepting the concept of community renewal in the format of the CRP, elected officials are in effect accepting the approach and program of the Planning Department. This approach differs greatly from Cranston's Planning Department which attempted to establish the values of the decision-makers in the

16 Ibid., p. 6.
17 Ibid., p. 6.
political context then designed action around them. Instead of dealing
with planning issues as they arise, Warwick's Planning Department seeks
to treat the City development in a systematic way. This is done by
attempting to handle city problems as they relate to each other within
the context of the city as many urban systems. This approach rejects
the long range desirability of daily problem solving at the expense of
setting up a meaningful pattern of municipal investment of resources.
It also rejects the concept of broad statements such as Cranston's
Comprehensive Plan as a meaningful document without specific plans and
programs to follow it up.

Warwick's development strategy is explicitly stated in detail by
the Planning Department in the Slavet Report:

The implementation of the CRP will mean that public actions--
the construction of public facilities, the use of eminent
domain to guide development in renewal areas, the use of
zoning to preserve the integrity of different categories of
land uses--will help to channel the private markets in
housing, industrial and commercial development toward CRP
goals. The City of Warwick's role in development will
broaden in focus from providing traditional promotion and
advisory services to prospective developers of housing, industry and commercial construction to an active partnership role by city officials using eminent domain, police powers and taxing powers and working in close cooperation with private enterprise to realize the potential of the
CRP.18

On the basis of this statement and with the realization that the
CRP is designed to deal with the conditions inhibiting development of
coastal areas, the Planning Department's approach to change in coastal
areas can be termed developmental rather than adaptive. These condi-

18 Ibid., p. 7.
tions are extremely small lot sizes in multiple ownership with little or no public services such as sewer and water. The high degree of professionalization and centralizing of authority which typifies the recent evolution of the City's government lends itself to this approach. The emphasis of the Planning Department on comprehensive planning through a systems approach coordinated with municipal investment incentives and use of regulatory powers indicates the Department employs Strategy E--strategic service allocation--as their conceptual approach to community change. In addition aspects of Strategy C--systems analysis and simulation--are employed. During interviews the Director stated that if the Department of Planning and Development had been created (and he feels there is still a chance), he would attempt to formalize this systems approach with additional staff capable of supplying technical expertise in mathematic and computer analysis of urban systems.

Thus far the planning factor has been discussed in terms of its plan, its organization and strategy. To assess the department's capabilities or internal strengths is necessary before any conclusions can be made about the strength of planning factor in Warwick's decision-field. To do this the same five standards applied to Cranston's planning function will be used to analyze the overall effectiveness of Warwick's planning function.

(1) Central Intelligence Function - The Planning Department provides a wide range of services to Warwick. Because it is the agency which most approximates a research department and because of its importance in the governmental structure it is called upon to provide
many services which include feasibility studies, programs, advice and design services. Those that regularly request such services are real estate developers, business, residential owners, city departments, conservation groups, and the Mayor and Council (Appendix B, Q. 17, 18). The Department acts as a major link with the federal government for grant-in-aid programs. The Department appraises agencies in local government of these programs. This function tends to supplement the importance of the planning function within local government and makes the influence of planning criteria an important factor in program formulation. In defining these criteria economic, social and technical data are used.

(2) Pulse-taking Function - The Planning Department maintains close ties with the Inspection Department which supplies the planning function with data indicating detailed changes in the physical standards of the City. Such standards would be housing conditions. Although the Planning Department issues no known reports on these findings, it is clear these facts are reflected in the programs the Department develops. The Slavet Report recommended that this relationship be formalized by making the Department of Inspections a division under the proposed Department of Planning and Development. By proposing in that same report increased communication with neighborhood groups one can see that the Planning Department is seeking to increase its ability to be sensitive to community sentiments as well as to the community's physical needs.

(3) Policy Clarification Function - The policy clarification function is well documented by the Slavet Report and by the Master Plan--
Recreation, Open Space, and Waterfront. In these reports goals, objectives, policy, programs, and implementation measures are explicitly stated. While it is evident that the Department is willing to meet with interested groups in discussing policy matters it is equally clear that the Department works primarily through the Mayor's office in its relationship to the Council. In this regard some aspects of the policy clarification are left with the Mayor's office who must defend politically the policies of its administration.

(4) Detailed Development Plan Function - The construction and implementation of the waterfront plan is ample evidence that the Planning Department undertakes detailed development planning. All those interviewed saw the plan as well agreed upon, but felt that periodic revision was necessary because of the rapid rate of change the community was undergoing (Appendix A, Q. 13).

(5) Feedback and Review Function - The aforementioned relationship between the Planning Department and the Inspection division indicated that the feedback and review function are incorporated in the planning process in Warwick. The Slavet Report in recommending a new administrative organization for city government recognized the need for constant review and sought to create the administrative machinery which was capable of responding most efficiently to public sentiment and the need for new community services. The role of the new social planning division was to fulfill this function. In terms of changes in the physical environment, most of those interviewed felt that the increased commercial development represented the most significant coastal land-use change in the community and that increasing water pollution was the
most drastic environmental change in the last several years (Appendix B, Q. 23, 24). Of the five criteria used to judge probable real policy impact Warwick's Planning Department shows the greatest weakness in the application of this criterion.

In conclusion, it can be stated that Warwick's planning function will have a high impact on the coastal environmental change applying their present policy output. Only increased water pollution seems to fall outside their ability to direct coastal environmental change toward their stated goals.

Summary: The Potential Impact of the Planning Factor

The MP-ROW is a strong policy document reflecting the strong professionalization of the Planning Department. The Slavet Report demonstrates the developmental approach the planning function seeks to apply. The analysis of the Department's internal capabilities shows no major weakness. From the above findings the potential impact of the planning factor in the decision-field can be appraised as high.

The Political Factor

Because the MP-ROW presents such a strong program for coastal development (which has been adopted by the Council) it is necessary to discuss the political factor in terms of its relationship to this plan. Historically the political factor had interacted in the decision-field in a way which had complemented the plans implementation measures. Warwick's share for initial land acquisition necessary to carry out the plan was estimated at $166,000. Of this, $55,000 had been voted by referendum in 1964 with $50,000 allocated annually in the Capital Improvements Budget.
Five interest groups express a distinct viewpoint on various aspects of the City's coastal management program. Together these form the political factor as it interacts with other factors in the decision-field.

The Waterfront Development Commission is run by a part-time director whose full-time occupation is store managing. This commission was created in the late 1950's as a special purpose agency to deal with coastal development concerns. It has the authority to issue bonds for acquisition and development costs for development programs in coastal areas. The Director felt only gradual approaches by his agency would solve coastal environmental problems (Appendix B, Q. 42). The goal of his agency as he saw it was to provide more life amenities (Appendix B, Q. 22). He saw therefore the addition of recreation facilities provided by his Commission in the Oaklawn and Conimicut Beach areas as the most significant adjustment in land-usage in the coastal areas in the last two years (Appendix B, Q. 24). From interviews it appeared that this commission's approach to coastal environmental management was defined entirely in terms of facilities. Facilities incorporating park and playground equipment were seen as being necessary in coastal areas. No thought had been given to reservation of coastal lands for future use or to analyzing who coastal users might be and what their recreational needs might be. He viewed the conservation viewpoint as valid but not the concern of his agency. He felt the Planning Department issued nice reports but could not communicate well with the public and Council which he considered one of the strengths of his commission. He apparently did not see any relationship between the Community
Renewal Program and the MP-ROW. He indicated a strong dependence on
others in formulating his own programs for coastal change (Appendix B,
Q. 46, 47). He preferred more public land-uses in coastal areas as
the best way to control key coastal properties (Appendix B, Q. 50),
even though he viewed the administration of coastal programs could
most effectively occur on a metropolitan scale or above (Appendix B,
Q. 51, 55). Lack of dynamic leadership was seen as the greatest factor
inhibiting new ideas in coastal land-use management (Appendix A, Q. 23).
He looked to the Council for this leadership in setting the direction
for his Commission rather than to the Commission itself or to the Mayor
and his staff. He felt more money should be spent on coastal programs
but that they had a low priority behind other local and State programs
(Appendix A, Q. 25, 26, 27).

It appears the limited and passive role this commission sees itself
as playing as well as the Commission's affiliation with the Council
rather than the Mayor makes its potential impact in the decision-field
limited to those areas about which it feels it has influence. Because
discussion of equipment facility types can only occur after issues of
location are determined it appears that the Commission will have little
impact on primary coastal development decisions.

Land Owners have vigorously expressed their preferences for
costal land-use development patterns. They have not always had the
impact they had hoped for. Land owners in such areas as Oaklawn Beach
and Conimicut Point have petitioned the Council to make municipal im-
provements in those areas. Due to the recurring hurricane damage in
these areas the Council followed the recommendations of the Planning
Department in applying to the State legislature for funds authorized under Rhode Island Shore Development Act of 1955. Although the bond issue required to raise the local matching was denied in referendum by a small margin, the City appropriated funds annually from the operating budget to gain the amount needed. This would indicate a strong commitment by the Council to improving coastal areas despite the views expressed by some residents.

Members of the Planning function and the Mayor's office, the force which developed the plans for these areas, each said that as long as planning and plan implementation occurred within the context of normal governmental operation it could be effective and responsive to local residents' wishes under usual circumstances. However, if landowners became aroused by development plans and the idea of city hall interfering with their affairs they are capable of stopping the entire development program. It appears the Slavet Report seeks to completely integrate planning into all phases of government development and by doing so make it more responsive to local opinion which was seen by all interviewed as very influential (Appendix A, Q. 4).

Developers and Realtors were seen by the Planning Director as the group outside government which most influenced public decisions on coastal matters. Such influence is usually exhibited in the granting of variances in zoning cases. All recognized that the market influence was expressing itself in increased commercial and residential development in coastal areas. The Planning Director saw this as the most significant environmental change in coastal areas in the last two years (Appendix A, Q. 25).
Developers face several inhibiting forces in attempting to exert themselves with decision-field. There are few public sewerlines in coastal areas. Decision-makers, while not against development, all expressed a concern over water pollution as a threat to Warwick's coastal areas (Appendix A, Q. 6). Developers therefore must have a thoroughly worked out plan before they will be seriously considered. The City has undergone very rapid development in recent years. Decision-makers know that by denying development they are not in danger of being underdeveloped in the future. Decision-makers can demand quality. This discourages certain developers.

Despite these constraints Warwick is development oriented. All interviewed saw the function of the Comprehensive Plan, for example, as directing economic growth (Appendix A, Q. 11). Developers exert a significant impact on decision-makers.

Influential Citizens and Institutions cannot be definitively proven to have any impact on the overall coastal development, but within certain definable areas their views are greatly respected by decision-makers. Land owned by such citizens and institutions as the Brown family, the founders of Brown University, and the Rocky Point school are both listed as major open spaces for the City. It appears the City seeks to maintain these uses; both of which reflect the desires of the landowners. Should the ownership of these properties change, both could be used for many other more profitable uses. Currently none of the lands abutting these ownerships threaten the high environmental quality of these coastal open space uses.

Elected, Appointed and Administrative Staff in Warwick are a major
force shaping public policy toward the coastline. Leadership in coastal affairs has been exhibited by the Mayor's office, however, rather than by the Council. One ward Councilman said he didn't know much about the City's coastline except in his ward. The administrative leadership exhibited by these officials is supported by their academic experience which in the majority of cases was on the graduate level in public administration (Appendix B, Q. 2). Elected officials all felt familiarity with Warwick and its citizens helped them in their work.

Appointed officials sought to promote only those policies which they were interested in or effected their function. In indicating the best approach to coastal environmental control strategies, the Planning Director stressed the expansion of municipal jurisdictions while the rest indicated that they would rely on others to set the strategy pattern. These views reflect their actual approach. In dealing with coastal issues these officials would seek out advice of technical advisors whose expertise lay in the areas of conservation and ecology with planners and lawyers being their second choice (Appendix B, Q. 48).

Those interviewed felt that water pollution and erosion represented the types of problems that would receive the highest priority in local government. Most felt, however, that these were the types of problems that were the hardest for local policies to have an impact on. All viewed extended zoning powers and acquisition as the best way of controlling coastal land use evolution. In addition the use of tax incentives was recommended. All favored a combination of zoning and performance standards in conjunction with adjustable tax policies and penalties as a control mechanism. No clear patterns emerged as to the
desirability of creating an overall administrative agency to encompass environmental concerns. All felt they would have to judge each proposal on its detailed configuration.

Of the 20 items listed in Appendix A, Question 25 on which money is spent, all interviewees felt more money was needed. As in Cranston this question appears to have solicited a response which reflected the interviewees' general concern over environmental issues, but did not reflect any detailed knowledge of the programs themselves or levels of expenditures in question. All felt that higher taxes would be the only way to finance this high level of governmental involvement. Interviewees felt special purpose bonds and general tax increases were the best means to finance these measures, though most felt that with the rising level of expenditures for all aspects of government that coastal concerns would get their share of revenues needed.

Elected and administrative officials associated with the Mayor's office demonstrated the willingness, knowledge and authority to influence coastal policy, while appointed and elected officials show less of an inclination to be actively concerned with this issue. Those associated with the Mayor's office will have a significant impact on coastal policy formulation.

Summary: The Potential Impact of the Political Factor

While the impact of the Political Factor can be expected to be high the views of developers and land owners can be judged as having less of an impact than those of the community leadership residing in the Mayor's office. Those officials are development oriented and appear better qualified and more willing to consistently influence the
Council than any other group when the broad spectrum of coastal environmental questions are viewed. Landowners and institutional users can be expected to play an influential role on issues which directly affect them.

The Market Factor

Increased demand is evidenced for Warwick's coastal lands. Residential and commercial uses in the form of apartments and marinas are the principle manifestation of this demand.

Two factors can be appraised as the major constraints to the market place. First large areas of Warwick's coastline were developed as recreation homes. Many of these homes were of very poor construction, lacked inside plumbing and had through the years been abandoned. Developers find it most difficult to assemble this property for re-use. In addition the poor environmental characteristics caused by surrounding property, if assemblage is possible, tends to devaluate the developer's investment. Secondly, lack of sewage facilities poses a major constraint to high density uses. One of the aims of the CRP is to overcome these obstacles through the use of public powers and investments in utilities in coastal areas.

Such a plan seeks to direct development but conversely will stimulate the market through the use of these incentives. By carefully pinpointing of where public investments will be made the market influence is directed into predetermined areas for growth. Rather than increase existing uses the market influence is for increasing land-use capacity by establishing productive uses in place of consumption uses. This transition is occurring.
Summary of the Impact of the Market Factor

A land-use transition is occurring in Warwick's coastal areas. Turnover of coastal land is increasing both among use types such as residential units and between consumption and production uses. Demand for coastal land is increasing generally with particular variations upward depending on the qualities of a particular site. Transitions in land-use are being focused by public action into certain areas around municipal investments. The impact of this market factor can expect to increase as these investments are made and developers vie for proximity to these services, and public sanctions.

Summary of the Potential Impact of Passive Factors: Economic-Ecologic Dichotomy and Jurisdictions and Controls

The Planning Department of Warwick has evidenced an awareness of ecological concerns and has, in their plans, illustrated areas of ecologic importance such as water courses and coastal marshlands. The Department concedes that the ecologic problems are regional in nature and has stimulated thinking on this level in helping establish a statewide task force to determine the best manner of utilizing Narragansett Bay as a resource. The rate of growth of the community, however, is having a strong economic impact stimulating intensification of land-uses.

The small parcels of coastal land held by individuals create a major constraint to the feasibility of re-use proposals. The municipality seeks to override this constraint through use of police and eminent domain powers. Willingness to use such controls will be a major factor in Warwick's success in following their coastal policy.
Such willingness will be dependent on the political repercussions this use generates.
III. East Greenwich, Rhode Island

The Evolution of Government and the Distribution of Legal Authority: A Synopsis

Government in the Town of East Greenwich has changed little in the last two hundred years. Though the government functions without a Charter, five Councilmen sustain the traditional role of town fathers in presiding over the administration of local government. The legal executive officer is the Council President who is the administrative head of all committees. This formal structure is shown in Chart G.

Each Councilman moderates one or more committees and boards. These committees and boards, however, answer to the Council as a whole. The School Department is separate from the Council's administrative control.

Principal administrative officers are the City Solicitor and the Public Works Director. A town of 8200, East Greenwich is just beginning to feel the pressures of suburban growth. These administrative officers are the most aware of this pressure because of their positions in government as advisors on legal and development problems. Republicans dominate elected positions. A Democrat has never held a major post. The town holds an annual financial town meeting.

