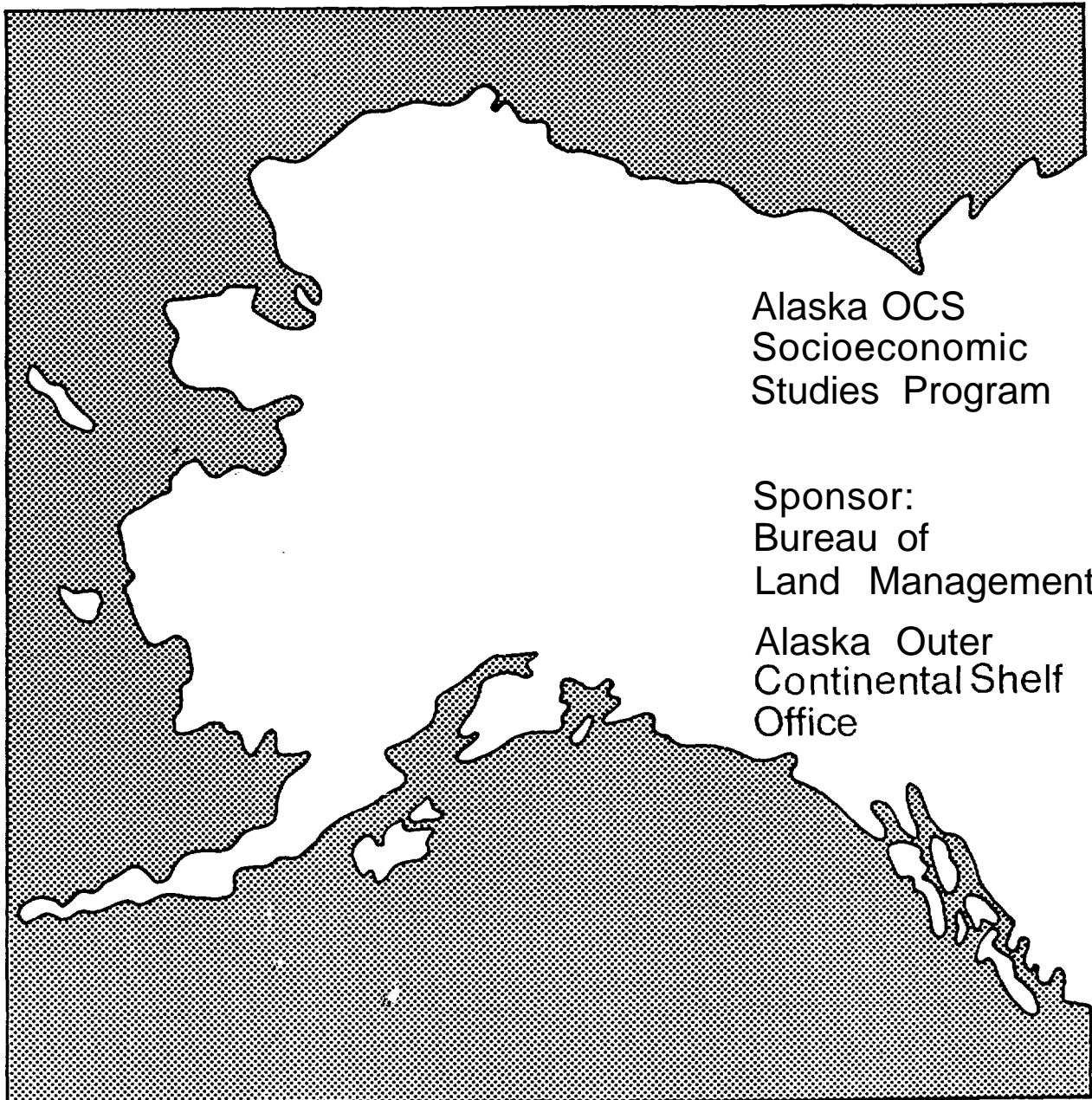


Technical Report  
Number 47



Alaska OCS  
Socioeconomic  
Studies Program

Sponsor:  
Bureau of  
Land Management

Alaska Outer  
Continental Shelf  
Office

Lower Cook Inlet  
Petroleum Development Scenarios  
Sociocultural Systems Analysis

The United States Department of the Interior was designated by the Outer Continental Shelf (OCS) Lands Act of 1953 to carry out the majority of the Act's provisions for administering the mineral leasing and development of offshore areas of the United States under federal jurisdiction. Within the Department, the Bureau of Land Management (BLM) has the responsibility to meet requirements of the National Environmental Policy Act of 1969 (NEPA) as well as other legislation and regulations dealing with the effects of offshore development. In Alaska, unique cultural differences and climatic conditions create a need for developing additional socioeconomic and environmental information to improve OCS decision making at all governmental levels. In fulfillment of its federal responsibilities and with an awareness of these additional information needs, the ELM has initiated several investigative programs, one of which is the Alaska OCS Socioeconomic Studies Program (SESP).

The Alaska OCS Socioeconomic Studies Program *is* a multi-year research effort which attempts to predict and evaluate the effects of Alaska OCS Petroleum Development upon the physical, social, and economic environments within the state. The overall methodology is divided into three broad research components. The first component identifies an alternative set of assumptions regarding the location, the nature, and the timing of future petroleum events and related activities. In this component, the program takes into account the particular needs of the petroleum industry and projects the human, technological, economic, and environmental offshore and onshore development requirements of the regional petroleum industry.

The second component focuses on data gathering that identifies those quantifiable and qualifiable facts by which OCS-induced changes can be assessed. The critical community and regional components are identified and evaluated. Current endogenous and exogenous sources of change and functional organization among different sectors of community and regional life are analyzed. Susceptible community relationships, values, activities, and processes also are included.

The third research component focuses on an evaluation of the changes that could occur due to the potential oil and gas development. Impact evaluation concentrates on an analysis of the impacts at the statewide, regional, and local level.

In general, program products are sequentially arranged in accordance with ELM's proposed OCS lease sale schedule, so that information is timely to decisionmaking. Reports are available through the National Technical Information Service, and the BLM has a limited number of copies available through the Alaska OCS Office. Inquiries for information should be directed to: Program Coordinator (COAR), Socioeconomic Studies Program, Alaska OCS Office, P. O. Box 1159, Anchorage, Alaska 99510.

Technical Report No. 47

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Alaska OCS Socioeconomic Studies Program

LOWER COOK INLET  
PETROLEUM DEVELOPMENT SCENARIOS  
**SOCIOCULTURAL SYSTEMS ANALYSIS**

Prepared for

Bureau of Land Management

Alaska Outer Continental Shelf Office

Prepared by

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Stephen R. **Braund** and Associates

January 1980

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Alaska OCS Socioeconomic Studies Program  
Lower Cook Inlet  
Petroleum Development Scenarios  
Sociocultural Systems Analysis

Prepared by  
Stephen R. **Braund** and Steven R. Behnke of Stephen R. **Braund** and Associates  
for Peat, Marwick, Mitchell & Co.

January 1980

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# I. INTRODUCTION

## CONTEXT OF STUDY

### Alaska OCS Program

This report is one of several integrated studies which make up the multi-disciplinary Alaska Outer Continental Shelf (OCS) Socioeconomic Studies Program. Sponsored by the Department of Interior, Bureau of Land Management (BLM), the overall purpose of the OCS studies program is to determine and evaluate the potential onshore social, economic, and physical impacts caused by proposed OCS oil and gas exploration and development. The federal government acknowledges that further OCS exploration and development has the potential to greatly impact and change existing social, cultural, economic, and environmental conditions. Therefore, these studies not only provide a baseline description and projection of existing OCS relevant trends, but also an impacts analysis of potential changes likely caused by OCS development.

The specific purpose of this report is first to describe the past and existing trends in the **sociocultural** systems of certain Cook Inlet communities and then to project these conditions forward both with and without OCS oil and gas activities resulting from Lease Sale 60. These projections are based on scenarios provided by other subcontractors. The differences between the Base Case and OCS scenarios are then considered the impacts caused by oil and gas development. An analysis and **evaluation** of the OCS impacts on the **sociocultural** systems of the study communities is the ultimate **goal** of this report.