Identification of Key Coastal Decision-Makers:

Unlike the cities of Cranston and Warwick, there is not a strict organizational distinction made between policy initiators, in the form of a planning department and policy implementors in the form of administrative agencies such as redevelopment agencies and waterfront development commissions. Instead a select group representing elected, appointed
and administrative positions are seen by those interviewed as being the key policy formulating and implementing body for coastal issues. The planning board is not viewed as among this group (Appendix A, Q. 1). Of these key decision-makers two are on the Council, and one each is involved with administration, and representing the district in the State Legislature. In addition, one other who could be termed an advisor to the decision-makers plays an important role in development policy. He works for the Department of Community Affairs and provides State-sponsored technical assistance to the town on development matters. Assistance includes such technical services as design and mapping as well as advice on development concerns and availability of federal funds. This group appears to collaborate informally on all development decisions. Their final position appears to determine the course of action taken by the Town.

The Planning Factor in the Decision-Field:

The Comprehensive Plan: The Official Policy Document for Management of East Greenwich's Coastal Environment -

Development policy for East Greenwich's limited coastal area is not meaningfully articulated in the Town's Comprehensive Plan. This plan was prepared in 1966 by the Department of Community Affairs. The stated purpose of the plan is

...to inform the citizens of the type of community which could be expected in the future.19

The Plan contains three elements: a general land-use plan, a

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circulation plan, and a community facilities plan. Within these elements no significant land-use changes are proposed for the waterfront area. Instead the Plan seeks to upgrade existing facilities and uses. In short, it recommends,

- growth of boating, commercial aspects, restaurants, various shops, boat sales and services, bait and tackle shops, docking, and repair and storage facilities, to blend with recreation and conservation resources of the Cove.\(^{20}\)

Residential uses in the area are projected as high density (4-10 families per acre). To achieve this density minor rehabilitation is recommended in the upper cove area and clearance and extensive renewal is seen as needed in the section of downtown abutting the cove. After such action existing uses are to be re-established in a modern form. Also projected is the establishment of a new circulation pattern for the shore area and the ultimate (1975 or after) conversion into a recreation area of the town dump at the mouth of the Muskerchug River which abuts Warwick on the town's western boundary.

The usefulness of East Greenwich's Master Plan as a guide to coastal development can be determined by applying five criteria.

**Clarity** - The Comprehensive Plan lacks clarity on coastal environmental issues because it presents planning concepts and coastal environment management concepts, in particular, in such general terminology that they cannot be used as a meaningful guide to action. The Plan contains goals and objectives but these are equally meaningless. Eight goals for the community are listed. Goal one demonstrates the

\(^{20}\)Ibid., p. 4.
lack of focus in these statements. The goal is:

To further the welfare of the people of the town by helping to create an increasingly better, more healthful, convenient, efficient and attractive community environment in which to live.21

The Plan objective is:

To promote the welfare of the residents in the town by developing a better, more efficient and attractive environment.22

The author of the Plan urges upgrading of existing coastal uses but offers no map or site plan for this improvement. As a result the Plan's broad statements can be seen to lack clarity in dealing with coastal concerns.

**Internal Consistency** - Despite the statement that commercial uses such as boat repair and marina services should blend with conservation areas the plan recommends that the coastal area be zoned as a waterfront district favoring these commercial uses. On the only expanse of undeveloped coastline the circulation plan shows a major access road which will serve this commercial district. The effect of this road which has been built by filling part of the cove is to overwhelm five hundred feet of this natural area with a man-made feature. Such a plan and action appears inconsistent with the stated desire to conserve unique natural areas.

In the downtown area clearance is urged in coastal areas although one aim of the Plan is to maintain the historic resources of the town. The waterfront area historically was the nucleus of the town's develop-

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21 Ibid., p. 7.
22 Ibid., p. 11.
ment patterns and yet this is not meaningfully acknowledged in the Plan. Such an oversight makes the Plan internally inconsistent.

**Scope** - The Plan has a target date of 1986-1990. It presents no specific program for accomplishing the broad goals of the Plan. The establishment of such a target date in this instance appears fanciful.

**Comprehensiveness** - The breadth and all inclusiveness of the goals statements should not be mistaken for comprehensiveness. The Plan does not make reference to the community's role in environmental control, especially in such an area as water pollution. The lack of specificity as to coastal use locations, implementation measures, and delegation of responsibility in sustaining the planning program severely weakens the Plan as a useful document.

**Operationability** - The Plan requires many additional studies and actions in order for it to be used as anything other than a conceptual approach to community development. Interviews with decision-makers indicated that so few copies of the Plan were still available that most could not recall exactly what it said. Because the Plan is so vaguely presented it cannot be considered a meaningful guide in daily governmental operations.

**Summary**: East Greenwich's *Comprehensive Plan* is weak. It lacks specific statements and maps to indicate what form coastal evolution should follow or what public investments should be in coastal areas. It offers no guide to private investors because it does not indicate what the municipality should do or when it should occur.

**Town Planning Organization and Position**

The Planning Board is the official body in East Greenwich charged
with devising development plans for the town. Because there is no Charter for the town, the board functions under the mandates of the State Enabling Legislation. This legislation has been characterized by the Rhode Island Department of Community Affairs as disjointed, and weak both in terms of its provisions for the role of the planning function in local government and in its provisions for zoning of local municipalities. These acts are currently being consolidated and revised for presentation to the legislature.

Two other groups officially speak out on development matters. These are the Conservation and Development Commissions. Because each of these three groups are responsible to the legislative body they take the position in government characterized as the Goodman Stance (see Chapter II, p. 29). These groups seek to represent the whole public interest of the community but act as advocates for certain functional specialties or areas of expertise. These specialties are conservation, industrial development and planning. It appears from those interviewed that the small and homogeneous size of the community gives the members of these groups a sense of knowing what the community wants and rejects the validity of unconventional views. In East Greenwich the viewpoint of the Democratic Party is apparently considered unconventional. The result of this splitting of advisory services on development matters reduces the impact of the Planning Board.

Instead of the conservation and industrial development specialties reporting to the Planning Board who might integrate their position on issues into a plan or policy position for presentation to the Council, each group presents their views directly to the Council which has the
option of taking one of these varied positions on a case by case basis. Those interviewed felt that these three boards and commissions were often in conflict with each other (Appendix A, Q. 3). None are seen as particularly influential in directing Council positions.

A review of the Council minutes for 1969 shows that on issues such as zoning changes where the three groups have taken differing positions, the Council showed no clear weighting of one board's or commission's position over another. On the contrary, on several instances the Council disregarded the negative recommendations of these groups to grant changes.

Despite the fact that these appointed agents of the local government represent certain functional interests it appears that the Council utilizes their advice more as a reflection of public sentiment on certain issues such as zoning rather than as an input of technical expertise on a given issue. The Council appears to depend primarily on the administrative staff, particularly the Public Works Director for technical advice.

The dispersal of the planning function among these three functional specialties is in keeping with the tradition of small town government which evolved in the agricultural tradition of decentralization of authority. While this gives a public image of a participatory democracy, administratively it constipates the daily decision-making process. Decisions have to be made on planning community development. These are made, it appears, independently of these groups.

Unlike Warwick and Cranston, relations between official government agencies such as the Mayor's office and the Planning Department
do not have a significant impact on coastal policy formulation. Instead, in the small bureaucracy of East Greenwich there are certain key individuals who by force of their position and personality tend to dominate coastal development decisions. Of this group the Public Works Director has initiated most of the thinking in terms of East Greenwich's approach to coastal development. All those elected and appointed officials interviewed felt the Public Works Director is the town's planning function. The Comprehensive Plan is seen by him as a general guideline for controlling community growth (Appendix B, Q. 22). On account of the rapid change in the community the Public Works Department has sought to increase its internal technical ability through added staff. This lack of expertise is viewed by decision-makers as the major weakness of town's ability to control change (Appendix B, Q. 39).

Because the planning, decision-making and implementation functions are not organizationally based but instead located in a few select individuals what ever tension exists between the planning and political considerations appears to be controlled in the informal bargaining process that occurs as this group decides what to do. Location of these individuals at the top of the town's administrative and political structure can be viewed as the major reason for their success in carrying forward their ideas.

Planning Strategy:

One major occurrence in recent years has set the pattern of actions for this group to attain public acceptance for their proposals. In 1968 this group decided that an additional boat launching site was
needed in Greenwich Cove. A site occupied by a house was found on a steep bank overlooking the cove and a sale price of $15,000 was established. It was the feeling of this group based on the Public Works Director's site plan that sale of the gravel excavated from the site in preparing a ramp and parking area would offset most of the development costs.

Although State 50% matching funds were available under the Green Acres Act, the group felt the requirement that the area be open to all State residents was not desirable. They believed that if Town funds were used the facility could be restricted to the exclusive use of Town residents. The proposed sum of $15,000 was rejected at the financial Town Meeting. Seeking to move ahead with the plan, the Town officials then applied for Green Acre funds which did not require the sanction of the Town meeting. The Plan was then carried through as originally conceived by the decision-makers, despite the original negative vote of the town meeting and despite the fact that there had been no particular sentiment expressed at any point for the ramp proposal.

When queried on this point those interviewed in this group unanimously agreed that the negative expression at the Town meeting was for the amount rather than the concept of a boat ramp in the proposed location. In making the determination of this use no other alternatives were considered. All interviewed felt, despite some expressions of community that the Council had gone against the will of the people, that they had acted well within their perogatives in pursuing this plan in the manner they did. All expressed a dissatisfaction with the
equity and efficiency of the Town meeting mechanism and felt that perhaps a charter and reorganization of government into a mayor or council-manager format might be worthy of investigation.

It is clear from interviews that the success of the ramp and the ultimate public acceptance of this manner of Plan implementation has crystallized a strategy approach for the decision-making group. All feel this ramp represents the most significant change in East Greenwich's coastline in the last two years (Appendix B, Q. 24). Since that time the ramp facility has been further improved and additional work such as the installation of sanitary facilities is scheduled for this year. None of those interviewed, however, feel any desire to encourage private initiative from outside the Town by using public funds as incentives.

This select group while exercising actual power cannot pursue a developmental approach to planning because of the dispersal of legal authority and lack of professional expertise. While the boat ramp plan was not specifically mentioned or sited on maps in the 1966 Comprehensive Plan, the idea fits generally into the concept of coastal development envisioned by the Plan.

Within the adaptive approach practiced by this group the ad hoc opportunist role defined on page 33 best fits the strategy used in the boat ramp issue and in their subsequent activities.

By using this approach and funds from his operating budget, the Public Works Director has been able to push forward with municipal coastal development on a project basis. Two small coastal "mini-parks" are now being constructed by his department. The Director feels
this initiative on his part and on the part of the other decision-makers is an efficient way to develop the Town's coastal areas for this type of use. The Director noted that he did not react in any way to criticism of his department (Appendix B, Q. 40).

Summary of the Planning-Development Factor:

Unlike Cranston and Warwick where there is a high degree of functional differentiation in the government, East Greenwich's planning and development factor is not organizationally based but rather is based on the interests and activities of certain key individuals. Unencumbered by governmental bureaucracies these individuals interact freely and are not constrained by accepted roles in the governmental hierarchy. Organizational definitions such as planner, administrator and executive officer do not strictly apply where no such organization and differentiation of authority exist in their manner of interaction. For this reason it is impossible to apply Meyerson's five criteria as a judgement of the affectiveness of the planning function's impact on decision-makers in the context of the decision-field. The adaptive approach and ad hoc opportunist strategy used in East Greenwich represents the way the Town effectuates their coastal management procedures. This is a distinct consideration from the way a planning department might devise a strategy for community development which may or may not be followed.

The Political Factor:

The political factor in East Greenwich must be discussed in terms of the way it affects the planning and development factor. This latter factor exercises the initiative on coastal issues, though the following
groups express views which are considered. Aspects of the decision-making group are discussed in the context of the political factor.

The Conservation Commission in East Greenwich is chaired by a retired state police officer. The major focus of his work is preservation of water courses in the inland section of the town. His views on conservation stress the John Muir tradition of the conservation ethic which upholds that the sanctity of nature should be preserved untrammelled for the future. As a result of these views all his efforts are exerted in the undeveloped part of the town. It appears that key decision-makers tend to respect the views of this group only when issues which might have an environmental impact arise in these areas of town. An area of specific expertise is that of pollution in streams. He expressed the view that the Cove is already polluted and has few conservation areas worthy of preservation. He feels the coastal areas of his Town need complete rebuilding to reflect the original environmental qualities of the area. He advocates only specific policies he is interested in, and relies heavily upon others for guidance (Appendix B, Q. 46, 47). He favors increased regulation of the coastal zone by some higher authority such as a regional agency. He feels more should be spent resolving coastal problems but looks to the State and Federal governments for initiative in these matters (Appendix B, Q. 55).

While it appears that the Conservation Commission has a limited interest both functionally and geographically decision-makers indicated that they wished the conservation commission would be more active, especially in coastal concerns which are of particular interest to the decision-making group. Some of this group indicated that the Commission
was an excellent place to plant ideas which later became their own. Decision-makers feel it desirable to have ideas generated on conservation matters by this group but also feel they are too slow to have a real impact for the conservation interest in light of the rapid development the town is undergoing. Thus on coastal decisions their interest and impact is low.

Land Owners exert some pressure on decision-makers. Coastal landowners such as marina operators have repeatedly petitioned the Council for extension of their uses but have had no noticeable impact on coastal decisions. These groups and individuals cannot be considered a dynamic group willing to disrupt their smooth relationship with the Council.

The view expressed by fishermen and quahoggers are not seriously considered by decision-makers, interviews revealed.

Developers and Realtors have showed little interest in East Greenwich's coastline. This may be accounted for, in part, by the highly developed and low quality of the land and buildings in the area.

Influential Citizens and Institutions exert a significant impact on coastal decisions. The Town's preservation society has recently come to life and is making a survey of much of the coastal land-use structures. It appears the growing commitment of this group to upgrading this area will preclude the extensive renewal recommended by the Comprehensive Plan.

The 20-25 member Town Republican Committee is the second organization which has a meaningful impact on coastal decisions. From this source all those elected officials receive their perception of public opinion. While this group does not initiate action, its reactions are
carefully appraised by the decision-makers. Currently this Republican Committee is studying the desirability of urban renewal for the coastal area. From interviews it appears that this investigation will take several years as there are no outspoken supporters of the concept.

Elected, Appointed, and Administrative Staff described in this discussion as the decision-making group shape public policy toward the coastline. Their leadership in this area is evidenced by their carrying through of the boat ramp proposal. Problems such as overcrowding in the harbor and traffic and congestion on the shore areas have prompted this group to attempt to expand their authority on coastal problems by submitting a bill to the State Legislature. The submittal of such a bill indicates the willingness of this group to press forward with their own policies and to increase their personal influence (Appendix B, Q. 46, 47). This group possesses progressive views on how coastal areas should be handled in the future. All feel planners and engineers offer the best advice on coastal development matters and would consider proposing the addition of one or more of these professionals to the Town's payroll (Appendix B, Q. 48). All favor increased public ownership and centralizing of coastal programs into a single administrative agency. All favored more state and federal participation and funds to carry out these programs but each insists on strong local control (Appendix B, Q. 50, 51, 55). All show a willingness to adopt new untested coastal development programs, provided they do not arouse the Town (Appendix A, Q. 24).

The leadership demonstrated by this group is a natural outgrowth of their personal characteristics. Each of those elected officials
interviewed runs a business. One elected official is a probable candidate to oppose Congressman Tiernan.

Summary: The Potential Impact of the Political Factor

Of the groups constituting the political factor only the decision-making group described as elected, appointed and administrative staff and the Town Republican Committee have a meaningful impact on coastal development decisions. The decision-making group, while political in nature appears to be free from any countervailing pressure.

The Market Factor:

Coastal land use patterns in East Greenwich's shore front show little evidence of being affected by market pressures. Existing uses such as marinas and boat yards are not competing actively for land. Some antiquated uses such as fishermen's shacks remain as they were 35 years ago. There are no spokesmen for the market factor attempting to influence decision-makers. Coastal land-use patterns appear stable even though the uses themselves are in demand. There is no evidence that the market factor is making any impact on decision-makers. On the contrary, the lack of improvement in the area has prompted some officials to consider renewal as a mechanism for stimulating market activities.

With the exception of land purchased by the town for municipal boat ramp turnover has remained low. While land values are appraised by realtors as increasing the configuration of existing land-uses, topography, rail lines and streets appear to be inhibiting the market.

Summary of the Potential Impact of Passive Factors: Economic-Ecologic Dichotomy and Jurisdictions and Controls
The lack of market activity has not resulted in any significant movement forward of the ecologic viewpoint in the decision-field. On the contrary, demand for increased anchorages and the discharge of effluents from boats has had an effect on water quality. Though some interest has been shown in protecting and enhancing coastal lands for aesthetic purposes, water quality is not actively being monitored or improvement sought.

The lack of municipal controls evidenced by the special bill seeking to expand local control remains weak and unaggressively used. Private property rights are greatly respected; eminent domain has not been used.
IV. North Kingstown, Rhode Island

The Evolution of Government and the Distribution of Legal Authority.

Like East Greenwich, North Kingstown functioned for most of its civic life under a council form of town government. With the adoption of a town Charter in the early 1960's, North Kingstown established a council-manager governmental form. The manager oversees all administrative functions and acts as the Public Works Director. He is the only administrative professional in Town government. All boards and commissions report directly to the five man Republican Council. The town appropriates money in the annual town meeting.

Development considerations are handled by the Planning Commission which answers to the Council but utilizes the City Manager as a technical resource during the time of capital budget preparation.

Although the Town has over 26,000 residents and a professional administration it gives the impression of resisting centralized authority. Eighteen special purpose commissions composed of 90 members serve as advisors to the Town Council. Governmental structure and standing committees are illustrated on Chart H. Some of these committees have more than eight members. There is little overlapping membership.

Despite the profusion of advisory groups there is little or no full-time organizational staff to coordinate these diverse efforts. This facet of the governmental organization is its distinguishing operational feature. The Planning Commission is the agency which most closely approximates this coordinating function.
Identification of Key Coastal Decision-Makers

The lack of communication and organization among these advisory committees seemingly makes decision-making a highly diffused practice. All major decisions, however, are legally made by the Town Council using the advice of these groups. Officially these groups answer directly to the Council without reporting to the Planning Commission. This Commission, however, is the key locus for policy formulation discussions on coastal concerns.

As in East Greenwich, certain individuals from various advisory commissions have a particularly strong impact on coastal development. These same individuals interact informally without reference to their particular committee assignment or elected position. As one councilman put it, "We make most decisions over the telephone long before it is taken up on the Council meeting." This informal interaction forms a communications network which is common to all small towns yet unique in each.

On coastal issues the Planning Commission chairman is accepted by all those interviewed as being the most influential individual. Others include a councilman and chairman of the Industrial Development Commission, chairman of the Conservation Commission, and the City Manager. Of this group the City Manager achieves his influence by his legal authority while elected and appointed officials, though possessing legal authority, appear to have gained their influence by the impact of their personalities and their place in the local political setting.

While it is possible to identify this group as key decision-makers, many individuals interacting with these few form a complicated hierarchy
whose influence cannot be precisely determined. As in East Greenwich, group consensus is sought even though the basic definition of the issues being considered is usually articulated by the key decision-makers.

The Planning Factor in the Decision-Field:

The Comprehensive Plan:

The town of North Kingstown has no Comprehensive Plan. The Rhode Island Department of Community Affairs prepared a plan for the community in 1958 but before it was accepted the tensions that developed between the Commission and the State project planner negated the usefulness of the plan. Apparently the town officials felt this state employee acted in a high handed manner in advising the town. The Plan was shelved.

In 1969 the first year class in the graduate curriculum of Community Planning and Area Development chose North Kingstown as a study area. During the course of the year a Comprehensive Plan for the town was developed by the class of 18 members as a study exercise without consultation with North Kingstown officials, although the class attended Commission meetings and supplemented information supplied by the town with field investigations.

Since the presentation of this report to the community at a public meeting in North Kingstown in May 1969, no apparent movement has been made to accept or modify this document. Two graduate planning students were hired on a part-time basis ostensibly to work with the Planning Commission detailing precise proposals from some of the concepts presented in the student report. The students, however, performed drafting services for the town in transcribing zoning classifications
Currently there are no studies used by the Commission to direct their position on coastal land-use policy.

Town Planning Organization and Position

The Planning Commission has been functioning in North Kingstown for twenty years and is currently chaired by one of the original members. As in East Greenwich, this commission answers directly to the Council though it also works informally with the many boards and commissions associated with the government. While the Planning function occupies the Kent Position described on page 28, it uses ad hoc committees (see page 29) both as a means of deriving community participation and consensus and also as a means of generating broad based support for planning proposals. Though all those interviewed stressed how smoothly the town government functions there appears to be some competitiveness or strain between the chairmen of the Planning and Conservation Commissions and between the Planning Commission chairman and the City Manager.

The source of this competition appears to result from the inability of the Commission to adopt a Comprehensive Plan after twenty years of meetings. The Commission chairman made repeated reference to the Commission's efforts to direct community growth in accordance with the Comprehensive Plan even though no such document exists. The Conservation Commission chairman noted that without a plan or data the advice of the Planning Commission on coastal or other areas was no better than the views of his commission or anyone else.

The City Manager felt that the Planning Commission had become somewhat of a government in itself in that it makes decisions which the
Council invariably endorses but without being politically responsible directly to the citizens. He indicated that he had been unable (or unwilling) to introduce any changes into the functioning of the Commission. He felt the Commission had established an image of what planning is and that attempts on his part to redefine their manner of operation challenged them. Conversely the Planning Commission chairman minimized the importance of the City Manager, casting him as a financial technician. Since being interviewed the Manager has resigned citing frustration at his own inability to create a municipal building program which would make an impact on the development patterns of the town.

The Planning Commission chairman dominates the Commission. In addition to his own business as newspaper owner and editor, he averages 12 hours per week on Commission activities (Appendix A, Q. 4). He views the goals of his planning function as economic growth and provision of more life amenities. The Commission meets weekly to handle development questions. The chairman cites low budget and unexpected workloads as the major reason for gaps in the planning performance (Appendix B, Q. 39).

Despite the fact that the Commission has been unable to devise a community plan they have rarely used planning consultants or drawn on state expertise since 1958. The Commission is confident in its own ability to shape development particularly in coastal areas. This confidence is reflected in their development strategy.

Planning Strategy:

Because the Planning Commission has no plan, and considers the
land-use pattern in coastal areas fixed there does not appear to be any particular development objectives framed which vary significantly from existing land-uses. Neither are any problems in coastal areas perceived by the chairman. He did not feel that either pollution or dredging and filling were a significant problem to the town, even though the two Navy aircraft carriers stationed at Quonset Naval Air Station have no shore sewage treatment and house over 800 men each (Appendix A, Q. 6).

When asked which group outside of government most influence decisions on coastal matters the chairman responded local landowners although he strongly pointed out that the Commission had the final say.

In achieving acceptance of his proposals the Commission works through many of the committees of government. These informal gatherings set the pattern of the planning strategy for the Commission. All are urged to express their opinions on development matters even though very little basic information is available about the physical and social characteristics of the community. The Commission appears to dominate the conclusions drawn from these discussions because of their accepted position as technical experts.

This expertise is reflected in the Commission's view of planning. To this group planning has a strong engineering connotation. This is how the chairman approaches his tasks. One of the Commission members is an engineer. He was appointed to the Commission as were two other members in recent years on the strong advice of the chairman. Most planning proposals brought before the Commission are decided on the merits of engineering feasibility. Decisions are made on the basis of
the cumulative knowledge and experience of the Commission members. Ground water pollution, for example, was viewed by the chairman as the major implication of subdivision development. In coastal areas, much of which has very low density development this problem was viewed as particularly severe. Because of this view in the Saunderstown village of North Kingstown the Commission has required $1\frac{1}{2}$ acre minimum lot sizes on some of these coastal lands.

The lack of overall plans for coastal areas and the emphasis of the Planning Commission on examining proposals individually indicates that the planning function applies an ad hoc opportunistic strategy (see page 33) within an adaptive development approach. All those interviewed felt the planning function sought to channel growth (Appendix A, Q. 11). This approach, however, is not reflected in the Town's zoning of coastal areas. The ordinance which has experienced minor revisions since its adoption in 1947 leaves much discretion on development matters with the Planning Commission and the zoning board. These decisions are made on the basis of the Town's limited technical resources in judging development proposals and in accordance with the desire of the Planning Commission to maintain the status quo.

The Planning Commission chairman presents a consistent and strongly held position on coastal programs and environmental control. He feels he has good information and no organizational constraints in managing the Town's coastal environment, but that any new ideas for management should be tested elsewhere before being adopted by North Kingstown. He believes local towns should be able to draw on the State's borrowing credit for local financing of local coastal plans,
but that the State needs to spend less money and more time rethinking their coastal programs (Appendix A, Q. 23, 27).

He views State enabling legislation and local zoning powers as sufficient to handle all coastal development problems, and yet he looks to the State and Federal agencies as the best levels of government to resolve coastal problems which he believes should be remedied by educating the public (Appendix B, Q. 42, 50, 52, 55).

Summary of the Planning Factor:

Planning in North Kingstown lacks organization, professionalism and documentation. Technical criteria and objectivity which were stated as being primary criteria and the most descriptive feature of the planning process appears to be based more on the personal views of the planning chairman whose conception of the planning function appears dominated by a civil engineering viewpoint rather than on broadly based community analysis (Appendix A, Q. 15). Though not actually sought out, the views of planning and engineering professionals were seen as most useful to the commission in deciding coastal matters (Appendix B, Q. 48). All new proposals are judged primarily on this engineering viewpoint and their relation to existing uses only within the municipal jurisdiction.

Unlike Warwick where detailed planning proposals have a significant impact in the decision-field, North Kingstown's planning efforts lack the organizational strengths, but nevertheless the factor remains influential because it is thought to have this technical competence and because it has functioned in a consistent manner with the same individual approach for over twenty years.
The Political Factor:

The Planning Commission, especially the chairman, influences decisions on coastal matters not by weight of technical expertise, but rather by their interaction in the political context. The leadership role of the chairman has been discussed in this framework in determining his views toward new coastal programs. Other groups, however, play an active part in the coastal decision-making process.

The Conservation Commission's work in North Kingstown has made a sizeable impact on decision-makers. Over the past four years more than 1,500 acres of land and inland water area have been acquired or placed under easement for conservation purposes. Most of this property is located around inland water bodies. No acquisitions are currently projected for coastal areas, where the Commission chairman indicated he feels costs and the views of coastal owners preclude meaningful purchases.

Like the Planning Commission chairman, the Conservation chairman is a long-time resident of the Town and has been active in sportsmen's clubs. He is currently vice-chairman of the New England Advisory Board on Fish and Game Problems.

He feels his knowledge of the community and experience in wildlife related activities gives him the basis of information he needs for making conservation decisions. He wishes, however, the University was more active in supporting technical information such as model ordinances.

In his retirement he repairs automobiles and spends 12-15 hours weekly pursuing his conservation work. He cites decline of shell
fishing and filling of Bissell Cove and Duck Cove as the most significant coastal environmental change in the last two years (Appendix B, Q. 25).

He feels the Conservation Commission has the most influence with the Council. This is not a contradiction of the views the Planning Commission, but rather indicates that as discussions occur consensus is reached with each group feeling its viewpoint has prevailed (Appendix B, Q. 44).

The Conservation chairman sought to increase his influence and strongly presents his viewpoints despite obstacles (Appendix B, Q. 46, 47). He feels ownership of coastal lands should be public, but that zoning and paid easements to prevent future development presents the best prospect for controlling growth in coastal areas (Appendix B, Q. 50, 52, 54). He views Federal and State agencies as the rightful initiators of coastal programs but feels they are presently poorly coordinated both locally and on higher levels. He feels towns have equal responsibility with higher levels of government but lack resources to handle problems (Appendix B, Q. 55).

When asked how effective he felt his Commission was in communicating their viewpoint to the Council he said he had always gotten along well with them. He found his hobby of repairing cars, often councilmen's cars, allowed him an opportunity to discuss town matters informally while councilmen waited.

He tends to view shore areas in terms of locales, such as Saunders-town or Wickford Cove, as independent places each with a particular development pattern. He feels environmental problems could only be
solved by public education (Appendix B, Q. 42). He values most highly the views of conservationists, economists and oceanographers in de­vising local coastal policy (Appendix B, Q. 48).

The Conservation Commission has a strongly expressed viewpoint which has an impact on the Council. Their efforts to date have not been in coastal areas. Because of the strength of the chairman it is likely that the conservation viewpoint will increase in impact as development in coastal areas increases, both because the chairman is respected by Councilmen, and because their conservation viewpoint is compatible with the Planning Commission's interest in slowing develop­ment.

Landowners in certain areas have a significant impact on coastal decisions. Marina and boat yard operators in Wickford Cove play a significant role in shaping decisions for that area. Their views have been supported by the Planning Commission.

Landowners in the Saunderstown area have sought to maintain low density development which has been consistent with the Planning Com­mission viewpoint. Landowners are seen to have less impact in undeveloped coastal areas than developers (Appendix A, Q. 14). It was felt by elected decision-makers interviewed that if landowners were willing to sell to developers they would be unlikely to oppose develop­ment if landowners in abutting low density areas did not feel develop­ment would affect their property. It was in this manner that land between Saunderstown and the Jamestown Bridge was slowly developed from farm to single family tracts. It appears that the impact of landowners views will increase with the density of development.
Developers and realtors are seen to have a significant impact on decision-makers even though the views of the Planning Commission often modified their proposals. In one case lot size requirements were increased from 20 to 50,000 sq. ft. Currently a nationally based real estate firm is proposing the building of more than twenty-five high income condominiums on coastal property north of Wickford Harbor. Although this involves changes both in zoning and the previous position taken by the Planning Commission on high density dwelling units, it appears the impact of the firm is having a meaningful affect on both the Council and the Planning Commission.

Armed with plans and engineering data it appears this developer is going to over-power the Planning Commission whose basis of knowledge is experience. As development pressures increase it is probable that developers will increasingly challenge the local decision-makers. A major challenge in the next decade will surely come from the Narragansett Electric Company which holds 90 acres of coastal land (see Appendix D).

Influential Citizens and Institutions:

The Navy is the largest coastal landowner in the Town. Their use of the coastline in this jurisdiction occurs independent of any local sanctions or restrictions and without apparent regard for ecological considerations. The Town has not evidenced any interest in curbing or influencing the Navy's use of their shoreline, even though Navy land abuts shell fishing beds and is near public beaches.

Yachtsmen do not appear interested in coastal development patterns but have urged the Council to consider expansion of docking facilities.
in Wickford Harbor. Their influence appears to be defined to their interest in the Bay as a functional part of their boating interests.

Local fishermen have complained about ecological damage to shellfish beds but neither the Council nor the Planning Commission have made an effort exerting any influence to arrest existing pollution sources, even though they are considering raising the Town's minimum lot size from 20 to 30,000 sq. ft.; ostensibly to curb more pollution.

One citizen group based in the northern part of town, where most new growth has occurred has successfully pressured local government for more professionalism. Not only did they petition the Council not to accept the City Manager's resignation, they advertised on a billboard urging the Council to hire a full-time planner. Twenty-five thousand dollars has been budgeted this year for such a new Town department. If this group continues its activities it could have a great impact on development decisions.

Elected, appointed, and administrative staff described as the key coastal decision-makers have not shown leadership in directing coastal environmental issues. The lack of a Town Plan, or activity in reserving coastal lands as a conservation resource indicates a lack of concern over the use of the town coastal areas. Present zoning allows only low density residential uses outside of Wickford Harbor. Though each in this decision-making group showed an inclination to press forward with their own points of view, none showed an active interest in North Kingstown's relation to Narragansett Bay even though the Planning Commission felt his board most active in coastal matters (Appendix B, Q. 46, 47). Two individuals other than the Planning chairman felt the
addition of a planner to the Town's staff was desirable. On coastal matters most preferred conservationists as advisors (Appendix B, Q. 48). All showed a strong inclination for the town to share in state revenues, but few favored an overall administrative agency to coordinate coastal programs.

Although support and initiative are looked for on the Federal and State level strong local control is urged in guiding the uses of Federal and State programs (Appendix B, Q. 48, 50, 51, 55). Local initiative appears low. There seems to be little willingness to create local programs. The City Manager who might logically be expected to help create such programs said he was not much interested in what happened to the quohaug, indicating his attitude toward coastal environmental questions.

Summary: The Potential Impact of the Political Factor:

Key decision-makers by personal inclination and past action show little interest in coastal questions. Landowners express their viewpoint forcefully only when public or private action appears to threaten their holdings. The Navy acts completely independently of local considerations on environmental matters, while yachtsmen are concerned only about environmental quality as it affects their boating interests. Developers and real estate interests are more frequently pressing for land-use changes. Only the combined viewpoints of the key decision-makers are currently slowing their activities. Certain local groups are pressing government to change their caretaker stance. Should this change occur, capabilities for considering and acting on coastal environmental questions should increase. Without this change developers will
probably feel little constraint in reflecting the unmodified influence of the market place.