## Study Area

The lease sale this report is concerned with is the proposed Lower Cook Inlet Lease Sale No. 60 currently scheduled for August, 1981. The area of the call for nominations for Sale 60 relevant to this report consists of the unleased federal offshore tracts between Kalgin Island and Cape Douglas in Cook Inlet. The specific communities investigated in this study include Kenai, Soldotna, Homer, Seldovia, Port Graham, English Bay, Tyonek, and Ninilchik (Figure 1). With the exception of Soldotna, all of these communities are situated on the shores of Cook Inlet, and all except Tyonek are on the Kenai Peninsula. Though Tyonek is technically beyond the study area as it is north of Kalgin Island, it is included in this study apparently because it is the only coastal village on the west side of Cook Inlet, and therefore any OCS development on that coast could potentially affect Tyonek.

Sale 60 is a second generation lease sale in Cook Inlet as Lease Sale CI was held on October 27, 1977. Thus, the communities of Lower Cook Inlet have already experienced the OCS oil and gas leasing process. In Sale CI, oil companies leased 87 of the 135 tracts offered, representing approximately 22% of the total federal acreage in Lower Cook Inlet (Dames and Moore, 1979, P. 2). Since 1977, exploration activity has been slow with only three exploratory wells drilled, and these were apparently dry holes.

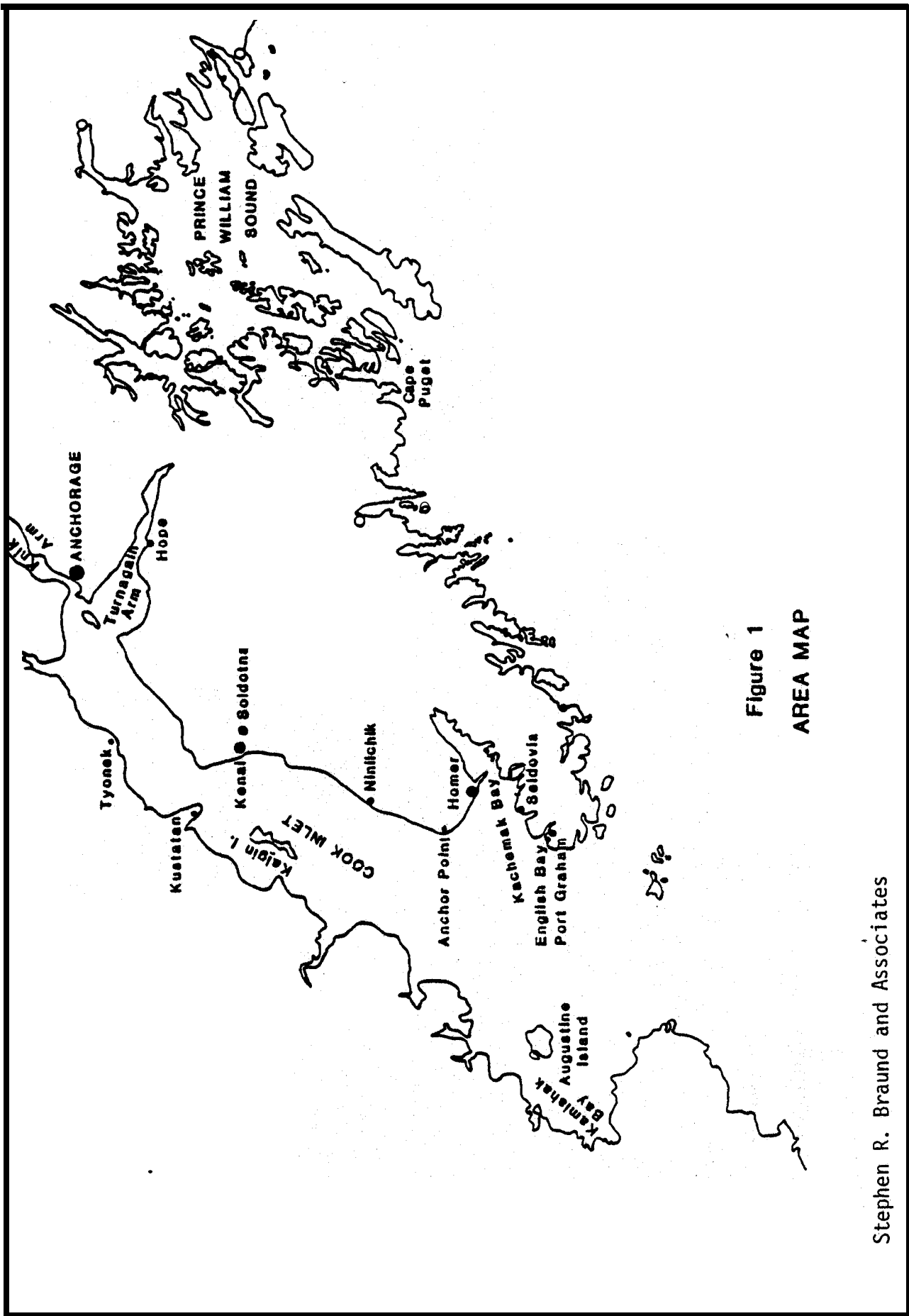


Figure 1  
AREA MAP

Stephen R. Braund and Associates

## LIMITATIONS OF STUDY

Several factors limit the nature and content of this study. First, this report deals only with the **sociocultural** systems of selected Cook Inlet communities. Not all communities on the **Kenai** Peninsula are examined. The specific communities considered in this study include **Kenai, Soldotna, Homer,** and the smaller coastal fishing communities of **Tyonek, English Bay, Port Graham, Ninilchik, and Seldovia.** The Scope of Work (P.22) adds a **further constraint** when it mandates that the five smaller coastal communities are to be treated as a "collectivity, highlighting critical elements in individual communities where appropriate". Often it is difficult to deal with these five communities together as they are very different both **ethnically, socially, and politically.** Treating them simultaneously also required additional time for analysis and continual cross checking.

As mandated in the Scope of Work, this report is concerned **only** with the **sociocultural** systems of the study communities. In terms of human behavior, the division between "socioeconomic" and "sociocultural" data is obviously an artificial dichotomy. Though **sociocultural** characteristics indirectly include all facets of a community, people, their behavior, and their **relation to** the physical and man-made environment is the core of the subject matter. Unlike economic data, **sociocultural** information, which deals with human behavior, is not **easily** quantified. Thus, standards are difficult to develop. It is very time consuming to perceive and understand patterns **in** human behavior, and it takes even **longer** to analyze motivations behind human activity. Thus, the time constraints of the project were also a limitation on the study.



Furthermore, the Scope of Work mandated that this **sociocultural** study not be comprehensive, but rather analyze only those issues which are deemed relevant to OCS development. Thus, this report is not to be considered to contain a thorough and conclusive analysis of the entire **sociocultural** systems of the Cook Inlet communities under study. Instead, it concentrates on **sociocultural** issues relevant to potential OCS impacts.

A final limitation of this study involves the use of the petroleum development scenarios. The reader should keep in mind that the Alaska Socioeconomic Studies Program is an exercise in hypothetical analysis driven by a series of petroleum development scenarios which are based on USGS estimates of undiscovered recoverable **oil** and gas resources in the study area. Thus, the accuracy of the final chapters of this report (projection and evaluation of **sociocultural** changes resulting from OCS development) is directly related to how well the scenarios reflect future actions by the oil companies. For instance, the scenarios for Lower Cook Inlet show the onshore facilities (service base, **LNG** plant, crude oil terminal) to be located at **Nikiski**, Drift River, and Homer. Consequently, the direct physical impacts on the five smaller coastal communities will be minimal. But, should the oil companies establish bases elsewhere, the impacts in the communities might be very different. It is **very difficult** to accurately predict the magnitude of OCS development until fields are defined and production plans announced.

## FORMAT

This report is organized into eight chapters. The first chapter serves as an introduction both to this report and to the Alaska OCS Socioeconomic Studies Program. Chapter two presents the methodology utilized in the research and preparation of this study. This methodology directed the organization of the baseline information and the Base Case and OCS projections.

Chapter three constitutes the baseline study of the specific communities. Past and existing trends in the sociocultural systems are described in this chapter. As specified in the Scope of Work, this information is broken down into three sections by area: (1) Kenai-Soldotna, (2) Homer, and (3) the smaller coastal fishing communities. This format continues throughout the report.

Chapter four (Base Case) continues the baseline trends developed in Chapter three and makes hypothetical projections about the future of selected Cook Inlet sociocultural systems in the absence of Lease Sale 60. For the proposed Lower Cook Inlet sale, the Base Case includes the effects of both a previous OCS lease sale (CI) and the assumed North Kenai LNG facility. Thus, the Base Case is very speculative, and in some ways its impacts, having included Sale CI, exceed those of the OCS scenarios, which add Lease Sale 60 to the Base Case.

Chapters five through seven (OCS scenarios) briefly describe the petroleum development scenarios and resultant population and employment projections, and then the hypothetical sociocultural effects of oil and gas development on the

study communities are postulated. Dames and Moore provided the petroleum development scenarios based on USGS information, and Alaska Consultants furnished the relevant population and employment data for the larger cities only (Kenai, Soldotna, and Homer). Three different scenarios are considered. The exploration-only scenario solely consists of activity for three years, and when no resources of commercial value are found, oil activity ceases. The medium find scenario assumes modest commercial discoveries of oil, while the high find scenario assumes significant commercial discoveries of oil and gas.



## II. METHODOLOGY

### THEORETICAL PERSPECTIVE AND GENERAL ASSUMPTIONS

#### Culture and Culture Change

In their attempt to understand and explain differences and similarities among the societies of the **world**, anthropologists developed and rely on the concept of culture. Culture is an "integrated system of learned behavior patterns which are characteristic of the members of a society and which are not the result of biological inheritance" (Hoebel, 1972, P. 6). Thus, culture is distinctive to man, is comprised of interdependent patterns of behavior, and is the basic adaptive technique by which man interacts with his total environment. Included in this total environment are the physical surroundings of man. Adaptation to the natural environment is crucial to survival, and successful subsistence techniques are required for a population to persist in a region. Also, these techniques must be flexible, as often the availability of food resources varies. The behavioral components of a particular culture are interrelated largely because of the requirement of adaptation. Cooperative, mutually beneficial interaction between the behavioral components of a cultural system **enable** it to successfully adapt in the face of the natural **selection** process. Using this perspective, anthropologists often see relationships between subsistence techniques, settlement patterns, social organization, and religious beliefs (Hole and Heizer, 1973, P.312-320).

The adaptive feature of culture leads to another of its characteristics -

its capacity to change. It is important to note that, because culture is integrated, change in one part of the cultural system may produce modifications elsewhere within the system, but alteration in any one feature does not by necessity require change in all other features. "Whether any aspect of culture is modified by other aspects must always be an open, empirical question, and it cannot be assumed that what affects one aspect will affect another in the same way or at all" (Roe, 1971, P. 370). Thus the method of direct observation is necessary to anthropologists, who study change.

The concept of "impact", viewed as the effect of one thing upon another, is associated with the theoretical framework of culture change in anthropology (. Dixon, 1978, P.271). Unfortunately, none of the theoretical approaches used by social scientists to explain culture change can reliably predict the future, including the impacts of resource development. Nor do all social scientists agree on which theoretical model best explains the process of cultural change.

But what **causes** change in a **sociocultural** system? What ingredients make up a **sociocultural** system? Are certain components of a **sociocultural** system more susceptible to change than others? If so, can one make broad statements about culture change in general, or must one concentrate on the uniqueness of a particular society? The answer to the last question depends on the theoretical perspective taken by the researcher. One may either use an idiographic approach (describe the unique non-repetitive event) or follow a research strategy aimed at discovering **valid** generalizations (**nomothetic**) of the causal relationships between **sociocultural** phenomena.

If one hopes to predict future change, the latter approach seems necessary, and as explained below, it is an underlying assumption of the Alaska OCS Socioeconomic Studies Program (SESP) itself. In fact, interwoven with this assumption, the overall method of the SESP also assumes answers to two of the first three questions, specifically what causes change and which segment of the **sociocultural** system is most susceptible to change.

Implicit in the objectives and methods of the SESP is the strategy of cultural materialism. This research strategy is dependent upon the division of the **sociocultural** system into three parts: (1) **techno-economic base**, (2) social organization, and (3) ideology.' Social organization and ideology are then explained as adaptive responses to the **techno-economic** conditions as the components of the system interact. In other words, the causes of cultural differences and similarities are ultimately found in the **techno-economic** processes of the **sociocultural** system, which exert selective pressures for certain types of social organization and ideology (Harris, 1968, P. 240-1). Which specific economic processes and what specific types of social relationships and ideology can only be determined empirically. Closely related to cultural materialism is the concept and method of cultural ecology, which studies the system of a particular culture and society in relation to the larger systems - both man-made (social) and natural - of which it is a part. Thus, this approach combines environmental factors (both man-made and natural) and human behavior, and views people as components of a larger system made up of both the natural and social environment (Dixon, 1978, P. 271). Here too, technology, environment, and economy are accorded research priority in conformity with the hypothesis that social organization and ideology tend to be, in the long run, dependent variables of **sociocultural** systems (Harris, 1968, P.658).

Cultural ecology assumes close social adaptations to the technological means of utilizing the environment. The extent to which the behavior patterns used in exploitation of the environment affects other aspects of culture can only be determined empirically (Steward, 1955, P.41).

Similarly, how changes in the economic base affect other areas of the sociocultural system can best be determined by direct observation and research.

This theoretical framework is parallel to the paradigm implicit in the SESP since the underlying assumption of the study is OCS development will likely cause changes in nearby communities. On a gross level, industrial development can be included with the techno-economic processes of sociocultural systems. A closer analysis of what specific feature of development will potentially affect other segments of the sociocultural system reveals the primary forces of change, posited in the SESP, are population and employment increases. Again, these factors belong to the economic base of the total sociocultural system. Thus, the independent variables for projections are techno-economic in nature and are generated by oil and gas development. The authors see these variables as population, employment, and increased demands on land and services caused by the direct presence of development. How these forces of change affect the coastal communities of Cook Inlet can only be determined empirically.

#### Acculturation

Preliminary research revealed some overriding processes which affect most Cook Inlet communities. The first of these is acculturation, which can be defined as "those phenomena which result when groups of individuals



having different cultures come into continuous first hand contact, with subsequent changes in the original culture patterns of either or both groups" (Linton, 1940). An important thing to note here is that acculturation is reciprocal and not necessarily a one-sided process. But often one group interferes actively and purposefully with the culture of the other, as for example, the Russians did in Alaska in the 18th and 19th centuries. Such directed **culture** change often leads to attitudes of dominance and submission. Then frequently there is a conscious, organized effort to revive or perpetuate aspects of the threatened culture (Linton, 1943). Acculturation is not simply a process by which traditional societies become more modern. Even though the relationship **may** be one of **dominant-dominated**, when the traditional society borrows an element it often changes the form or function to fit into his own system of social relationships and ideology. Also, in a situation of forced change, it is not only the introduction of new culture patterns that have negative effects, but also the blocking of **pre-existing** behavior (*ie.* forbidding Native Languages in schools).

Although a thorough analysis of acculturation is beyond the scope of this study, some basic assumptions can be made with regard to Cook Inlet **communities**. The indigenous population of Cook Inlet include **Athabaskans, Aleuts,** and Eskimos, all of whom have been affected by directed efforts of culture change since the time of Russian contact. Past "submissive" or passive behavior has long since given way to a **nativistic** movement which culminated politically in Alaska Native Claims Settlement Act (**ANCSA**). The residents of the native communities of **Tyonek,** English Bay and Port Graham feel strongly about retaining elements of their traditional culture (attachment to the **land and** subsistence complex) and are suspicious of outsiders offering something new. Local residents want to have a voice in controlling their own

future. The authors assume these attitudes will persist indefinitely.