The Market Place:

Coastal land in North Kingstown is in large parcels and is weakly controlled by zoning. Only the decision-makers constrain development activity. Market pressures do not appear as intense as in Warwick or Cranston, nevertheless intensification of land-use capacity is being sought.

Two years ago the old Cold Spring Hotel abutting the town beach came on the market. The town purchased the property on the market for $180,000 after a developer had bid $172,000. After the deal was transacted the town learned the developer had bid an extra $15,000 thinking the parcel served by town water and sewage.

In this instance the Town paid an inflated market price because it had no mechanism for determining market demand. The market influence is stimulated both by the proximity of the Navy base and the University of Rhode Island which serve as generators of market activity.

The demand for coastal land will increase as the South County area grows. Developers will press for more changes in land-use capacity in response to this demand. It appears, North Kingstown will be greatly influenced by this factor because of their own lack of preparation and because of their inability to stop it.

Turnover of coastal property is increasing as land values rise. Because the rural character of much of the coastal area below Wickford Cove it is difficult for realtors to appraise exact increases in land value. A major new use which is in regional demand, apartments, is
only beginning to manifest a demand in North Kingstown. This demand may be a major challenge to the town's present zoning.

Summary of the Potential Impact of Passive Factors: Economic-Ecologic Dichotomy and Jurisdictions and Controls

Economic factors will overpower ecologic considerations which have no spokesmen in the decision-field. Low local awareness of environmental issues appears to preclude for the moment any meaningful attempt to incorporate the ecologic viewpoint into coastal decision-making. The Conservation Commission possesses the highest potential for this expression but is not actively interested in this pursuit.

Jurisdictions and controls do not inhibit decision-makers who avoid use of eminent domain and resist infringement of private property rights.
V

A CASE STUDY

THE PAWTUXET COVE REDEVELOPMENT SCHEME
This case study demonstrates the interaction of the decision-factors for a study area city in a real situation. While the manner of interaction of these factors may be unique to this city, the issue of coastal redevelopment is pertinent to the entire study area for it demonstrates that planning politics and the market place are important factors in determining how coastal land areas will evolve.

THE PAWTUXET COVE REDEVELOPMENT SCHEME

In June 1961 the City Planning Commission of Cranston received from their consultant, Blair Associates of Providence, a comprehensive plan for the city. Among the many aspects of community development analyzed by the consultant was the desirability of urban renewal. The consultant's surveys found that in some census tracts "as much as 26% of all dwelling units in deteriorating or dilapidated conditions".\(^1\) The report continues, "...on the basis of preliminary surveys and the city's needs, it is apparent that urban renewal action of the most drastic sort--tearing down of structures--is generally not the most appropriate form of renewal for Cranston. ...in addition to renewing residential areas, urban renewal should be used where possible to further the economic growth of the city, i.e., by renewing commercial areas and providing sites for industrial expansion".\(^2\)

Under a section entitled "Tentative Renewal or Redevelopment Areas" the report lists several areas for renewal consideration.


\(^2\) Ibid.
First on the list was the

1. Pawtucket Business Center

Citing the existence of a substantial trade area which extends south to include the Gaspee Plateau on the Warwick Coast the consultants recorded, as the basis of redevelopment activity, the inadequate harbor, the demand for marina facilities, and needed community facilities. The report supported renewal recommendations on the rationale that inadequate parking and the existence of several deteriorating structures were inhibiting this area as a community center.

Another site for renewal action was the Bellefont Pond area which due to its diverse ownership pattern, inadequate parking and vacant land was described as an area of "arresting growth" which had, however, due to its proximity to rail lines and the proposed extension of the Huntington Expressway a high potential for industrial redevelopment.

The Cranston Redevelopment Agency was established in 1963 with Daniel D. Dicenzo, a civil engineer, as its executive director. Following the mandate of the State enabling legislation the agency began making surveys into the conditions of the first two redevelopment areas referred to in the Blair report. Preliminary surveys in September, 1964, of the area surrounding the Pawtuxet Cove established the following deficiencies:

1. deteriorating buildings
2. substandard living facilities
3. traffic congestion
4. incompatible mixtures of land use
5. lack of parking facilities
6. inadequate street capacities and layout
7. obsolete building types
8. inadequate platting of land parcels
9. congestion and misusage of the cove area as a natural resource
10. poor siting of buildings
11. loss of tax revenues

A tentative renewal area of approximately 11 acres was selected for closer analysis. This area included 69 land parcels with 49 structures and 53 owners. The 35 residential and combined residential-business structures represented 60 families. There were also 13 businesses and one manufacturing club, and volunteer fire stations usages in separate structures. The appraised value of this area totaled $860,244 returning $18,464.16 in tax revenues to the city in 1964. In making proposals for alternate uses of the area the following improvements were proposed:

1. A 50,000 sq. foot business building with 650 off-street parking spaces, an increase of 595 over the existing on and off-street spaces, which was to house as many of the 13 displaced businesses as desired space. At the time of the agencies survey there were 30 empty store fronts within the area of the proposed renewal site. 20 other businesses were in arrears in their rent.

2. A 28 story luxury apartment with parking facilities within the building.

3. Recreational facilities which included a yacht club, a private club renting cabanas to 400 members. The club would include an olympic sized salt water pool and restaurant facilities. Also to be constructed on part of the area dredged from the harbor would be marina with a capacity of over 150 boats.

4. Along the northern banks of the Pawtuxet River was to be constructed an extensively landscaped and lighted park which would have a vista of the cove area as well as space for open air concerts. ³

It was estimated that these improvements would return to the city a tax revenue of $167,528.59 not including the marina. Preliminary

³Cranston Redevelopment Authority, Cranston, R.I.
figures forecasted the project cost to be approximately $1.8 million with a net city cost of $480,000 after the sale of the land to developers and after the 2/3 federal participation with renewal funds.

The general condition of the Pawtuxet Cove area assayed by the Redevelopment Agency's surveys did not come as a surprise to either local residents or the city council. In addition to the references made to the area by the Blair report, the number of empty stores and the formation of the Edgewood Improvement Associates attest to the awareness of the general decay of the area. Earlier in 1964 a published consumer analysis by the Providence Journal noted the decline of Pawtuxet business. Zoning for the area at the time was a mixture of commercial and multiple family intertwined with single family residential districts. Residential rents averaged $40 to $80 per month. The majority of the structures in the proposed project area were not owner occupied.

The proposed improvements for the area were the out-growths of the studies of the Redevelopment Agency's Director, Mr. DiCenzo, and his summer help. No detailed feasibility studies for erecting the 28 story residential structure had been made though the Director from his own professional background did not estimate any particular difficulty. A rough working site plan had been prepared by the director for presentation and discussion with Redevelopment Agency's citizen board. In order to provide the needed space for the proposed facilities it was evident that most or all of the existing structures on the site would have to be cleared. Extensive rebuilding of utilities and the harbor would have to occur in order for the plan to proceed. It was apparent
that this was going to be a long term program even without the extensive delays inherent to Federal renewal programs. Local businessmen aware of this as well as the other aspects of the program soon became aroused at the prospect of "bulldozers displacing people". Newly elected Mayor James DiPrete had met with the Redevelopment Agency's Chairman, Fred C. Kilgus, and Dicenzo and had reviewed the plan and the site. According to Dicenzo, he expressed shock at the condition of the Cove area, but remained neutral about supporting the plan.

Procedure for the submission of the plan once it had been formalized into drawings with their appropriate documentation could have followed one of two routes leading to the required approval by the Council before application to HUD for the necessary federal participation. Chart I and J illustrate the procedural courses that would be followed under the normal circumstances.

**Chart I**

<table>
<thead>
<tr>
<th>Redevelopment Agency</th>
<th>City Plan</th>
<th>Full Council</th>
<th>Ordinance Committee of Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Votes</td>
<td>HUD</td>
<td>Public Hearing</td>
<td></td>
</tr>
<tr>
<td>Council</td>
<td>N.Y.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chart J**

<table>
<thead>
<tr>
<th>Redevelopment Agency</th>
<th>City Council</th>
<th>City Plan Commission</th>
<th>Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Council Committee on Ordinances</td>
<td>Full Council</td>
<td>HUD N.Y.</td>
<td></td>
</tr>
<tr>
<td>Public Hearing</td>
<td>Submits Recommends</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Under the Rhode Island redevelopment law, it is the agency's perogative to initiate renewal studies and to submit their findings to the city council with suggested action. The submission of such reports could be either directly to the Council or through the Cranston City Plan Commission to the Council who then by the terms of the charter (Sec. 13:03) had to refer any such proposal to the Plan Commission for their recommendation. The proposed plan or idea as, it later became referred to, differed from the Blair report's recommendations in two significant ways:

1. It demanded significant clearance and rebuilding while the report advocated spot clearance and privately financed conservation and upgrading of existing neighborhoods.

2. The Comprehensive Plan map of proposed land use designated the cove area as being medium density, while proposal suggested high density.

By October 17, 1964, Ward 1 councilmen within whose district the project fell were speaking out strongly against the proposal. John J. Tuohy, Republican Chairman of the Council's Finance Committee, was recorded by the Providence Journal as saying,

"Apparently Daniel Dicenzo would like to push all homes and businesses into the sea just to satisfy a whim without regard to the personal rights of the people of the area. This we guarantee he shall not do."

Tuohy further stated that the agency was attempting to "Usurp the powers of the elected City Council" in announcing a proposed redevelopment area. Speaking to a rally of Republican candidates and workers at city headquarters John Florence, another Ward 1 Councilman, promised
By early spring the forces working against the plan had mounted another offensive. Decenzo remained the sole recorded supporter of the redevelopment proposal and thus criticism was leveled at him as well as the plan. Planning Commission Chairman and Ward I resident Murray Upham who had received from the Redevelopment Agency a request to discuss the proposal at a Commission meeting commented publically that, "He (Decenzo) can't bulldoze that area. He can't get government funds and he doesn't know what he is talking about, and he just got a $2000 a year raise." Even Redevelopment Agency Chairman Fred C. Kilgus who had made no previously recorded public statement concerning the plan stated that, "The plan looks interesting", but added that the agency would be very concerned about relocating the families who would lose their homes as a result of the renewal.

Others speaking out during this period regarding the plan were Public Works Director and member of the Planning Commission Edwin G. Avery who stated that it was the Council that delineated the redevelopment area and that Decenzo had no apparent support from his own agency. Councilman Richard M. Casparian Democratic majority leader and chairman of the Ordinance Committee stated, "I don't see how other members of the agency can let him bring it up a second time after the initial

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7 Ibid.
reaction. Councilman Casparian later vowed, "I will do everything I can to defeat it (the plan)." 8

On May 23, 1965, Mayor DiPrete ordered a public hearing on the proposal in Cranston City Hall. Such a hearing was within his perogative to call, but was contrary to established procedures. The proposal, it should be noted, had not been submitted as of this time to any city agency or board, nor had the Redevelopment Agency itself taken a formal position on it or formalized the project itself into a site plan with documentation. The following summarizes the public positions taken on the proposal before the May 23 hearing.

BEFORE THE HEARING

Strongly against

Councilmen
Tuohy - Chairman Finance Committee ward 1
Florence ward 1
Casparian - Democratic majority leader,
Chairman Ordinance Committee

Planning Board
Chairman Upham
Local Businessmen and citizens

Against

Public Works Director Avery
Councilman Goodwin
Edgewood Improvement Associations

Neutral

Mayor DiPrete
Redevelopment Agency Chairman Kilgus

For

Dicenzo, Redevelopment Authority Director

AFTER THE HEARING

Strongly Against

Mayor DiPrete
Councilmen Tuchy, Florence, Casparian, Goodwin, Marchesi
Planning Board Chairman Upham
12 citizen speakers

Against

Planning Director Del Sesto
Spitz, Chairman of Rhode Island Area Redevelopment Committee

Neutral

Dicenzo

Of the one hundred people attending the hearing only Dicenzo supported the plan. He limited his remarks to supporting the opportunity to be seized at the Pawtuxet Cove area rather than defending the merits of the plan itself. Arguments against the plan stated that the high rise structure was not in keeping with the character of the area; that the plan itself not only did not serve the needs of the residents and the area, but opened up the area to out of town "sharpies" who would benefit from federal financing in taking over the area. It was stated that the plan would bulldoze the area that wasn't blighted and had not been proven to be blighted by the Agency; that greater rather than lesser congestion would result; and finally that the Council had made no provision for such a project in the five capital budget extending to 1970 and that the plan seemed less of a plan and more of a proposition of Dicenzo.

Before the hearing concluded the Mayor and several Councilmen and
other city officials came out strongly against the plan, but recognized
the need for improvement of the area. At the next meeting of the
Redevelopment Agency the Board passed a resolution postponing further
action on the program and directed their attention to the development
of the Bellefont Pond Industrial area.

The Planning Factor

Other than the reference in the Comprehensive Plan to upgrading the
Pawtuxet Cove Commercial area no mention or guidelines were set by
that document or by the Planning Department to aid the Redevelopment
Authority in devising a redevelopment program for the area. Indeed,
before Decenzo was able to fully discuss his proposals with public
officials his preliminary ideas which he had used as a point of dis­
cussion became solidified in the public eye as "the Plan." Prior to
this public disclosure he had not conferred with the Planning Depart­
ment on the merits of the scheme.

Neither those for or against the proposal made mention of the
possible impact of the plan on the City of Warwick whose municipal
boundary defined the cove side of the project.

No apparent cooperation in coastal development schemes was in
evidence between the two towns even though they had jointly appropriated
funds for improvement of the cove itself.

As far as the plan was defined no measure had been made of the
impact of the scale of the proposed design on the surrounding area.

In summary, the plan as prematurely defined lacked the detail to
answer some of the most pointed criticisms against it. It was less of
a plan than a scheme.
The Political Factor

No group for or against the plan expressed any opinion as to the effect such a high land-use capacity might have on the Pawtuxet Cove as an ecological asset. The Conservation Commission took no position.

Land and business owners so vocally supported their views that the plan was completely stopped and the Redevelopment Authority discredited.

Potential developers did not enter into the debate, even though the Redevelopment Authority Director had interested a New York concern in the idea. This concern had developed similar plans elsewhere but was awaiting local public support before taking any concrete action in supporting the plan.

The Edgewood Improvement Association, composed of local businessmen actively worked against the plan. They were the only local citizen organization which expressed a view and were thought to be the group that urged the Mayor to hold a public hearing. This organization had a significant impact in the outcome of the plan proposal.

With the exception of the Redevelopment Authority Director, all elected, appointed and administrative officers in local government followed the early lead set by coastal ward councilmen and finally the Mayor and opposed the plan. No leadership was demonstrated in attempting to reach a compromise position. In that election year all these officials responded only to the lead set by the elected Council in opposing the plan. Each overlooked the recommendation of the Comprehensive plan to upgrade the area through redevelopment. Only the Redevelopment Director attempted to implement the plan.
The Market Factor

Because the area evidenced no signs of the market influence in making the area a suitable locale for local business, the Redevelopment Director sought to stimulate the market with public investments in the area. When this effort was defeated business volume continued to drop. The outside developer who tentatively sought to participate in the plan felt, according to the Redevelopment Director that a profit could be made if the scale of the development was large enough to overcome the major deficiencies to the area. Location was seen as the major reason why such investment would be profitable.
VI

REGIONAL CONSIDERATIONS
Three case studies found in Chapter 5, and Appendices C and D present narratives on coastal environmental issues which have regional considerations. In each case participants argued for and against proposals even though exact benefits and costs were not systematically defined or acknowledged.

Public planning is the mechanism designed to sort out these benefits and costs so that a clear and common ground of understanding can be used by decision-makers.

A central feature of each case which precluded achieving this common ground is the widely varying perceptions held by participants of what impact coastal resource use would have regionally. The basis for these differentiated perceptions rests on the varied definitions applied to coastal resources.

Historically natural resources have been considered commodities to be consumed as part of the economic growth process. In recent years with the national movement toward a tertiary economic orientation, this traditional definition has come into question.¹ In an urban society, amenity resources such as air, water, and open space are becoming increasingly scarce. The coastline provides a transition point between man-made environments and the natural environment.

The shoreline possesses high value as an amenity resource but it is particularly susceptible to the effects of externalities. The impact of these externalities resulting the effect of the market factor

is not limited, in most cases, to a particular municipal jurisdiction.

The Pawtuxet Cove Scheme (Chapter 5) was seen by participants as an issue with only neighborhood significance. The Redevelopment Authority Director sought to utilize the amenity value of the coastal environment as a stimulus for economic revitalization. He did not consider the external effects such a development might have on Warwick's coastal environment, and particularly on the spatial qualities of Pawtuxet Cove and adjacent lands. He appeared to relate his extensive rebuilding proposal only to the narrow objective of upgrading the small commercial area without taking into account what effect the physical scale of the 28 story apartment tower and ancillary uses would have on the cove's or coastline's total amenity resource value.

Though the Director had an image of the cove which allowed him to utilize the amenity resources of the area as a basis for his plan, local residents, politicians and planners viewed the proposal in much narrower terms. The coastal environmental resources of the area appeared to be perceived only as land, which despite its proximity to the amenity resources of the coastline was seen to possess no unusual value outside that placed on it by the owner.

Politicians viewed the proposal only in terms of its impact as an election issue. Potential improvement of the environment of the cove appeared to be completely ignored as a by-product of the proposal's intent to upgrade the commercial uses. In no recorded instance did any participant feel the proposal would have a negative environmental effect on the coastal ecology.

Rejection of the proposal appeared to be based on at least the
following factors:

(1) The degree of local opposition, and lack of support;

(2) The degree of initiative expressed by the Redevelopment Authority Director which was viewed as an encroachment on Council prerogatives;

(3) The desire to squelch an issue which would arouse public sentiment during an election year.

The Jamestown Refinery Case (Appendix C) presents the largest coastal environmental controversy yet faced by the West Bay Area Communities. The record is a clear statement of the economic-ecologic dichotomy. It is in this dichotomy that the basic shift in the definition of resources is most clearly demonstrated.

Those favoring the establishment of the Refinery appeared to view the Bay as a commodity resource. The highest and best use of its environmental resources were seen to be used (or consumed) as one primary basis for economic development. Despite a history of oil spillages, the impact of new jobs and tax revenues overwhelmed Jamestown and State politicians.

The deepwater characteristic of the West Narragansett Bay made feasible such a proposal and yet despite the obvious positive economic benefits there was no mechanism for determining the economic and environmental liabilities.

Only the Jamestown Improvement Association and its supporters sought to represent the ecologic-environmental viewpoint. This point of view perceives the coastline as an amenity resource which could not be separated from the marine resources of the Bay itself.

Specific functionally specialized organizations tended to be
narrowly concerned with the refinery proposal. Chart K indicates some of these views on how the Bay resources should be viewed. While the strict distinction between commodity and amenity resource definitions was not made explicit, it is clear major participants viewed the proposal in these terms.

Chart K

Commerce Oil Refinery Case
Participant Positions on use of Coastal Resources

<table>
<thead>
<tr>
<th>Participant</th>
<th>Major Activity</th>
<th>Resource Value Position</th>
<th>Position On Resource Use As Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td>National defense</td>
<td>Commodity uses as functional support</td>
<td>Functional conflict</td>
</tr>
<tr>
<td>Rhode Island Development Commission</td>
<td>Economic development</td>
<td>Commodity</td>
<td>Economic return to state</td>
</tr>
<tr>
<td>Jamestown Town Council</td>
<td>Representing host locale</td>
<td>Commodity</td>
<td>Local economic return</td>
</tr>
<tr>
<td>Jamestown Protective Association</td>
<td>Representing owners</td>
<td>Amenity</td>
<td>Local &amp; regional amenity cost</td>
</tr>
<tr>
<td>Governor Roberts</td>
<td>Representing state admin-istration</td>
<td>Commodity</td>
<td>Political &amp; economic return</td>
</tr>
<tr>
<td>Commerce Oil Corp.</td>
<td>Profit-making</td>
<td>Commodity</td>
<td>Investment return support</td>
</tr>
<tr>
<td>Newport City Council</td>
<td>Representing locale</td>
<td>Amenity</td>
<td>Economic liability</td>
</tr>
<tr>
<td>North Kingstown Town Council</td>
<td>Representing locale</td>
<td>Amenity</td>
<td>Amenity costs</td>
</tr>
</tbody>
</table>
At the heart of the conflict lies the economic-ecologic and the commodity-amenity dichotomy. The lack of an institutionalized body to meaningfully determine costs and benefits precluded any bargaining to resolve the issue. Instead jurisdictional and functional control mechanisms all reviewed the proposal from their narrow breadth of interest.

The potential environmental conflict was left to be resolved not by public leadership or rational and comprehensive action on the part of a public agency but instead in the raw exercise of power. In this instance, the type of development proposal required the ultimate legal sanction by the federal government on a narrowly defined functional basis. Local regional environmental impacts were considered only by individuals based regionally who were able to spontaneously forge a political force from local groups with common concerns. Public resource policies on the local, state, and federal level played no part in the outcome of the case.

The Rome Point Case (Appendix D) illustrated the basis for a future regional environmental issue. Local decision-makers in North Kingstown appear to anticipate few environmental liabilities when compared with the massive economic benefits inherent to the project. Though the greatest threat to coastal environmental quality was seen to be thermal pollution, complete faith by North Kingstown officials was placed on the state and federal governments for protection of coastal environmental quality.

Unlike the other cases which occurred several years ago, participants from all cities and towns recognized the potential impact such
a development might have on the Bay as an amenity resource. City inter-
viewees showed a greater concern for this potential resource cost than
did town officials. The use of the Bay water as a coolant was not
viewed by local officials as detracting from the environment of the Bay
as a local or regional resource.

Only one official of the many interviewed considered the proposed
power plant from a regional development viewpoint. This Planning Direc-
tor stressed the impact of the scale of development as having a poten-
tially detrimental environmental effect by establishing a precedent
in the type and scale of the development. This particular proposal,
he felt, will draw heavily on the amenity resources of the West Bay
Coastal area. As in the refinery case, market demand for the Rome
Point site was not evident for competing uses of a similar character.
The site offered particular attributed conceived as consumption re-
sources by the developers.

Summary of Case Studies:

In the first two cases public planning on the state or local level
had no active role on the issue resolution, even though the Pawtuxet
Redevelopment Scheme was based on a coastal policy document. Although
these cases had strong regional impacts there was no coordinating
mechanism to relate local and regional viewpoints or to define the
hierarchy of issues for these geographic areas. No public policy on
the local, regional or state level was used as a standard for judging
the overall desirability of these proposals.

Political factors played a critical role in the resolution of these
two cases. The impact of landowner's viewpoints appeared to turn senti-
ment against the proposals. In both cases the developers (the Redevelopment Agency and the Corporation) initiated the issue but finally succumbed to political and fiscal constraints. In these cases local and regional leadership responded primarily to political and economic factors but did not seek out a planning viewpoint.

In each study ecologic factors were poorly expressed and able at best only to inhibit the market factor. There was no standing organization or institutionalized body presenting the ecologic perspective even though ecologic harm in the refinery case was considered a major point of contention.

Fragmented jurisdictions and controls located in such bodies as the Jamestown Town Council, the Navy, the State Division of Rivers and Harbors, and the Corps of Army Engineers dealt with the proposed refinery in an uncoordinated manner and from many independent perspectives.

The Pawtuxet Case demonstrates how despite the presence of planning resources, local political factors can have a great effect in shaping development patterns which have regional implications.

The Refinery Case is significant because it shows that when a large scale development proposal was made which used regional environmental resources no local, state, or federal public agency had the authority to review the project as a whole to determine its impact on coastal resources.

The Rome Point Case illustrates that future regional environmental issues are emerging which have the apparent support of the local decision-makers, but not the endorsement of municipal neighbors. Al-
though interviewees expressed a willingness to cooperate in coordinating development plans among coastal communities, no formal mechanism is currently available for this purpose. The state was seen as supplying only limited technical services.

Based on the emerging national awareness of ecological problems and the formation of such local groups as Ecology Action for Rhode Island it is likely in the resolution of this case that the ecologic viewpoint will be an important factor swaying decision-makers.
SUMMARY AND CONCLUSIONS
Coastal environmental issues as explored in this study have resulted primarily from coastal land-use proposals. These proposals were inspired by the lack or presence of influences initiated by the market factor. These influences appear to have two types of impacts on the overall development of the Study Area.

On the local scale development decisions, such as proposed intensification of dwelling capacity in Cranston, mini-park and boat ramp development in East Greenwich and proposed condominium housing in North Kingstown are locally oriented coastal changes. Extended through time they create a cumulative development pattern which changes the current environmental pattern of the total shoreline in the Study Area.

On the regional scale certain proposed developments would have an immediate impact on the local and regional environmental development patterns. Such proposals as oil refineries, large high-rise apartments and a nuclear generating station have lasting environmental consequences which go far beyond local jurisdictions. While it is impossible to factually judge the effect of the proposals from currently available information, one can conclude as a result of this investigation the ability and interest exhibited on the local and regional scale in determining how such coastal issues should be approached. In addition, one can draw certain conclusions concerning which factor in the decision-field appears most capable of directing coastal management policy to reflect its point of view.

Chart L summarizes decision factors influencing study area municipalities.
Using Chart L and the preceding analysis in Chapter IV certain conclusions can be drawn regarding the degree of urbanization of these communities and the manner in which they are formulating coastal policy or reacting to decision-making factors.

In North Kingstown, the least urbanized municipality, coastal policy and governmental organization seek to create consensus through
citizen participation, diffused authority, yet single party control. New and transient residents are beginning to challenge this pattern of traditional decision-making. The town has no coastal policy. Neighborhood groups influence action toward the town's total coastal resources.

East Greenwich also has strong party control but a higher degree of professionalization. Increased development pressure town-wide is forcing the tightly organized decision-making groups to recognize that increased professionalism is necessary to handle the problems of coastal change. Coastal policy remains as an outgrowth in formal interaction between professional and elected officials. The coastline is treated as a whole or single resource as a result of the professional input of a full-time development official, the Public Works Director.

Warwick exhibits the most urbanizing segment of the study area. It is here that professionalism has reached its peak resulting in strong local coastal policy spanning all of the city's coastal areas but also resulting in increased tension between professionals and politically appointed lay boards and some elected officials. This is manifest in a communication gap. It is in Warwick that planning has both the greatest impact and the greatest conflict with the political factor.

Cranston's coastal areas have long since been urbanized, resulting in a segmenting of the city's shore resources into an entrenched political clientele which seeks to represent this neighborhood interest through a machine style political interaction with elected officials. Planning impact and a unified coastal policy are weak before this factor.
Planning - With the clear exception of Warwick's planning function, the planning factor locally has a weak impact on coastal changes. Where centralized authority exists the planning factor has not utilized this potential asset to frame development approaches. Planning has been ineffective in formulating coastal development objectives and strategies for achieving them. There is no operative regional dialogue, communication between professional officials in neighboring towns on a sustained basis, or active professional leadership coordinating development among municipalities. Planning, as now practiced, appears capable of dealing with coastal areas only incrementally with little coordination or assessment of local resources in and among jurisdictions.

Politics - Political leadership for dealing with regional coastal management proposals is not in evidence. Politics for spokesmen of the political factor remain functionally based in such groups as yacht club members, local landowners, and developers. Personal values and a narrow scope of perceived responsibilities appear to preclude local politicians from having a significant impact on a continuing basis on regional issues. Voter appeal and increased tax revenues are clear motivating forces to elected decision-making outcomes. For this reason where there is no major upheaval in the local political system politicians favor production uses which create tax revenues. Such uses are not open space and low density residences. Regional environmental considerations are not seriously considered when local tax and voter support favor higher uses.

Consistent with this impact locally on the converse side is the local Conservation Commission which advocates open spaces but cannot
justify it fiscally under usual circumstances. Weak as they are, they have no regional organization or viewpoint. Conservationists seek to promote the natural coastal environment as an amenity resource but have little power on a regional basis to overpower large scale economic users of these resources.

Landowners exert only local interest in the majority of cases. The economics of development require regional market studies making developers a primary holder of regionally-oriented data.

The market factor for coastal land expresses an increased demand for higher uses throughout the study area, but is not expressing this demand in an integrated market. Local land-use patterns, laws and environmental quality appear to segregate this market factor into local sub markets. Demand is expressed almost exclusively for residential and marine oriented commercial facilities. Lack of comparable data among municipalities precludes a thorough locational analysis of market effects on land values.

Economics overwhelms ecology. There is no institutionalized ecologic viewpoint. It has been ignored until recently. There are no ecologic facts applied that are being translated into forms useful to countering regional scale development proposals.

Jurisdictions and controls reflect the varied uncoordinated approaches of single purpose agency and governmental units. Local controls in some instances can be effective.

An Overview:

The market factor is the primary force from which other factors in the decision-field derive their stance. Coastal policy expressed in
documents on zoning is a weak constraint to market factors in underdeveloped areas. Historical land-use patterns and present landowners constrain the market factor more than do planning, ecological, or jurisdiction and controls.

Such controls seek to control land-use and density, neither of which relate to particular areas of high amenity value or ecologic importance. Coastal resource amenity value, a basis in economic development, is not being seriously recognized by municipalities. General awareness of local coastal environmental patterns is not translated into regional awareness of the Bay as a resource totality.

The market acts on a regional scale while countervailing factors such as politics and planning are locally operative. Consumption uses have local impacts but are acted upon by regional economic forces. Increasing land-use capacity urged by the market factor works against sustenance of open spaces and coastal amenity areas. Public policy is not maintaining coastal open spaces and general public accessibility to the coastal environment. Town officials respond to productive uses as a tax resource generator and show little or no ecologic awareness.

With the exception of Warwick, public policy for coastal areas is formed without a regional awareness and reflects those factors that are vigorously presented. Policy formulation and quality depends more on the expertise and communication skills of the participants than it does on placement or particular agencies in government or the community.
SELECTED BIBLIOGRAPHY


Meyerson, M. "Five Functions for Planning." *Journal of the American Institute of Planners* (Spring 1956), 158.


Providence Journal Bulletin, Providence, R.I.


APPENDIX A

PERSONAL INTERVIEW QUESTIONNAIRE
PART I - Personal Interview Questions

Ques. 1  a) From this list, which of the boards and commissions do you consider have the greatest impact on the overall development policies of your city?

1. City Council as a whole
2. Redevelopment Authority
3. Planning Board
4. Historic Commission
5. Development commissions
6. Council Committee on Finance
7. Real Estate Board
8. Mayor and administrative staff
9. Zoning Board of Review
10. Other, who

b) Can you add to this list?

c) How would you define the major emphasis of the two most important boards or commissions during the past year?

Ques. 2 Rate this list of boards and commissions for their effectiveness in handling such coastal environmental issues as open space or salt marsh usage.

Ques. 3 From this list of boards and commissions which do you consider in competition for areas of functional responsibility in planning the use of your coastal land resources?

Ques. 4 From this list of those not directly affiliated with local government decision making which in the past have had the most influence on public decisions relating to coastal environmental concerns, such as land use in salt marsh areas.

1. realtors
2. developers
3. marina operators
4. Navy
5. land owners
6. local foundations
7. newspapers
8. Utilities companies
9. others, who
QUES. 5  a) How is a coastal planning problem such as the reservation of open space identified and stated by your town government?

b) Which of the following groups usually initiates action:

1. Planning Board  5. realtors
2. Redevelopment Agency  6. councilmen
3. area residents  7. city administrators
4. developers  8. others, who?

QUES. 6 From the following list indicate which types of potential coastal environmental problems receive the highest priorities in local government?

1. water pollution
2. dredging-filling
3. erosion
4. tract development unrelated to the natural landscape
5. strip commercial development
6. hurricane threat
7. industrial development
8. mass recreational use
9. other, what?

QUES. 7  a) Listed below are several alternative coastal land use classifications; which would you prefer for the _______ section of your shore areas?

1. manufacturing
2. heavy commercial-recreational, eg. Rocky point
3. community facilities, eg. tennis, swimming, marina
4. government use - armed services
5. open space - conservation areas, eg. walking, nature walks
6. utilities

b) Why did you choose this use?

c) Under what circumstances would you substitute one of the other uses if you had the opportunity to choose any from this list?

QUES. 8 Listed below are several decision sequences, which
most accurately portrays the manner in which the allocation of municipal money, materials, personnel, or legal protective devices were allocated when your town determined to __________?

1. Citizen petition Planning Board recommends to council
   Council City Committee Council

2. Planning Board Council Committee
   City Council

3. Petition Council Board rec. to comm. council
   City Planning Council City

4. Petition councilman sponsors bill council committee Planning board recommends council

5. Other, what?

QUES. 9

Listed below is the process which could take place in making an ordinary decision in government. Assuming that all groups contributing to public decisions regarding coastal environmental use all or a combination of these elements, which combinations seem to best fit the emphasis of ___________.