Related to the strong desire of residents to control the type and rate of change affecting their **community** is the concept that communities are not passive recipients of change (Baring-Gould, 1976, P. 351; Dixon, 1978, P. 268). The residents have their own **goals** and aspirations and also the means by which to act on them. They learn from the experiences of **neighboring** communities, including those experiences related to OCS or other energy projects. Thus, simply forming assumptions based on past behavior is not always accurate. Communities are dynamic, and in exercising their right of self-determination, their future behavior might not be predictable from past actions. Local governments may make innovative decisions unforeseen by the researcher, to offset potential impacts of energy development. **Since** these decisions probably **will** reflect the **values held** by the residents, it is important to assess each community's attitude toward their own growth and development, especially as related to nearby energy projects. Failure to consider community alternatives in the face of energy development reinforces a sense of powerlessness in the local community. This sense of powerlessness can lead to a failure to respond by the community, which only exacerbates the impacts (Dixon, 1978, P. 269).

Acculturation processes between ethnic groups in Cook Inlet continue today and will continue into the future. Though, in retrospect, the rate of change resulting from the contact situation seems to have been rapid in the past, it is probably more rapid now. A quantitative measurement of this rate is impossible, **but** a review of past contact and some of the more recent issues confronting the native communities of Tyonek, English

Bay, and Port Graham seems to support the assumption that the more complex the agents of change, the more pressure for changes which occur with great rapidity. The complexity of continual meetings and correspondence between villagers and federal, state, and borough officials regarding land transfers, subsistence and commercial fishing regulations, planning and zoning, taxing, ANCSA, and grant programs cannot be disputed. From the villagers perspective, the intricate maneuvering of the governmental agencies often narrows the choice so that no matter which selection is made, a conflict with traditional values is the product. And, since a decision must be made before the expiration of some bureaucratic deadline, outside forces dictate a rapid rate of change within these small communities. Preliminary research supports the assumption that changes originated from outside the villages usually conflict with values held by village residents.

#### Modernization

The communities of Cook Inlet, both large and small, are dependent upon, and therefore vulnerable to, decisions and actions originating from the larger Alaskan and American society. Their economies are concentrated on only a few basic resources (fish, tourism, timber, government, oil and gas), and their small size, peripheral locations, and narrow economic bases add to their vulnerability to decisions made outside the region. But each community, even the smallest, is adapting to the need for dealing with the impacts of decisions and projects originating in the larger society. All of them have institutions and links with the larger world through which they attempt to influence decisions in their own favor,

in **terms** of their own values, to increase the benefits and reduce the costs of **change** to themselves.

The concept of increasing complexity symbolizes another general process which affects both the large and small communities of Cook Inlet - trends of "modernization". These are characterized **by** the progressive **increase** **in** complexity of organization and integration in society, trends which affect America as a whole. In this process, less complex social and economic components are combined into more complex administrative and economic structures which manage and utilize resources more effectively, thereby adding to their own power and complexity which enables them to capture more resources. This process is plainly illustrated **by** **Native** land claims in Alaska, in which Native groups first organized throughout the state in response to specific threats to their use of land and resources, and then united to struggle politically for land rights. The **ANCSA**, passed by Congress in 1971, created even more complex forms of organization, including a hierarchy of profit and non-profit corporations, to manage land and monetary awards, which in turn has led to further bureaucratic and economic linkages. The net result is a large and rapid increase in bureaucratic complexity and organization. These trends of modernization, characterized by increasing complexity, are assumed to persist, and thereby continue to make community decisions regarding land and development issues increasingly difficult. This is especially true in the smaller Native villages.

## SPECIFIC RESEARCH METHODOLOGY

### Literature Review

The data used for this **sociocultural** study comes primarily from two sources: a literature review and fieldwork consisting mainly of informal interviews. In contrast with the smaller fishing communities, there is a large amount of literature available on the Homer and **Kenai-Soldotna** areas. Most of this literature is in the **form** of planning documents, reports, and surveys. However, it primarily focuses on economic conditions and physical planning, rather than social or cultural matters. Pedersen (1976) does provide some historical and **social** information on most of the communities. The social and economic surveys conducted by the University of Alaska in 1976 (Baring-Gould and **Heasley**, 1977, n.d.; Green, et al, 1977) were particularly valuable. They deal specifically with attitudes toward OCS development, and also provided systematic information about population characteristics in Homer, Kenai, Soldotna, and **Seldovia**.

Newspapers were also particularly valuable aids in the Homer and **Kenai-Soldotna** areas, unlike the smaller communities which receive little news **coverage**. Back issues of the Kenai Peninsula Cheechako News, and the Homer News for the past year were obtained, as were scattered issues of the Peninsula Clarion, and the Cook Inlet Chronicle. These provided a record through time of important recent social and political issues in these communities.

An historical perspective is necessary in order to understand the present situation in the various communities. An examination of the dynamics of

a culture over time helps **establish** which factors motivated change in one direction rather than another. Patterns and values may be discerned which offer insights into future responses to change. If the community is composed of different groups of people who came at different times, it is important to determine when they came and for what reasons. Different people bring different value systems, and, if they **settle** in sufficient numbers, they can drastically alter the social character of a community. Thus, a brief description of the settlement and social history will be presented in the baseline.

In the smaller coastal fishing communities (English Bay, Port Graham, Tyonek, **Seldovia**, and Ninilchik), an understanding of the historical experience is more **critical** as the majority of the present populations have a longer time depth than the residents of **Kenai**, **Soldotna**, or Homer. The majority of people in these three cities are relative newcomers to the Kenai Peninsula. Three of the smaller villages, English Bay, Tyonek, and Port Graham, are primarily Native, which indicates a long time depth of occupation. Thus, methods which provide data from the longest time span are used. Sources for this early period include: archeological reports, accounts by voyagers, explorers, fur traders, and missionaries who first came to the Cook Inlet area in the late 18th century, Russian histories, early census documents, and early military and fishery reports. Ethnographic information is also considered, and data from all of the above sources is combined in hopes of gaining a realistic historical perspective.

## Field Research

Field research in the Cook Inlet study communities provided invaluable information on current trends and concerns. Generally, residents were very eager to discuss OCS activities and express their views. As the published material available on the smaller coastal communities is limited, the fieldwork there is critical to understanding these communities. Even in the larger cities, social and cultural data is largely unavailable. Both in the communities and in Anchorage (Native villages and regional corporations have offices here), informal interviews and discussions were held with borough and community officials, regional and village corporation leaders, community residents, and appropriate agency personnel.

In the larger communities of Kenai, Homer, and Soldotna, unlike the more homogeneous smaller places, more time was devoted to trying to understand the multiplicity of social and economic groups and special interest groups which make up the diverse populations of these places. Only a limited understanding of the social organization of these communities would be achieved in such a short time, however. This fact, and the orientation of the scope of work toward the incorporated cities, resulted in a focus on the community level, rather than upon smaller *sociocultural* groupings.

Social groupings in the Native communities tend to be along family lines, and while in the larger communities, one can distinguish between distinctive segments of the population (construction workers, fishermen, government workers), in the relatively homogeneous Native villages, social differences

are much more subtle. Given the sensitive nature of family relationships in the small villages and the time frame of this project, it is not possible to distinguish many social and special interest groups in the smaller communities. The goals and interaction of village organizations (both councils and corporations), regional corporations, and the Kenai Peninsula Borough were seen as critical, especially in relation to the response capacity of the villages.

## IMPACT CATEGORIES

### Data Collection and Organization

Given the trisection of sociocultural systems as explained earlier, there are an infinite number of linkages between the three major components. Although this theoretical perspective assumes one element (techno-economic) of the sociocultural system to be the principal causal factor, feedback is a critical characteristic of all systems. Political processes are essential feedback components of sociocultural systems (ie. political control and manipulation of economic processes). An additional feedback component includes actions taken by community residents in anticipation of oil development. Also, an accurate understanding of the workings of the sociocultural systems of Cook Inlet requires the addition of a time frame, which further adds to the complexity of the problem. Conceptually, the entire web of relationships over time comprised a sort of grand shopping list of items for study. Since it would be impossible to examine the entire intricate web of relationships of each community, both independently and as they relate to each other, the first job was to reduce the list.