(see result of ques. 1)

1. Perception - obtaining of new information on coastal situation or problem.

2. Assimilation - analyzing information in order to see the problem from several facets.

3. Performance Assessment - determines that there is a gap between present goals and activities and dimension of the problem.
4. **Formulation of Alternatives** - Designs a number of possible actions to close the gap

5. **Analysis of alternatives** - determines consequences of possible actions

6. **Evaluates Alternatives** - evaluates consequences of alternative actions by measuring them against goals

7. **Strategy Selection** - develops course of action, examines how conditions correspond to this strategy

8. **Action impact & feedback** - assesses impact of action on situation, assesses new information as result of action, assesses how impact has altered the problem


---

Please rate the following in order of importance to councilmen making decisions regarding coastal land use and environmental considerations?

a). **THE PROGRAM OBJECTIVE** - What does the program set out to do? Are there several distinct objectives? How can they be formulated in clear and precise terms so that their degree of achievement can be observed and measured? What is their relationship to the norm established in surveying the problem situation?

b). **THE ACTOR** - Who enacts the program (eg., the Federal, State, or Local government? Who administers it?

c). **THE PROGRAM MEASURES (OR MEANS)** - What provisions are used to meet the objectives? What are the appropriations? To what extent are the measures mandatory, or can they be accepted or rejected by individuals on a voluntary basis?

d). **THE CONDITIONS** - What are the physical, technical, economic, and social conditions to which the measures are adapted and by which they are limited in their use? To what extent are the measures made flexible enough to suit
particular conditions of various regions or groups of people?

QUEST.11 Do you feel the Council sees the Comprehensive Plan as a means of
a) directing growth
b) stimulating growth
c) maintaining the status quo
c) ignores the Comprehensive Plan

QUEST.12 a) Do you feel that the present zoning in your town accurately reflects the recommendations of your city plan.
b) Is your capital budget following the needs outlined by your plan?

QUEST.13 Would you consider your Comprehensive Plan and Zoning Ordinance under:
a) constant significant revision
b) under small irregular change
c) fixed and well agreed upon
d) revised in reaction to circumstance

QUEST.14 Which of the following ways would you prefer to employ in influencing coastal land-use patterns: Please indicate which you consider to be the optimal method (most effective & most practical)
a) zoning
d) design standards
b) acquisition
e) special district regulations
c) easements
f) other, what?

QUEST.15 Below is a list of objectives which are commonly applied to coastal land areas. Which of these reflect most closely your coastal land use objectives in the ______ section of your shoreline?
a). development of single use categories
b). development of multiple use categories
c). protection of existing uses
d). increased public access to coastal resources
e). preservation of natural areas
f). allocation of coastal resources equitably among all social groups

QUEST.16 a) Are coastal land use objectives sufficiently defined that alternate objectives can be considered?

QUEST.15 b) Which of the following factors do you feel carries the most weight with decisionmakers in judging these
objectives?

a. the official plan of the area
b. the sentiments of the residents
c. the sentiments of the property owners
d. the arguments of the developers
e. the degree in which present land uses would be changed
f. other, what?

c) Do you feel there is a consensus among the City Council on priorities among these considerations?

QUES.17 Do you judge the advice of Federal and State agencies on such matters as open space preservation as you would information developed by local government?

\* QUES.18 a) Did you determine public preferences before making coastal land allocations? If so, how?

1. public hearing
2. survey
3. by those communicating with the administration and elected officials
4. by organized citizens' groups or interests
5. other, what?

b) Did you consider these opinions representative of the majority of the affected citizens in the _______ of your coastline?

QUES.19 If I had an idea to be implemented by local government concerning coastal land usage, what would be the best way to get it implemented?

a. petition council
b. petition planning board
c. form a citizen committee
d. talk to individual councilmen
e. get support from local groups
f. get support and recommendations from various city departments
g. other, what?
QUES.20  a) Do you feel your job title accurately reflects the major emphasis of your activities?
    b) Do you feel your superiors, peers, subordinates view your job in the same way?

QUES.21  If there are conflicts present among these views do you feel that they affect the quality of information you receive and the decisions you make?

QUES.22  To what degree do you feel the acceptance of others of your ideas toward the utilization of the ______ section of your coastline influenced your decisions towards its use?

QUES.23  a) Do you feel the organization or procedures of your town's administrative agencies constrict new ideas for coastal environmental management?
    b) Which of the following factors do you consider contribute most to inhibiting new ideas:

    (1) poor outside information sources
    (2) disinterest in the problems of the coastline
    (3) inflexibility of present programs to innovative reorientation
    (4) satisfaction with present level of program efficiency
    (5) personnel restrictions
    (6) budget allocations

QUES.24  To what degree do you feel new coastal management concepts should be tested either in your town or elsewhere before a commitment either legally or financially establishes them in your town? Such a concept or approach might be the acquisition of as much as coastal land as possible with leaseback privileges to the present owners.

QUES.25  The functions of town and state governments are increasing rapidly while at the same time government budgets are hard pressed to provide for these new
demanded functions. Your state and town governments spend money on many things. Below are listed some of these things on which the governments spend their funds. Should the governments spend more money, less money, or about the same amount on each program?

<table>
<thead>
<tr>
<th>Program</th>
<th>More Spending</th>
<th>Less Spending</th>
<th>Same Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. shore erosion control</td>
<td></td>
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<tr>
<td>2. water pollution control</td>
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<tr>
<td>3. hurricane protection</td>
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<tr>
<td>4. beach facilities</td>
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<tr>
<td>5. land use zoning</td>
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<tr>
<td>6. road improvement</td>
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<tr>
<td>7. open space</td>
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<tr>
<td>8. marsh protection</td>
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<td></td>
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<tr>
<td>9. land use planning</td>
<td></td>
<td></td>
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<tr>
<td>10. flood protection</td>
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<tr>
<td>11. beach creation</td>
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<tr>
<td>12. education</td>
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<tr>
<td>13. parking lots</td>
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<tr>
<td>14. harbor improvements</td>
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<td>15. mosquito control</td>
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<tr>
<td>16. industrial parks</td>
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<tr>
<td>17. town pier</td>
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<tr>
<td>18. unemployment compensation</td>
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<tr>
<td>19. forest fire control</td>
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<tr>
<td>20. city parks</td>
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</tbody>
</table>

QUES.26 For those programs above for which you said the government should spend more money, if the governments had to raise taxes to finance the additional expenditures necessary for these programs, then for which of these things would you still favor spending more money.

1. ______________________ 6. ______________________ 11. ______________________ 16. ______________________
2. ______________________ 7. ______________________ 12. ______________________ 17. ______________________
3. ______________________ 8. ______________________ 13. ______________________ 18. ______________________
5. ______________________ 10. ______________________ 15. ______________________ 20. ______________________

QUES.27 If more people coming to the coast each year cost the towns and the state more money during the next few years, do you think the governments should:
231

a. raise property tax___
b. raise sales tax___
c. spend less on other coastal programs___
d. spend less on noncoastal programs___
e. issue bonds___
f. go into debt____
g. begin and increase user fees for town and state beaches____

**QUES.28** If you checked 3c and 3d above, which programs suggested in number 1 above would you want reduced:

1. ______ 6. ______ 11. ______ 16. ______
2. ______ 7. ______ 12. ______ 17. ______
3. ______ 8. ______ 13. ______ 18. ______
5. ______ 10. ______ 15. ______ 20. ______

**QUES.29** a) If a nuclear generating station was to be established on Rome Point in North Kingstown, what do you feel the effect would be on your town?

b) On Narragansett Bay?

c) What of the following liabilities would concern you most, and why?

1. explosion potential
2. thermal pollution
3. change in the natural environment of the Rome Point area
4. Ecological Damage
5. change in currents
6. presence of high voltage transmission lines
7. the potential for damaging the esthetics of the area
8. other, why?

**QUES.30** What is the capacity of the West Bay communities
to absorb the following:

1. construction employment
2. operational employment
3. impact on schools, sewers, streets, recreation areas
4. housing
5. governmental supervision

**QUES.31** What is the single most important piece of information you would require before granting a permit for a land use change such as the utility request at Rome Point?

**QUES.32** What would be the effect in your town if the state passed and enforced a zoning change requiring conservation and recreational uses only of the shorelands in the future?

a) gain estimate of $_______
b) loss estimate of $_______
c) neutral

**QUES.33** What federal and state monies are now being used by your town which affects the coastal region?
APPENDIX B

MAILED INTERVIEW QUESTIONNAIRE
This final section of the questionnaire is designed to be completed by the interviewee and mailed in the self-addressed stamped envelope to the University of Rhode Island. None of the questions involve lengthy answers; in most cases, only a check mark is sought. The return of the questionnaire as soon as is conveniently possible after the interview will both add to the quality of the results of this important research and be most appreciated by the Department of Food and Resource Economics at the University of Rhode Island.

Thank you for your continued cooperation!
Ques. 1. Age at last birthday ______ years.

Ques. 2. Education:
   a) Formal school training - circle highest grade completed:
      1) grade school  1 2 3 4 5 6 7 8
      2) high school   1 2 3 4
      3) college       1 2 3 4
      4) graduate study 1 2 3 4

      Degrees: BS BA BFA MA MS MIF MPA MCP PHD Other ________
   b) Major at highest education level ______, year ______
   c) Non college training ______
      Trade or vocational ______

Ques. 3. Income:
   $3999 or $4000-  $6000-  $8000-  $10000-
       less    5999     7999     9999    11999
   $12000-  $14000- $16000- $18000- $20000-
      13999  15999  17999  19999 and over

Ques. 4. What is your full-time occupation? ______________________
   (If full-time city employee go to #6)

Ques. 5. How many hours a week do you spend on your regular job? ______ Attending to city business? ______

Ques. 6. What military, educational, work, or life experience has been most useful to you in making decisions affecting coastal land use as a public representative, official, political leader? ______________________

Ques. 7. When was the planning function started? ______ (year)

Ques. 8. What led to the planning function being started? ______________________

(continued)
Ques. 9. How fast has the planning function grown since it started?

   a) increase in budget from start _____________
         (amount) to size now _____________
   b) increase in personnel from start _____________
         to size now _____________
   c) increase in scope of operations (new
         functions) from _____________, _____________,
         to size now _____________

Ques. 10. Of the total personnel involved in the planning function, how many are involved in mostly administrative problems?

Ques. 11. What new planning functions have been added over the last two years? (If none, check here ______.)

   1. environmental quality
   2. water resources
   3. marine resources
   4. open space
   5. recreational parks
   6. industrial parks

Ques. 12. Do increases in budget and personnel go along with increases in planning functions within the planning agency?

Ques. 13. How broad is the scope of your planning functions?
   check one of these

   a) cover entire land-water area
   b) cover only land areas
   c) cover only limited land areas
   d) only feasibility studies
   e) comprehensive planning
   f) single function planning
   g) following and coordination of plans of others

Ques. 14. Who defines the planning functions of your organization?
   check one of these

   a) the town or city council
   b) the town or city charter
   c) real estate board
   d) chamber of commerce
   e) city manager
   f) mayor
   g) other, who?

Ques. 15. What town boards or commissions and outside groups such as State organizations and other towns compete with your planning functions?

(continued)
Ques. 16. What is your system of allocating financial resources within your agency?

a) problem perception
b) pressure points
c) professional considerations
d) tradition
e) other, what? ________

Ques. 17. Who regularly demands the services of the planning function?

a) real estate developers
b) business
c) residential owners
d) recreation boards or agencies
e) other towns
f) conservation groups

Ques. 18. What services does the demander normally receive?

a) feasibility studies
b) advice
c) design services
d) other, what? ________

Ques. 19. From whom does the planning function derive most of its outside support in conflict situations?

a) realtors
b) business
c) newspapers
d) state
e) other planners
f) other towns
g) town council
h) boards
i) commissions
j) other, who? ________

Ques. 20. How are those whom your planning function causes to suffer handled (such as zoning changes)? _________________________

__________________________

__________________________

Ques. 21. What goals do you have for your planning function?

a) encourage economic growth
b) provide more life amenities
c) improvement of existing service levels

(continued)
Ques. 22. What environmental shore protection has been done privately within your town?

Ques. 23. What is the most significant land use change along the shore during the past 3 years?

Ques. 24. What significant adjustments in environmental quality of the bay shore have occurred in the last two years?

Ques. 25. What do you think is the major emphasis of the State for our Bay coast?
   a) concerned with the coastal environment
   b) local planning assistance
   c) technical services
   d) specialized programs for coastal resource management

Ques. 26. Do you consider the state planning and zoning enabling legislation adequate support for the planning activities your town should undertake?

Ques. 27. Do you feel you have sufficient freedom to shift monies within your annual budget to meet unexpected needs?

Ques. 28. Do you undertake fund raising?

Ques. 29. What is the role of Federal grants-in-aid in supporting your working budget? ______% in supporting your capital budget? ______%?

Ques. 30. How much of your planning function is routinized? ______%

Ques. 31. Are planning employees isolated from planning conflicts?

Ques. 32. How is recruitment for new planning employees done?

Ques. 33. Promotions within your planning functions come from within _____ or outside _____?

Ques. 34. What do you look for in a new planning employee?

(continued)
Ques. 35. What is the turnover rate of new employees in the last three years? professional ____ , non-professional ____

Ques. 36. What internal training do you give new employees? ____
If so, what do you emphasize? ____________________________

Ques. 37. Listed below are some planning alternatives for directing changes in land use. Please rate each one for its effectiveness in your town. Please rate + for benefit; - for liability.

Alt. | Benefit (+) | Liability (-)  
--- | --- | ---  
zoning | |   
subdivision regulation | |   
health regulation | |   
building codes | |   
land purchase | |   
cluster development | |   
lease | |   
easement | |   
eminent domain | |   
grants-in-aid | |   
town management | |   

Ques. 38. To what do you contribute gaps in performance in your planning functions?

a) internal turnover  
b) internal technical ability  
c) low budget  
d) unexpected workloads  
e) change in state and federal rules  
f) change in political setting  
g) rapid rate of change in the community  
h) slow  

Ques. 39. How do you react to public criticism of your planning solutions to coastal problems?

a) not at all  
b) attempt to conform to image held  
c) attempt to change image held  
d) redefine functions or solutions  

Ques. 40. Are there any planning functions you are willing to give up? ____  If so, what? ____________________________

(continued)
Ques. 41. How will coastal environmental problems be resolved?

   a) adoption of innovative approaches
   b) keep basic gradual approaches
   c) general education of public to amenity values
   d) change outside rules, e.g., enabling legislation
   e) other, what? 

Ques. 42. On such natural municipal boundaries as the Pawtuxet River, Greenwich Cove, and Potowamut River, is there:
   a) formal effort to coordinate development policies toward these common resources
   b) awareness of planning activities of abutting towns
   c) no awareness of policies of neighboring towns, but willingness to cooperate in the future determination of new policies
   d) no awareness, no interest in future coordination

Ques. 43. Which board, commission or citizen group do you feel is most influential with the council or public in making decisions which relate to coastal land use?

1) City Council as a whole 10) realtors
2) Redevelopment Authority 11) developers
3) Historic Commission 12) marina operators
4) Historic Commission 13) Navy
5) Development commissions 14) land owners
6) Council Committee on Finance 15) local foundations
7) Real Estate Board 16) newspapers
8) Mayor and Administrative staff 17) Utilities companies
9) Zoning Board of Review 18) others, who?

Ques. 44. Which of the following factors most closely states your reasoning for this choice in #43?

   a) prestige of the board, commission or group
   b) prestige of the individual members
   c) political strength
   d) their technical ability in dealing with coastal concerns
   e) legal authority in dealing with coastal concerns
   f) their rapport with decision-makers
   g) other, what? 

Ques. 45. Which best describes your activities in local government (continued)
last year: (circle answer)

a) Sought to increase your influence and personal values on original decisions and to change and increase your responsibilities within your function or area of the organization.

b) Sought to solve new problems presented to you through rules specifying regular operating procedures. (Sought to maintain the status quo.)

c) Sought to promote only specific policies you were actively interested in. Attempted to create in others strong backing for your policies.

d) Sought to create a consensus within the rest of the organization before making any change in functions that affected the organization.

e) Sought to serve the public interest as you saw it beyond your organization even if your organization would suffer.

Ques. 46. Which of the following strategies would you employ in controlling the coastal environment in your town: (circle answer)

a) Decide what you wanted to do and then attempt to do it despite obstacles.

b) Choose perhaps the second best way to control the environment, but continue to strive for constant improvement beyond it.

c) Gather as many facts as time and money permits and seek to eliminate all factors which cannot be considered strictly objective.

d) Delay choosing a final policy until several alternative approaches have been thoroughly tested for practicality.

e) Choose a single policy which from your experience or judgement seems best.

f) Seek out and rely on others for choices.