One of the first things considered during the data collection phase are the characteristics of the oil industry and the types of demands it might place on the communities serving offshore oil and gas activities. Theoretically, this process helps diminish the subject matter and issues to be examined. A fundamental requirement of the oil companies is an industrial land base, ideally vacant, level, waterfront land suitable for storage and docking facilities. Large amounts of water are required for offshore drilling rigs and platforms. Depending on **the number** of people projected to come into the different communities, varying demands are placed on housing, community facilities and utilities (such as water, sewer, health care, police protection, power, and telephone), transportation (airport and port facilities), and on the local government's capacity to provide these services.

Though this review of oil industry requirements is undertaken in order to **limit** the amount of data necessary to be examined (i.e. only review those things potentially affected by OCS activity), it, in fact, does not substantially narrow the focus for the researcher. Depending on the level of direct industry presence, OCS onshore demands are all-encompassing in their **scope**. This is especially true in the smaller coastal communities, where it **would** be difficult to add anything to a potential impact list that already included additional people and jobs, waterfront land and docking space, additional demands on housing, utilities, transportation, and **local** government, and **all** of the corresponding "**sociocultural**" implications. Even in the larger first **class** cities on the Kenai Peninsula, the population, employment, and land and service demand variables could have **significant** effects, again depending on the magnitude of the numbers involved. Thus, the nature of the oil industry requirements does not in itself greatly narrow the breadth of items to consider.

The problem of reducing the larger data base down to key issues and concerns was **solved** empirically, based on research and **field** work. The interested parties (community residents, village and regional corporation leaders, and borough officials) identified the issues. Since oil development is not new to Cook Inlet, the most effective method of reducing the shopping list to relevant **OCS-related** issues was to let the people in the communities identify the germane issues. Then by combining the informal field interviews with information from the literature review, trends could more readily be established.

### Impact Categories

Once the community issues potentially affected by OCS activities were identified, these issues were organized under key categories of concern or impact categories. The **sociocultural** baseline describes the critical characteristics and concerns of the study group and narrows the huge array of social information down to a core of important features. These features are organized under impact categories. The following sociocultural impact categories will be used in the baseline and for measuring changes in both the Base Case and OCS scenarios:

#### ECONOMIC ADAPTATIONS

The adaptations people have made to the local natural environment and economy are important determinants of how they respond to, and are likely to be affected by, OCS development. Since economic adaptations form the basis of the sociocultural system, it is important to consider both which

economic activities might be affected by OCS development, and where any potential conflicts might arise. Equally important is the relationship between the people and their particular economic niche, and their corresponding attitudes toward change and OCS activity in Lower Cook Inlet.

The economic bases supporting the **sociocultural** systems of Cook Inlet are primarily fishing and sea food processing (**all** study communities), and oil and gas production (**Kenai-Soldotna** area). Tourism, timber, and government are also important, but to a **lesser** extent. Successful fishing pursuits are dependent on both a productive marine environment and a supportive shore base. Any changes **to** either of these environments will have an effect on fishing activities, and therefore might **alter** the **sociocultural** systems of the study communities. Potential OCS related changes to the marine environment include increased boat traffic in Cook Inlet and degradation to the **marine** habitat caused by oil **spills** or blowouts. Either of these occurrences would hinder normal fishing operations. Changes in population growth and economic emphasis caused by OCS development may cause increased competition for the following local resources: harbor and docking space, fresh water (a requirement of both fish processing and offshore drilling), industrial land base, and the labor pool.

People's attitudes toward potential economic or environmental change and OCS activity are also greatly influenced by existing economic adaptations. How people earn a living (economic adaptation) affects how they view any potential change in the surrounding economy and environment. Certain socioeconomic groups are more likely to benefit, or see **themselves** as benefiting, from industrial development, while others are more likely to

experience, or see themselves as experiencing, the costs. Fishermen, for example, are likely to see OCS as a threat to their livelihood. Those with the greatest commitment to fishing, either because there are few alternatives, as in the smaller coastal communities, or because they have invested heavily in equipment, as in Homer, are likely to be most opposed to OCS activity. Part-time fishermen, such as gill-netters in the Kenai-Soldotna area, may be more likely to have alternative skills which allow them to exploit niches created by OCS development. At the same time, construction workers, oil workers, and businessmen dependent on construction and oil activity have both a favorable attitude toward and positive effect from future OCS development. Thus, the sociocultural impacts of population or economic change will vary from group to group.

#### LAND AND ENVIRONMENT.

The relationships between land and environment and the people of Cook Inlet encompass many dimensions. In this impact category, land and environment are considered in three manners: 1) how people feel and think about the surrounding land and environment; 2) land ownership and zoning as a means by which the local community can control development if so desired; and 3) land use including existing and potential conflicts by different user groups where relevant.

Many important values of residents of the study area revolve around relations to the land and natural environment. Thus, many recreational, economic, and subsistence activities are perceived by residents as dependent upon the quality of the environment. Changes to this environment by new user groups will conflict with existing local values.

Land use and ownership is discussed primarily in communities where the land base is limited and a potential source of conflict. In areas with a more than adequate land base in relation to potential population growth, the baseline does not dwell on land issues. For example, in the Homer area, land use conflicts on the Homer Spit are critical issues. But, the **Kenai-Soldotna** area has an abundance of accessible land for sale for residential, **commercial**, and industrial uses with no major issues. In the smaller coastal communities, ANCSA lands are critical in terms of understanding the communities. Many issues revolve around traditional Native land use and corresponding values and recent ANCSA land ownership patterns.

#### SMALL TOWN SOCIAL RELATIONSHIPS

The **social** relationships in **small** communities and **Native** villages in Alaska differ from those in larger cities. This category deals with the nature and quality of social relationships. All of the study communities are relatively small, and many people are attracted to these communities, and remain in them, because of their small scale of social organization. Small town qualities such as personal exchanges, knowing practically everyone in town, and extended **family** networks are valued by most residents.

Population growth and economic change are decreasing the role of personal "face to face" relationships in many of these small towns. As more people with varying backgrounds move in, the communities become larger and more complex. Decisions affecting the communities are often made by government organizations located elsewhere, which adds to the impersonal nature of the **social** relationships and **leads** to a feeling of helplessness by many

residents. These trends of modernization are increasing contacts with government and bureaucracy which changes the small town flavor of the social relations in the community.

OCS activity could intensify these trends of decreasing the role of personal social relationships, and therefore further disrupt the small town characteristics valued by most residents. Population growth and economic changes caused by OCS could also disrupt customary kinship-based social patterns in the Native villages. People in all the communities are concerned about these possibilities, and therefore this category is included.

#### POLITICS AND RESPONSE CAPACITY

Politics is a critical sociocultural category because community values and public objectives are articulated and implemented (or not implemented) through political processes. The major types of community change potentially induced by OCS activity (increased population, employment, and land and service demands) can have a variety of repercussions upon the political subsystems. These include the development of conflict within the community, shifts in political power, and increasing pressure upon the ability of local government to supply services and guide growth.

A community's response capacity, or ability to affect, guide, or control change within the context of its own values, is largely a function of the political subsystem. Four factors seem particularly significant in determining a community's response capacity:

- 1) Information - Knowledge of what is likely to happen, and what alternatives exist for a community.

- 2) *Community Consensus* - Agreement on community priorities, and what should be done to implement or protect community values.
- 3) *Organization*- Knowing how to do what needs to be done, and having a system for doing it. Whether the community will receive support from higher levels of government is important. Thus, it is necessary to determine the current relationships and goals of community organizations (both councils and Native corporations), regional Native corporations, and the Kenai Peninsula Borough.
- 4) *Resources* - The availability of human, physical, and financial resources to do what needs to be done. To benefit the fullest from development, the communities must have bargaining power with the oil company. This depends on the ability of the local government to exercise land control either through ownership or planning and zoning tools, the taxing authority, and the quality of community leaders. Aid from the state government could also enhance the community's bargaining position.

## SOCIAL HEALTH

The social well-being of a community (including mental health, community health, and family health) is a measure of how well that population is

adjusting to change. Anything that conflicts with the values in the community will cause stress and disruption. One of the goals of this study is to identify and analyze indicators of this stress. Ideally, standards would be developed and provide a measurement of the stress indicators. The **field** of health has gone the furthest in this area (suicide rates, divorce rates), but for the study communities this approach did not prove useful. As a recent study on the Kenai Peninsula concluded, "stress indicators, such as divorce and suicide rates or incidence of alcoholism, could not be derived from available data" (MSNW/HRPI, 1976, P. 180). In an attempt to update mental health data, information was gathered from the following agencies: the U.S. Public Health Service, Alaska Indian **Health** Service, Systems Development Section in Anchorage; the Alaska Department of Health and **Social** Services, Office of Information Systems in Juneau; and the South Central Health Planning and Development, Inc. in Anchorage. The data was computer oriented and generally organized by census division. Since this study deals with specific communities, the census division data was not useful. Also, the information was generally not broken down by race in a manner that would lead to any meaningful conclusions in multi-ethnic communities. Where the data was available for the first **class** cities, the short time depth of the available information (three years) and the small sample size led to statistically unreliable data. These conclusions were consistent with statements made by the social service personnel from the various agencies. Even if the data were available for each of the study communities, mental health admissions based on two or three years of statistics is not adequate to identify community trends.

This category will include a discussion of trends in alcohol problems,



crime, mental health, and educational opportunity (especially in the smaller communities). These comprise the indicators of change for this category. Also included will be a brief description of the health care delivery system to the smaller communities that lack hospital facilities.

### Cultural Values and Standards

Cultural values are central to and underlie all of the impact categories. Patterns of land ownership and use, subsistence activities, economic pursuits, and small town qualities all reflect the values of the local residents. Essentially, then, impact categories are defined around central issues and concerns of local residents which arise from their fundamental values, attitudes and beliefs. Political organizations, both governmental and special, are viewed as the means by which the people attempt to realize their values. How well they do this depends on the community's response capacity.

Community or group values at a point in time are also standards against which the effects of change or projected impacts can be compared. The importance of economic, social or political changes for people rests largely upon the question of whether the changes will allow greater opportunities to realize their values and goals or whether they will constrain and restrict the realization of these. Other changes may be insignificant in terms of individual or community values, i.e. they are neutral in effect. The relevant standard of comparison is the community standard, the values which are shared by the groups under study. Thus, future changes within the impact categories can be measured against the cultural values of the

community. In this way, community values become a subjective standard by which one can measure change. Existing values in the study area will be developed in the baseline.

The basic assumption relied upon for this technique is that existing trends in values will hold true for the Base Case and OCS cases. Though community values do change as new people with different values move in, or new economic opportunities appear, or as the community grows, they evolve very slowly and are usually the cultural characteristic least susceptible to change. Therefore, the technique used here to project behavior, in general terms, through values is considered appropriate.

A second type of standard which is used to measure sociocultural change are stress indicators. Using this technique, such things as the crime rate, suicide rate, or divorce rate are considered as indicative of the social health of a population. This technique is dependent upon a good statistical data base from a large sample size. Neither of these conditions were present in the Cook Inlet study communities, and therefore this technique did not prove very useful. Consequently, it was dropped.

#### OCS IMPACT PROJECTION AND ANALYSIS METHODOLOGY

The methods used to project and assess potential OCS impacts on the sociocultural systems of the Cook Inlet communities are comprised of three stages. In the first stage, once the current trends in the key sociocultural categories are developed and discussed in the baseline, the sociocultural changes which are likely to occur without further OCS development

in Lower Cook Inlet are projected. This will be done by first determining the existing trends and probable directions of change in population, employment, land tenure and use, and demands upon services and local governments (independent variables). This information will be derived from other subcontractors' Base Case projections (ISER, Alaska Sea Grant Program, and Alaska Consultants, Inc.). The future of selected Cook Inlet sociocultural systems without OCS Lease Sale No. 60 are then projected by examining the probable effects of these trends upon the key sociocultural categories developed for each community or group of communities.

The second stage requires an assessment of the sociocultural changes likely to occur with the various scenarios of OCS development in Lower Cook Inlet. The specific locations, extent, and effects upon population, employment, land use and service demands of projected OCS activities in Lower Cook Inlet will also be provided by the OCS scenarios and projections of other subcontractors. The sociocultural changes induced by each OCS case (low, medium, high) are then projected by tracing the effects of these hypothetical locational and socioeconomic impacts through the key sociocultural categories developed in the baseline research. In both the Base Case and OCS cases key assumptions about the effects of population, employment, and environmental change upon the critical sociocultural categories guide the sociocultural projections.

The final stage consists of the analysis of the impacts of OCS development upon the sociocultural systems of the Cook Inlet study communities. This is accomplished by comparing each of the OCS projections with the Base Case. Thus, the difference between the Base Case and the various OCS cases are

the OCS impacts. These impacts may be either positive or negative.

## 111. LOWER COOK INLET BASELINE: COMMUNITY ANALYSIS

### THE KENAI-SOLDOTNA AREA

#### Introduction

This section describes the critical sociocultural characteristics and concerns of the communities and populations of the Kenai-Soldotna area of the Kenai Peninsula. Sections on the Homer area and the smaller coastal communities follow. The purpose of this description and analysis is to provide a base from which the probable future of critical aspects of these sociocultural systems, both with and without LCI Lease Sale 60, can be assessed.

The Kenai-Soldotna area includes the major trade, industrial, and population center of the Kenai Peninsula. The first-class cities of the Kenai and Soldotna, the Nikiski industrial area, and the residential areas outside the cities along the North Road, Kalifonsky Beach Road, Beaver Loop Road, Ridgeway, and the Sterling Highway as far as Sterling form a distinct sociocultural area. This area includes about 15,700 people, more than half the population of the entire Kenai Peninsula. Most of them shop, work or go to school in the cities of Kenai and Soldotna.

Although there is an emphasis in this study on the population centers of Kenai and Soldotna, it would be unrealistic to exclude

the large number of people who live in their hinterlands and who will affect, and be affected by, change in the titles. Mention will be made throughout the report of the relevant unique characteristics of particular localities and ethnic groups.

The Kenai Peninsula is too far from Anchorage for daily commuting by car, and therefore somewhat distinct and separate economies and societies have evolved on the Peninsula. Nevertheless, the area is closely linked to Anchorage by air, highway, and sea. Although too distant from Alaska's metropolis to serve as a bedroom community, the Kenai Peninsula is accessible enough, and endowed with the necessary scenery, space, water, fish and wildlife, to serve as Anchorage's playground. Each weekend during the summer, thousands of cars pour out of Anchorage bound for the Kenai Peninsula. Tourism and recreation support numerous businesses along the Sterling Highway

The Kenai area, with its sprawling businesses and residential areas, and an economy based on petroleum extraction and processing, has a very different society and "feel" than does Homer, with its fishing and tourism base and its orientation toward the sea. A regional government, the Kenai Peninsula Borough, is superimposed on these distinct areas and links them politically, as the Sterling Highway does in terms of transportation.

## Settlement and Social History

The settlement of the Kenai-Soldotna area has occurred in several phases which have reflected people's changing evaluations of the resources of the area. The population and economy of the area has grown largely in surges or "booms" associated with these changing resource values, each of which has drawn the area into increasingly complex and interdependent networks of economic and political relations.

The first known settlers, Eskimos and Athapaskans, apparently moved into the area and stayed because of the relatively rich land and marine fauna. Russians came to find furs, prospectors arrived in search of gold, and commercial fishermen and canneries came after salmon. More recently, diverse groups have come in response to job and business opportunities created by the discovery of oil and the availability of land and recreation opportunities.

A limited social continuity has been maintained through time in the Kenai area, despite these booms, by the Tanaina Indians, the homesteaders, and the fishermen who arrived at different stages of the settlement process. There have been convergence, too, as members of each group have adapted to the new niches provided by oil-related economic growth. Strong interests in local historic sites, and in fishing, hunting, and other outdoor sports help residents maintain continuity with the Kenai area's colorful past.