Ques. 47. If you were asked to be chairman of a committee which was to study and present a program dealing with the use of

(continued)
the shoreline in your town, which of the following professionals do you think could offer the most valuable advice. Please rate 1, most valuable, 2 second most valuable, etc.

a) oceanographers
b) engineers
c) planners
d) lawyers
e) economists
f) industrial-commercial developers
g) ecologist
h) conservationists
i) other, who?

Ques. 48. Do you feel changes in the land use patterns should occur in your town if these changes would benefit the bay area as a whole even though accomplishing these changes would be disruptive to certain segments of your community?

a) strongly agree
b) agree
c) don't know
d) disagree
e) strongly disagree

Ques. 49. Should property ownership in the coastal area be:

held in common by each coastal town

held by a bay authority

held in state ownership

held in private ownership with no public regulation beyond zoning

held in private ownership with extended public regulation

none of the above, but instead

Ques. 50. Above is listed a few of the many programs which affect the quality of the coastal environment of Narragansett Bay. If one administrative agency was to be designated to organize and approve of these and other programs dealing with the use of the shoreline which of the following would you choose:

(continued)
Ques. 51. Which of the following general approaches to coastal environmental control do you favor:

a) zoning and performance standards
b) price-like devices such as deferential and preferential taxation and effluent charges
c) engineering or structural devices such as barriers, groins, etc.

Ques. 52. Which of the above do you feel is most practical administratively? ______ Why? ____________________________

Ques. 53. Here are some of the alternative ways for influencing and sometimes controlling land development. Please rank them in the order that you would prefer to see them applied in your town:

Cluster development zoning placing single family houses in circles (clusters) around dead-end roads away from the immediate shore so that greater shoreland environment is maintained.

Paid easements on existing property patterns to prevent future development by purchasing development rights along parts of the shoreline deemed publically necessary to retain attractiveness and maintain available space.

Condemnation with just compensation paid to owners to remove all present development along the shoreland and to re-create and attractive and open space area.

Zoning of shoreland into three zones: 1. Conservation and recreation zones on immediate shoreline; 2. Residential and developed recreation zones behind the first zone followed by the third multiple-purpose development zone.

(continued)
Cooperative shoreland districts designed to maintain the shoreland attractiveness whereby owners organize themselves to accomplish the one task (such as a fire district or soil conservation district).

No public controls of private land use patterns and practices.

No single family homes allowed, but clustered condominium (multiple family) homes with large open space areas between them.

Ques. 54. Please check the box which the coastal problems stated in the vertical column of the left can be most appropriately handled by the one of the agencies listed on the horizontal column below:

<table>
<thead>
<tr>
<th>Coastal Problem</th>
<th>National Agency</th>
<th>State Agency</th>
<th>River basin &amp; area authority</th>
<th>County authority</th>
<th>Metropolitan agency</th>
<th>Individual</th>
<th>Land owners</th>
<th>Associations</th>
<th>Individuals</th>
<th>Other</th>
</tr>
</thead>
</table>
APPENDIX C

A REGIONAL CASE STUDY

COMMERCE OIL CORPORATION - A NEW REFINERY FOR JAMESTOWN
Changes to the environmental quality of the West Narragansett Bay ocean environment may emanate from a variety of sources. Some of these changes are imperceptible, while the impact of others is immediately clear. The following case presents a story of a single development proposal whose impact would have had regional consequences. The real decision-makers in this instance were not located in a single municipality but instead were placed on several levels of government and in several private concerns and groups. It is in this case that the impact of the passive decision factors described in Chapter II demonstrate their importance. The significance of this narrative lies not in the merits of the particular proposal in question, but rather in the potential it exhibited for directing the overall pattern of future development on the Bay. Such a potential posed questions to decision-makers which theretofore had never been considered. This is what happened.

Commerce Oil Corporation - A New Refinery for Jamestown

During the early 1950's the economic condition of Rhode Island was not encouraging. Textile industries which had long been the backbone of the State's economy were declining. In 1947, 27,000 textile mill workers were without employment and 11,000,000 sq. feet of mill space remained empty.\(^1\) John A. Monahan, Executive Director of the newly created R. I. Development Commission noted in 1956 in a speech on Jamestown that the state had made good industrial progress over the

\(^1\)Providence Journal, May 13, 1957.
last few years but that "we hope in the next few months to do a great deal more". In concluding the speech Monahan stressed the importance of the Navy in bolstering the State's economy, but noted that Rhode Island was receiving $47 per capita of prime defense contracts while Connecticut was receiving $620. In manufacturing Rhode Island was receiving $307 per manufacturing worker, Connecticut was receiving $3200.2

Senator Pastore at the time was advocating action at both the Federal and State level to improve the condition of the State. "Our industry in Rhode Island needs modernization," he said. "Many of our plants are archaic. Industry has taken the position, at times, that it has done enough to modernize. Labor has sometimes taken the position that not enough profits have been plowed back in to industry to modernize."3 In forming the Development Council in 1951 Governor Roberts had made his major political thrust around the issue of economic development for the State.

During 1953 and 1954 Lehman Brothers, New York financiers, in conjunction with Gulf Oil Corporation created Commercial Oil Company which sought to build a refinery first in Portsmouth and then in Jamestown. The Corporation came into existence because Gulf Corporation sought an east coast refinery to which they could transport Kuwait crude oil and from which they could ship the processed oil to transfer points. The land originally acquired by Commerce, located on the north-

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2bid.

3bid.
ern end of the Jamestown Island and stretching along both the East and West shores, was sparsely settled with summer and permanent homes. Before the refinery could be built, however, several important hurdles had to be crossed. The acquisition of additional land was necessary both in Jamestown and North Kingstown. Local zoning restrictions had to be overcome. Navigation clearances from the Navy were required as well as from the Corps of Army Engineers. A large fresh water supply also had to be obtained for the operation of the refinery.

By September 27, 1956, the Jamestown Town Council had passed a zoning amendment creating a refinery use district which included over 16,000 feet of shoreline on the east and west coastlines and included over 640 acres in the interior of the island. Councilman Francis K. Costani and Town Solicitor Daniel Murray vocally supported the establishment of the $55,000,000 refinery on the grounds that it would prove to be an immense tax producing resource for the town which had no industrial base and would serve as an employer of 250 area residents. Public opinion at this time had not become polarized for or against the proposed refinery, yet all were aware of the tax benefits it offered the town.

During this period, however, several of the residents whose properties were being sought by the Commerce to enlarge their site and others in the immediate area became alarmed at the implications a development of this scale and nature would have on the character of the Town and the Bay area. Forming the Jamestown Protective Association with an initial membership of 17 members, area resident Dr. William W. Miner sought the support of the Navy, President Eisenhower, and the
State Division of Rivers and Harbors in preventing Commerce from proceeding with the construction of a concrete pier which was to extend 850' into the East passage of Narragansett Bay then run 1205' parallel to the shore.

Up to January 1957, the forces gathering on both sides of the issue remained locally based. Each sought to win the support of the Navy for their own point of view. The Navy's Department of Defense Mobilization had the authority to approve or disapprove of the extension of the rapid tax write-off certificate which was essential to Lehman and Gulf's financing plans. The State up to this time remained reticent on the issue although Governor Roberts was known to be working for the establishment of refinery as was Development Council Director, Monahan. Before Commerce could proceed in any meaningful way with the actual construction the pier had to be built with the approval of the State Division of Rivers and Harbors with subsequent approval of the Navy and Corps of Army Engineers. On January 9, 1957, the Director of the State Division of Rivers and Harbors announced that a public hearing would be held on January 22. The released statement said:

The state is anxious to obtain the views of navigation interests and the general public as well as other interests which would be affected (by the establishment of the refinery).\(^4\)

The Jamestown Protective Association, whose members had quickly swelled to over 700 had not been idle during this period and had, as a result, been instrumental in forming the West Shore Association composed of

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over 200 members from North Kingstown, East Greenwich, South Kingstown, and Narragansett. On February 15th a Journal Bulletin editorial urged the creation of a panel of experts from the University of Rhode Island and from industry to try to answer some of the following questions.

1. Is the Commerce Oil refinery a threat to the Bay resources?

2. How would such an installation affect the Navy?

3. What is the balance between the immediate economic gain offered by the refinery and the long term social benefits the Bay itself offers in its undeveloped state?  

Within a week, State Senator Joseph Savage co-sponsored a bill before the Rhode Island Legislature which would create a Senate subcommittee to investigate the economic impact of the Jamestown Refinery.

During the last two weeks in January 1957 several key developments took place. Navy Undersecretary Thomas S. Gates, Jr., had announced to Commerce Oil's lawyers in Washington that the Navy would "prefer that the refinery be located elsewhere" and that the use of the planned site might force "adjustments in the Navy's operations which could affect military readiness." The Newport City Council backing the Navy voted to oppose the refinery location. The Corps of Army Engineers in separate deliberations had approved phases of the refinery plan under its jurisdiction after conferences with the Company and public hearings.

Commerce Oil Company began the second round of negotiations with the Navy in Washington and finally managed to overcome every explicit objection of the Navy. This included a plan to relocate the proposed

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pier from the West to the East Passage of the Bay, and the resiting of other facilities the Navy feared would interfere with aviation controls. After this second round of meetings Undersecretary Gates wrote,

"We have urged the Company to give full consideration to the needs of national defense in making their final determination as to the site of the proposed refinery. We only hope that they will select some other location and not reduce the value of Narragansett Bay as one of the Navy's three principal operating bases." 7

What the Navy communicated to the Office of Defense Mobilization whose recommendations had a major effect on the financial arrangement of backers of Commerce Oil was not public record. It was clear from the Navy's statements however that Narragansett Bay's deepwater channel that had originally attracted the Navy to establish the Newport and Quonset Point Navy bases was also an important factor in Commerce Oil's intentions to locate in the Bay Area. No other Bay in the New England Region offered the site potential for such a refinery supported by tankers in the 100,000 ton scale.

North Kingstown, feeling the pressure exerted by the West Bay Association, began to assess its position toward the refinery. It was the intention of Commerce Oil who had already spent several hundred thousand dollars in acquiring property on Jamestown and in North Kingstown to sink wells in North Kingstown to supply the refinery with the required 2 million gallons a day for use in the refining process. The location of the proposed well sites near the municipal wells prompted the Town Council to direct the Town Solicitor to take steps to insure and protect the Town's water rights.
While opposition appeared to be growing in every quarter proponents were becoming more active. On the State level Governor Roberts and State Development Director Monahan were speaking out for the installation of the facility while locally the Jamestown Town Council sought resident support. A meeting sponsored by the Commerce and Gulf Oil Corporations was held at the Barrington Yacht Club for members representing yacht clubs and marinas across the State to explain the effects the refinery would have on yachtmen.

Extensive oil spillage from a Sinclair Oil Company tanker off Newport in 1952 had aroused much concern among yachtmen in the Bay area who witnessed the lengthy conflict between the City of Newport and the Sinclair Co. over the cost of boating and beach damages.

During the winter of 1957 Commerce Oil extensively circulated brochures describing modern refinery methods and how through modern design refinery facilities could be attractively integrated into the landscape. Nevertheless, in February the report of the Governor's Advisory Commission set up to study the situation concluded,

"The existence of a refinery at Jamestown would be incompatible with Naval operations in the Bay."8

This statement focused the issue again around the economic importance of the Navy to the State leaving issues of environmental concern as a secondary consideration.

Shortly after the report of the Governor's Committee was issued, the Journal Bulletin editorial entitled, "On Balance, a Refinery on

Jamestown looks good for Rhode Island." The paper stated that it would not support the construction of the refinery if they believed the plant would be a real, present and perpetual danger to the Bay everyone wanted to protect. Citing the danger of fire and explosion, noise, smoke, particulate matter, toxic and noxious gases, odorous materials, glare and vibration, the paper urged rigorous standards be applied in Jamestown.\^9

Governor Roberts had made a passing reference to enacting air and water pollution controls in the State Legislature and promised to shut the refinery down if it did not conform after it was built. Secretary of State Notte who had been a proponent of the refinery more candidly told fishermen at a meeting of the Bristol County Shellfish Association that he had "visited the refinery area" and that from first hand experience he was convinced that no safeguards were able to cure the nuisance--actual, not potential--of the refinery.\^10 Anthony Del Sesto, Planning Director of Cranston, was quoted as saying that the State needed new industry, that the refinery was an industry but added that for this type of industry an appropriate site should be sought elsewhere than on Jamestown. The Jamestown Council had enacted no ordinance up to this time imposing any performance standards on the proposed refinery.

Within the next 6 months Commercial Oil Corporation began to push more aggressively in seeking a resolution of the issue on the local level. On March 12, 1958, the controversy moved to the courts when


\^10Ibid.
Commercial Oil Corporation filed suit for $34,000,000 in U.S. District Court against the original 17 members of the Jamestown Protective Association charging them with conspiring to block the refinery. Among the attorneys for the plaintiff was Daniel Murray, Town Solicitor for Jamestown. Later the suit against the landowners was dropped but a counter-claim for the defendants seeking an injunction to stop the refinery was pressed forward by the Protective Association under the legal advice of attorneys Moore, Virgadamo, Boyle and Lynch of Newport. Commerce Oil continued their public relations efforts by purchasing a full page advertisement in the Sunday, March 9th Providence Journal with a general aerial view of the proposed refinery and an architect's rendering of the facility which included, in addition to the refinery equipment, an athletic field house, a swimming pool, two baseball diamonds and tennis and badminton courts.

The federal suit which extended through 41 days of court hearing, 19 days to present the Association's case and 22 days to present the refinery's case was finally resolved with a decision which was 5 months in preparation handed down by Judge Edward W. Day.

"I am satisfied," Judge Day ruled, "that the operation of the said refinery in the manner and at the location proposed by the plaintiff (Commerce Oil) would cause a substantial diminution both in the values of the defendant's properties and in their enjoyment thereof, as measured by the degree of comfort the average man living in such a locality has the right to expect.

It follows that said use will be unreasonable and hence a nuisance to the defendants (the Jamestown Protective Association) against which they are entitled to injunctive relief."

Regarding the threat to the environment of the town the Judge ruled in his 33 page decision that:

"...The credible testimony in this case establishes that said gases (from the operation of the refinery) will be carried by prevailing winds at all times to the properties of some of the defendants, and, because of their extremely disagreeable odors in very low concentrations and their cumulative effect, they will seriously diminish both the value of the defendant's land as residential properties and there enjoyment thereof."\(^{12}\)

In ruling that the Commerce refinery would be a nuisance Judge Day said that the fact that it may be useful or may contribute to the welfare of Jamestown was not legally at issue in the case. The zoning amendment creating a refinery use district voted by the Town Council on September 27, 1956, was cast as invalid.

"It is a matter of common knowledge that an oil refinery is a potential source of danger from fire and explosion unless properly constructed. And it is similarly a matter of common knowledge that such a danger from fire and explosion can be substantially lessened if not entirely eliminated by the imposition of proper restrictions and safeguards relating to its construction. The record in this case is completely devoid of any evidence that could possibly support the finding that said amendment to the building ordinance is conducive to the conservation of public health, safety or welfare of said town."\(^{13}\)

Regarding the license granted Commerce by the Town Council Judge Day said that the ordinance under which it was granted was illegal because it was not in strict conformity with the General Assembly Enabling Act that provided for the town ordinance.

He ruled that the ordinance did not provide the strict control

\(^{12}\) Ibid.

\(^{13}\) Ibid.
over the refinery operations specified by the statute. Instead the Council incorporated in its ordinance only "by reference" standards described by such organizations as the National Board of Fire Underwriters.

Harold M. Geller, the Executive Vice President of Commerce said, "We definitely are going to appeal." In the appeal proceedings Commerce Oil fortunes took an upturn when on June 16, 1960, the U.S. District Court of Appeals reversed the restraining order against construction and unanimously denied petition for a rehearing. Attorneys for the Jamestown Protective Association made statements that they were considering taking the case to the Supreme court.

While at least some of the legal recourses were being resolved for Commerce Oil the ground swell of local opposition was gaining new support throughout the West Bay region. The Narragansett Bay Homeowners Association had formed consolidating many of the mainland groups which separately had opposed the refinery. Association President Lewis G. Calvani of the Newport Chamber of Commerce noted that in December 1958,

"Very few people are willing to risk capital in investment in the area (Narragansett Bay Area) before knowing whether Narragansett Bay will become a major site of the oil refining industry with the subsequent annihilation of its present character. Capital investment would be spurred and initiative released if the oil refinery industry is excluded from the bay. Exclusion of the industry would be a clear demonstration that the State intends to protect its greatest natural resources."

In urging stronger support in their fight Calvani noted that the Association budget had dropped from over $56,000 to less than $1,000 and that

the backers of the refinery had already spent over $1 million.

In December 1960, after over seven years of controversy Commerce Oil Corporation had still to resolve the difficult restrictions placed on the refinery construction as a condition of approval by the Navy; had not received the rapid tax write-off certificate from the Office of Defense Mobilization; faced continued court entanglements with the Jamestown Protective Association, and was losing the active support of State political leaders who were feeling the pressure of public sentiment against the refinery proposals. In addition Democratic Senatorial Candidate Claiborne Pell has stated,

"I've weighed it carefully in my mind. As I see the picture, the refinery is objectionable in particular to the Navy. In toto, I would be inclined to believe there should not be a refinery on the Island of Jamestown."

During this period Commerce Oil completely stopped their efforts to establish the refinery. Members of the Rhode Island Development Council who were actively participating in the issue resolution believe that the legal and political implications of the refinery controversy forced financial backers of the proposal to withdraw their support for the refinery.

Francis R. Costani, Acting City Council President of Jamestown, reflected in his remarks to Town Council in 1959 the dismay and distrust he felt in the final outcome of the issue. He stated that he felt that a wealthy minority of out-of-town people had managed to overrule a workers majority. In reading a column written by Drew Pearson

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before the Council he said that it was necessary to inform the people of Jamestown,

"So that they will be able to defend themselves against outside intruders, many of whom are in high places. Much of the opposition to the refinery was in the dark and for that reason I think the Council should make public any information that comes to its attention."\(^{17}\)

No such information has yet turned up.

But while there was no evidence that outside "intruders" directly influenced public officials, it is interesting to note that interviews with both attorneys for Commerce Oil and the Jamestown Protective Association stated that the case which is the longest on record in the State's history tied up the majority of their respective legal staffs for more than a year prior to and during the final court presentation. While Commerce Oil Corporation could afford such an outlay it is difficult to see how the Protective Association which had no formal resources could sustain such services without substantial financial backing.

People closely associated with the case during this period on both sides of the issue unanimously felt or speculated that this support which although it lost the legal battle ultimately won the environmental war was supplied in generous measure by philanthropist Doris Duke of Newport. Attorneys for the Protective Association, Moore, Virgadamo, Boyle and Lynch of Newport declined to speculate on this question.

**The Planning Factor**

Even though the Rhode Island Development Council's mandate was to encourage economic development, interviews with staff members participat-
ing in this issue indicated that no effort was made on the part of that state agency to analyze the potential impact of the refinery on the Bay or Bay area communities. At that time Cranston and Warwick had planning departments but they played no apparent role in influencing the State government's position supporting the plan. Neither the State or local governments had the technical resources available to effectively determine objectively what the impact of this facility might be both economically or ecologically. The University of Rhode Island also had no formal mechanism for organizing this information.

Organizationaly there was no mechanism for relating the local concerns brought about by the externalities of this proposed development to the supposed benefits this refinery would bring to the region. As a result each jurisdiction and citizen's group acted independently through various institutions such as local government, while Commerce Oil could maximize its organizational capabilities and actually plan a development strategy for gaining the public sanctions required. Their highly organized institutional form, embodied in the modern corporation gave them an advantage over the highly fragmented positions taken by opponents. There was no institutional structure representing the public which could counteract the viewpoints expressed by this industry. There was no agency capable of answering the question posed by the editorial writer on the Journal Bulletin, "What is the balance between the immediate economic gain offered by the refinery and the long term social benefits the Bay offers in its undeveloped state?" Ultimately it was the Navy that demonstrated the strength to overcome the company's position. Local, state and regional concerns for the type of develop-
ment precedent this refinery embodied had no mechanism for expression. Planning did not interact as a factor in this issue resolution.

The Political Factor

The political factor had an uneven impact on this issue resolution. Governor Roberts sought to strengthen his position by supporting economic development of the State at the risk of greatly depleting the quality of the State's major natural resource. The heads of administrative agencies charged with overseeing the use of this resource followed his lead.

The many positions taken for and against the proposal had the effect of keeping elected state legislative officials from actively participating in the interaction between the corporation and the public. It was not until groups joined ranks that a clear position became evident for legislative decision-makers. At this point they moved toward stopping the proposal.

Citizen opinion against the proposal embodied in the Jamestown Protective Association proved to be the major political force blocking the refinery. They were able to both delay construction of the refinery and also swing public opinion against the proposal. This small group unencumbered by an official organization was able to forcefully express their views against the proposal. No other political organization was able to do this without alienating some of its supporters. One might hypothesize that traditional political institutions on the State and local level are ill-equipped to deal with radical large scale development proposals when public opinion is unclearly expressed.

On another level, politics may have played the deciding role in
this issue resolution. Extensive inquiries failed to determine on the national level why the Navy did not grant the rapid tax write-off certificate. Whether oil lobbies influenced the Republican administration on this issue is unclear. It was on this point that the issue resolution revolved. Local political sentiment appeared to bear little impact on the Navy's decision. Indeed, in the final analysis, the relationship between Commerce Oil Corporation and the Navy Department was of greater import than the local relationship between the potential environmental polluter and the local environmental users.

The Market Factor

There was only one significant reason why Commerce Oil Corporation sought to locate on Narragansett Bay. The location of the Bay and its deep water channels provided a resource the company could not find elsewhere. This aspect of the Bay made it in great demand for this specialized use. In this case it was not competing demand but scarcity of this resource characteristic that made the purchase price for access to this resource one investment on which Commerce Oil would not quibble. When local landowners resisted for political reasons the market pressures to sell out the Corporation sought to have the courts sanction their market influence which in this case they created.

On a state-wide basis the creation of added jobs and tax revenues greatly influenced the decision-makers in Jamestown as well as on the state level. The market factor can be assessed as the primary reason the company received state and local support. It did not seem to make a great impact on regional functionally oriented groups such as yacht or fishing clubs or on such local governments as Newport or North Kings-
town whose concerns were expressed because of fear of economic and environmental depletion in their respective towns due to the competition the refinery posed. In Newport the Council felt the refinery tankers would hinder the Navy, thus making Newport less desirable as a base. This base is the major source of economic stability for the City. In North Kingstown the refinery was viewed as competitive with the town's ground water resources. Being the closest adjacent municipality, the town viewed the economic impact of the refinery as potentially costing the town money by depleting its water resources without adding to the town's tax base. It appears however from subsequent interviews that environmental concerns are of lesser importance than the potential for increased tax revenues when, in a different case, the economic benefits accrue to North Kingstown (see Appendix D). The market factor played a critical role in shaping the thinking and actions of almost all the participants in this case. Only the Jamestown Protective Association and other citizen groups argued against the issue on grounds other than those dealing with economic concerns.

The Economic-Ecologic Dichotomy

Neither local, State or Federal governments or their agents represented the ecologic viewpoint in this issue; nor was there any institutionalized voice capable of doing so. The particular Bay resource characteristic of depth attracted Commerce Oil to the Bay and yet no action was taken to preserve environmental qualities of the other Bay characteristics. Only the Jamestown Protective Association advocated environmental considerations. They were supported by individual contributions by people whose personal values reflected this
organization's position. While they were required to take a defensive position against the advocates of the market factor by using citizens groups to pressure elected officials and by using courts, they were unable to coerce state or local jurisdictions to seriously consider environmental concerns. This case strongly demonstrates why this dichotomy exists and how, as a factor in the decision-field, this factor is a passive consideration. The ecologic viewpoint is more a way of thinking and a reflection of personal values than a definable method of operation generating immediate fiscal returns.

**Jurisdictions and Controls**

The diversity of jurisdictions and controls had a significant impact on Commerce Oil's plans to construct a refinery. It appears they had the greatest effect in negating the company's plans on the lowest and highest levels. Both local landowners and the Navy proved the most difficult jurisdictions from which the company required sanctions. There appears to have been no communication among the administrators of these jurisdictions and controls. Hence Commerce presented different aspects of their proposals to those jurisdictions and controls which can be described as holding the middle area. An example of these would be the State Division of Rivers and Harbors, the Corps of Army Engineers and the local government of Jamestown. Each viewed the proposal from their own jurisdictional point of view with Jamestown seeing the proposal from almost an entirely economic viewpoint.

It appears only local landowners and the Navy viewed the proposal as a whole. Both rejected it.
APPENDIX D

THE ROME POINT POWER PLANT - BENEFIT OR LIABILITY
The following narrative describes the setting for a major environmental issue which will arise in the next ten years. The decision-makers interviewed all will probably play an important role in its resolution. Ecologically and economically this issue bears a close resemblance to the refinery case in Appendix C. The purpose of presenting this case is to document the fact that future large scale development proposals will be placed before local decision-makers which have a regional impact. Who will have the authority to resolve such issues and how will local and regional development objectives be reconciled?

The Rome Point Power Plant - Benefit or Liability

In September, 1953, the Narragansett Electric Company bought 98 acres of sloping woodland abutting Rome Point in North Kingstown. The parcel, located approximately 1/3 of a mile north of the Jamestown Bridge, is bound on the west by Boston Neck Road (Coastal Rt. 8) the inland access point; and on the north and south by large undeveloped parcels of woodland owned by individuals, one of whom is currently a member of the North Kingstown Town Council (but was not at the time of the acquisition). The eastern boundary of the property has approximately a two hundred foot frontage on Narragansett Bay.

Though the property was acquired over 17 years ago, the surrounding area remains the least developed of any section of the coastal environment within the study area. The current North Kingstown Planning Board Chairman and other decision-makers feel this general section of the coastline will remain in this state because of the difficulty in
sewer the area and the ineffectiveness of septic systems in handling anything but light charges of effluent. The nearest dwelling to the site is approximately one half mile. Developers owning property which shared similar soil characteristics located immediately south of the Jamestown Bridge were required by these same decision-makers to recognize this consideration and increase their lot sizes from a twenty to fifty thousand square foot minimum. Currently the Rome Point site is zoned for single residential development with a twenty thousand square foot minimum lot size.

At the same period during 1951 and 1952 when Lehman Brothers of New York created Commerce Oil Corporation, Narragansett Electric Company felt it would be prudent to purchase an additional generating site on Narragansett Bay which could be put into use as a fossil fuel or nuclear power generating plant as the future demand on the company demanded. It was felt by company officials that a site in the South County region would be advantageous because of its proximity to existing service areas, areas to the north in the Providence SMSA, and sources of potential growth to the south which include the University of Rhode Island and the Southern Rhode Island-Eastern Connecticut land areas.

Company officials report that the selection and acquisition of the site was made on criteria of availability and least cost and was completely independent of and without knowledge of the potential relationship to the proposed commercial oil refinery to be located on Jamestown directly across the West Passage of Narragansett Bay, a distance of less than one mile from the North Kingstown site.

No official schedule has currently been set by the company for
constructing any type of station on this site. Indeed, they are moving very cautiously in this direction. As part of the "Big 11 Power Loop", a New England network of electrical power plants, Narragansett Electric Company has recognized the future economies and desirability of establishing nuclear power generating stations. They appear equally aware of the intense public concern over questions of ecological damage and thermal pollution potential which have focused national attention on such rural areas as Vernon, Vermont, where a nuclear station has been constructed on the Connecticut River. A major fossil fuel generating station of the Company located on the Providence waterfront is a heavy contributor to the State capitol's air pollution problems. In a recent front page series of articles on this subject in the Providence Journal Bulletin, the State Director of Air Pollution Control stated that Narragansett Electric Company was the state's number one source of air pollution.¹

Prior to this series and cogniscent of the Commerce Oil controversy, Narragansett Electric Company contracted with the University of Rhode Island to gather all physical and biological data on this land and on the West Narragansett Bay passage that would be needed to undertake the necessary research before establishing any type of generating facility at the proposed location. Under a separate research grant from the Department of the Interior and endorsed by the company, the University of Rhode Island is seeking to determine uses for the heated water that would be discharged from a nuclear plant at this location. Such

potential uses which might benefit from the application of this water are recognized as being:

**Industrial:** Sterilization of food chlorine-caustic soda Plastics

**Commercial:** Greenhouses Laundries Dairies Hotels

**Public:** Sterilization of sewage Snow removal Swimming pools Aquariums

A principal investigator on this project, Dr. Vincent Rose, Assistant Professor of Nuclear and Ocean Engineering of the College of Engineering at the University of Rhode Island, estimated that because of the complexity of such an engineering and design proposal as well as the time span inherent to compliance with and approval of federal regulations and licenses that any facility projected on site could not be expected to be in operation much before 1980.

It is impossible to estimate the potential impact of such a nuclear facility on North Kingstown or the Narragansett Bay coastal environment, ten years hence should it be built. Based on current trends in the electric industry, however, Dr. Rose estimates that such a facility would, if completed today, probably be in the 1000 megawatt scale, slightly larger than the nuclear plant located at Haddom Neck, Connecticut, and would cost in the range of $230-270 million. Should cooling towers be required as was the case in Vernon, Vermont, $25 million would be added for each tower.

Based on this estimate the following computation might be used as
a general guideline to the financial impact the Rome Point Station might have on North Kingstown based on the current tax rate of $33.50 per $1,000 assessment using a 100\% evaluation for the base year of 1961.

| Land (98 acres)² | Valuation | $122,500 | Annual Tax | $4,103.75 |
| Rome Point Power Station (1 cooling tower) | $275,000,000 | $221,250.00 |
| Total | $275,122,500 | $225,353.75 |

The current assessed valuation of North Kingstown real estate is $82,300,000. Total tax receipts for the town this tax year amounted to $3,051,089.³ Applying these figures as reference point, one can see that the impact of such a generating station in North Kingstown would, in terms of tax dollars, increase real tax revenues by 30\% if it were completed today.

Eighteen key decision-makers in the study area were personally interviewed and asked the following questions as a basis for discussions (Appendix A, Q. 29-31).

1. (A) If a nuclear generating station was to be established on Rome Point in North Kingstown, what do you feel the effect would be on your town?
   (B) On Narragansett Bay?
   (C) What of the following liabilities would concern you most, and why?

   1. Explosion potential
   2. Thermal pollution

²Office of the Assessor, North Kingstown, R.I., 1/24/70.
³Office of the Assessor, North Kingstown, R.I., 1/24/70.
3. Change in the natural environment of the Rome Point Area.
4. Ecological damage
5. Change in currents
6. Presence of high voltage transmission lines
7. The potential for damaging the aesthetics of the area
8. Other, why

2. What is the capacity of the West Bay Communities to absorb the following:

1. Construction employment
2. Operational employment
3. Impact on schools, sewers, streets, and recreational needs
4. Housing
5. Governmental supervision

3. What is the single most important piece of information you would require before granting a permit for a land-use change such as the utility request at Rome Point?

**North Kingstown - The General Consensus**

The four decision-makers in the North Kingstown government from the town council, town administration, the Planning Board and the Conservation Commission all felt strongly that the tax benefits to the town would be the most significant impact of the supposed station on the town. Only one individual in the four felt the plant might have any effect on Narragansett Bay, though thermal pollution and high voltage transmission lines were viewed as liabilities. No decision-maker in North Kingstown or the three other communities felt the presence of the plant would have any significant effect on the communities capacity to absorb construction employment, etc. (0.2). All felt pollution was the major aspect about which they would seek additional information.
The Cities of Cranston and Warwick expressed strong negative attitudes toward the plant both of the effect it would have on their cities and on the Bay. The related themes of thermal pollution and ecological damage were viewed as the major threats to the Bay and hence to these communities. The majority of those interviewed in these cities, especially those non-elected members of boards or from their respective administrations expressed the view that the plant should be seen as a potentially harmful development and further that the company should be expected to furnish complete information on all aspects of the operation affecting the coastal environment. Warwick Planning Director felt further that such a development like a nuclear station or an oil refinery would establish a scale and style of development which might permanently change the contemporary residential development patterns of the West Narragansett Bay coastal environment.

The Towns of North Kingstown and East Greenwich expressed no or mild concern over the potentially harmful effects of such a plant. These concerns were articulated in terms of engineering and safety precautions such as Atomic Energy Commission Reports and provisions for performance or maintenance guarantees rather than ecological concerns.

Those that expressed the strongest negative opinions shared either a professional training in the areas of conservation and ecology or regularly used the Bay for recreation purposes.

Conservation Commission Members interviewed held no or mildly negative opinions toward the establishment of the plant.