## THE NATIVE AND RUSSIAN HERITAGE

The Kenai River, with **its** rich salmon runs, has been a locus of human settlement and subsistence activities for at **least** 2000 years (Dixon, 1978; Reger, 1974). Although archeologists are unsure of the dates, an early Eskimo population was replaced by the **Tanaina Athabaskans**, or Kenaitze, who inhabited the area when Russian traders and British explorers arrived in Cook Inlet in the mid-18th century (Reger, 1974; de Laguna, 1934; Borass, 1974).

The establishment of Russian trading posts near Kasilof in 1786, and at the mouth of Kenai River in 1791 (Bancroft, 1886) established the **Kenai** area as an important center from which Russian, and **later** American, goods and ideas diffused to, or were forced upon, the **Tanaina**. Dramatic cultural and ecological changes occurred in the **region** during the 19th century, including adaptations by the Kenaitze to the fur-trade, **to** the introduction of **alcohol** and Russian Orthodoxy, and to major disruptions of subsistence caused by commercial fishing and fires set by prospectors (Townsend, 1974).

The village of **Kenai**, site of the Russian's Fort St. Nicholas, gradually grew as **smaller** surrounding **Tanaina** settlements were depopulated by **epidemics** and economic hardships. The Russian Orthodox church, its school, trade goods, and cannery work drew **Tanaina** to **Kenai**.



The establishment of canneries and the discovery of gold on the Peninsula in the 1880's drew whites to the region and some settled in Kenai. By 1920 the village had a population estimated at about 330, making it one of the larger communities on Cook Inlet.

#### THE KENAI AREA NATIVE COMMUNITY

While the population of the Kenai area was half Indian thirty years ago, the Kenaitze have been overwhelmed by the growing white population, and now comprise less than 2.0% of the total population of Kenai and Soldotna (Green, et al., 1977). Rising taxes in the 1950's forced many of the Kenaitze to move into surrounding areas outside the city.

Strong family ties, involvement in commercial fishing, and more recently the provisions of the Alaska Native Claims Settlement Act (ANCSA), have helped many Kenaitze retain a distinct identity despite great cultural changes. The Russian Orthodox church in Kenai, and Wildwood, the former military base acquired by Kenai area Natives as a result of ANCSA, have helped them blend past and present.

Many Kenaitze are commercial fishermen, involved primarily in set and drift net salmon fishing from the Kenai and Kasilof areas. This occupation, which has long been important to the Kenaitze, also helps them maintain continuity with the past, and also allows

traditional social patterns to continue, as families and relatives participate together in fishing.

The **Kenai** Native Association (KNA) was formed to represent the 170 people who enrolled in the historic village of **Kenai** under the terms of ANCSA. As an urban group, KNA was entitled to select up to 23,040 acres of surface estate. In 1972, when the Defense Department announced that it would close **Wildwood** Air Force Base, the **Kenai** Native Association began negotiations to acquire it from the federal government as part of their land entitlement.

The **Kenai** Native Association received title to the land and numerous buildings of the facility, and since 1972 it has operated the **Wildwood** Indian Action Program. With grants from the Bureau of Indian Affairs, KNA provides vocational training programs for Native students from villages throughout Alaska, including mechanic, clerical, and building maintenance classes. KNA has also obtained grants for a demonstration project in controlled environment agriculture.

Through KNA, several **Kenai** tze have gained valuable experience in managing real estate and service businesses. In addition to managing the land and buildings of **Wildwood**, the **Kenai** Native Association has formed three subsidiaries, including an **Anchorage-Kenai** construction company, and two oil service businesses, a roustabout service and a **wireline** company. As new and unknown

companies, these have had trouble breaking into the close-knit "old boy" oil service industry, but they have slowly been gaining experience and work.

Leaders of the **Kenai** Native Association have organized to take advantage of economic and population growth on the **Kenai** Peninsula, and they are continually gaining business expertise. Negotiations were underway in 1978, for example, to use the land and facilities of **Wildwood** for the **Alpetco** industrial complex. **Kenai** Native Association leaders, like the rest of the business community of **Kenai** and **Soldotna**, welcome the prospects of further OCS leasing and exploration in Lower Cook Inlet, and are counting on further industrial development in the **Kenai** area.

**Salamatoff** is an historic village north of **Kenai** with 120 enrollees. Its contested status as an eligible **ANCSA** village is under appeal, and if it receives village certification, it will soon gain title to 92,160 acres in the **Kenai** area. These lands, including some highway frontage and riverfront property, have been selected by the **Salamatoff** Native Association primarily for commercial value, and will probably eventually be leased and sold as commercial and recreational lots. The **Salamatoff** Village Corporation has also selected lands overlying gas fields in the **Kalifonsky** area, and these may be leased or developed by the Cook Inlet Region, Inc., which will have subsurface rights to these lands.

Relationships between the **Kenaitze** and whites of the **Kenai** area vary from individual to individual, but seem generally cordial. Many of the **Kenaitze** are considered "just the same as anybody else" by themselves and whites, and are not distinguished by anything but racial characteristics or ownership of stock in Native corporations. Others consider themselves, and are considered by others, as distinctively "Native," and, as mentioned previously, commercial fishing and family relationships help maintain this separateness. Interethnic relationships in the 1940's and 1950's appear to have been fairly harmonious, but the **Kenai** Oil Boom of the late 1950's and early 1960's resulted in considerable conflict between **Kenaitze** and whites. Oil workers from California, Texas and Louisiana brought southern prejudices north and these soon showed up in schools and bars. The **Kenaitze** tended to withdraw and avoid contacts with oil workers. Today these problems are not so noticeable. Involvement in the local business community through Native corporations and significant increases in salmon runs and prices have improved the economic status of many **Kenaitze**, and have probably helped improve interethnic relations.

#### HOMESTEADING

The population of **Kenai** grew little during the 1930's and 1940's, but the construction of a gravel airstrip during WWII began a period of accelerating involvement with the outside world. Homesteading began in the **Kenai** River area in 1947, when three townships in the

Kenai National Moose Range were opened to entry as the result of intense demand for land after the war (Pedersen, 1976).

An old wagon trail from Moose Pass on the Alaska Railroad to gold placer claims at Cooper's Landing was paralleled by the right-of-way for a new highway to connect the Kenai Peninsula with Anchorage in the late 1940's. Residents of Kenai, and many veterans, claimed land in what are now the Kalifornsky Beach, Kenai Spur, Soldotna, and Sterling areas. By 1949 the road was usable in good weather between Seward and Kenai, and it provided people with access to homesteads in the Soldotna and Sterling areas. By 1950 there were about 170 residents living on isolated homesteads in areas near Kenai, while Kenai had about 320 residents (U.S. Census, 1950).

In the early 1950's Kenai was still a small fishing village. Many residents had set net fishing sites, and two canneries were in operation. A few small stores in Kenai provided basic supplies. Homesteaders raised potatoes, vegetables, and livestock, largely for their own use, since there were few markets for produce (Johnson and Coffman, 1956).

Construction of the Sterling Highway, and of a military communications site just north of Kenai, at what is now Wildwood, marked the beginning of major shifts in the population and social composition of the Kenai area. Highway access to the area from Anchorage and homesteading and job opportunities, rather than land per se, became the major reasons for people to come, and this changed the

character of the Kenai-Soldotna community. Homesteaders made increasing demands--for roads, better mail service, more stores, and more freight service. Construction workers at the military site, with large paychecks, supported new bars and small businesses in Kenai.

Although homesteading on the Kenai Peninsula never developed a viable agricultural economy (Johnson and Coffman, 1956), many of the long-term residents of the Kenai, Soldotna and North Kenai area acquired land in this way. Considerable local tradition and folklore has grown up around the homesteading experience. Residents tend to stress the "pioneering" nature of homesteading, the struggle against nature, and their accomplishments in building a home in wild country. They also stress the hardships they overcame to get the land.

Clearing the land to "prove up" was expensive, hard work, even if most never farmed it, and homesteaders lived with few conveniences, bad roads, and isolation. Wives and children sometimes stayed alone at homesteads while husbands left to work in distant towns. Many people abandoned their homesteads in the early days.

Some of the leading families of Kenai, North Kenai and Soldotna were homesteaders, and they take pride in their accomplishments, and the hardships they survived. They also remember the friendships, cooperation, and sense of community which shared hardships fostered, and a hint of nostalgia colors their tales and reminiscences, even when they say they would not want to do it again.

After the **Wildwood** military site was completed in the mid-1950's, the **Kenai** area experienced a local recession. Small businesses which had grown up to serve temporary construction workers were hurt, as were homesteaders who had been employed in the construction phase. Many homesteaders left the North **Kenai** area and abandoned their homesteads during this period (Thompson, 1976, P. 13).

#### THE KENAI OIL BOOM

In 1957 **oil** was discovered in the Swanson River area, northeast of **Kenai**, and the "**Kenai Oil Boom**" began. Residents remember the rumors that preceded the official announcements and the pervasive excitement and optimism; everyone dreamed of oil riches. A few homesteaders obtained oil rights to their lands, but, due to the complex laws surrounding oil leasing and homesteading, most never realized any direct benefits (Graumann, 1978).

The Oil Boom brought many other economic opportunities however. Land values soared and homesteaders in **Kenai, Soldotna**, and along the highways subdivided. Many started new businesses. The actual exploration, drilling and development took place miles away, but people moved into the existing communities, and support services for tourism, oil development, and general population growth developed. **Soldotna**, with its crossroads location, became a population and service center largely as a **result** of the Swanson River development. Sterling, too, became home for some of the **oil** workers. Trailer

parks and rental units were built along the highway systems to house newcomers and temporary workers.

Most of the roustabouts and other oil field workers came from Oklahoma, Texas, and California and brought their distinctive culture with them. Cowboy boots and southern drawls became common in the Kenai area. Even those that brought their families tended to remain transients, since they knew they would be moving along to the next job when this one was completed. They tended to live in trailers and did not commit themselves to the communities. Their children went to local schools, but parents seldom involved themselves in PTA or other local affairs.

The oil workers of the 1950's and 1960's were rough, hard-working, hard-living, hard-drinking men according to residents of the Kenai area. They brought their prejudices with them, and local residents remember that the Kenaitze suffered from these. Racial problems between the children of oil workers and natives surfaced for the first time in Kenai area schools in the early 1960's.

While residents of the area welcomed the new services, conveniences, and opportunities which accompanied economic growth, the argument was already beginning about whether "progress" was an unmi xed blessing, or whether old Alaska values were being lost. The debate continued in various forms for the last twenty years.



The small Tanaina Native community of Kenai was overwhelmed and disrupted by the combined construction and oil booms of the late 1950's and early 1960's. The Tanaina were quiet people, many of whom fished commercially and they did not participate in the dramatic economic changes which swept the region. Most of the Kenai Tanaina lived in the old village core around the Russian Orthodox church, and although they interacted with whites, they tended to maintain family ties and traditions. Commercial fishing allowed them to maintain customary patterns of life, kinship, and resource use.

Rapid change and the need to provide city services, led to attempts to incorporate Kenai in the late 1950's. Kenai Natives voted against incorporation, and the first two attempts failed. A third try, in 1960, succeeded, and Kenai became a first-class city. Increasing land values, and taxes levied to pay for a rapidly increasing range of city services, gradually forced most Natives to move out of Kenai during the 1960's. Many of them dispersed throughout the central peninsula, while others moved to Anchorage.

The Kenai Oil Boom intensified with the construction of a pipeline and marine terminal in the late 1950's and the Standard Oil refinery at Nikiski in the early 1960's. A second phase of the Oil Boom began with the discovery of major offshore oil discoveries in Cook Inlet in 1963-65. More oil service industries moved to Kenai and North Kenai areas, putting up prefab steel buildings along the North Road.

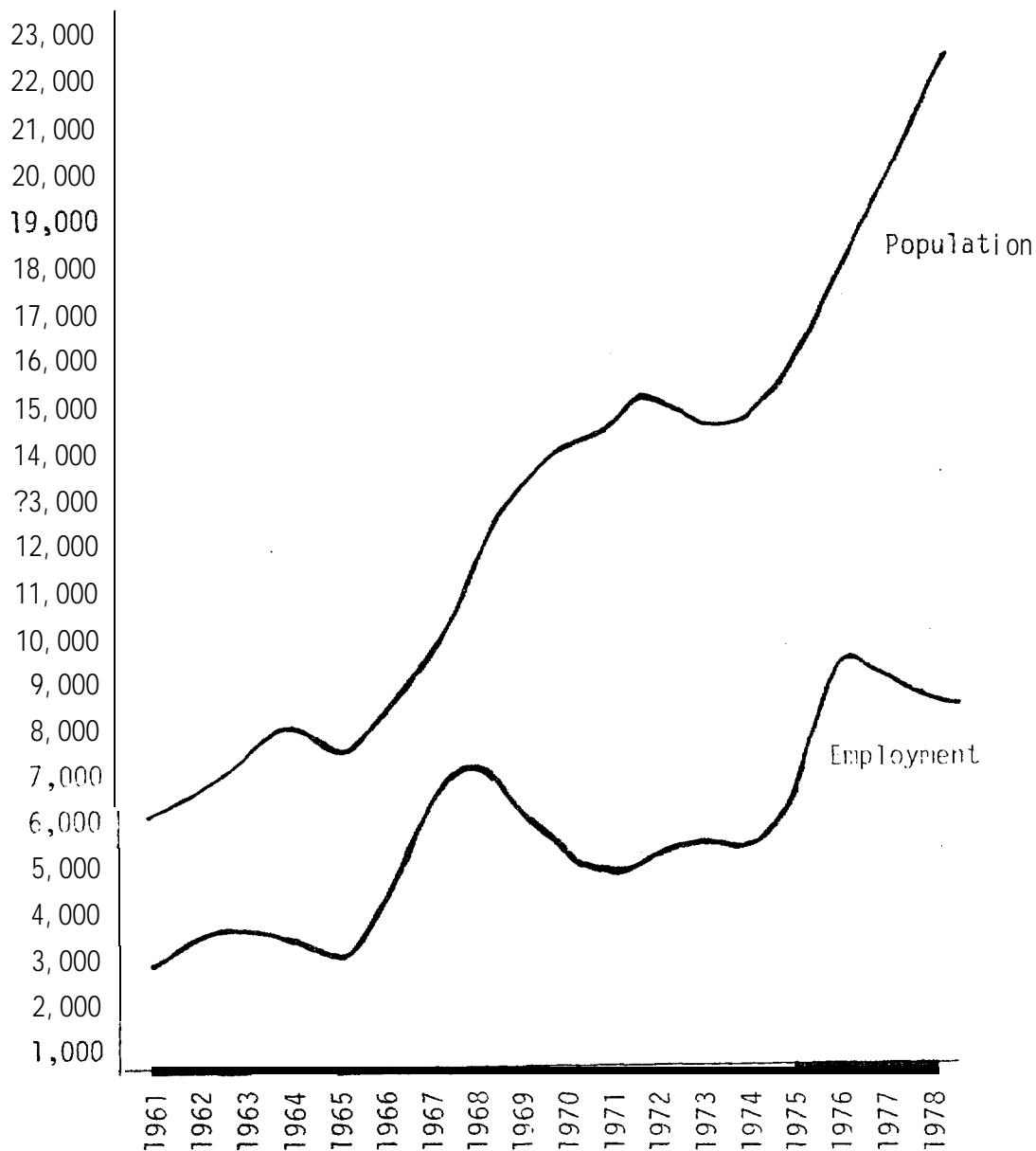
The tempo of the Oil Boom increased during the 1960's. Ten permanent offshore platforms were set up between 1965 and 1968, each of them utilizing crews of fifty to sixty workers at a time during their drilling phases. The laying of offshore pipelines required crews of 100 to 200 men (MSNW/HRPI, 1976, P.15). Two petrochemical plants were completed at the end of 1968 and two more were completed in 1969. New businesses, homes, roads, and urban services were required to support industrial and population growth.

Figure 2 shows the rapid growth in employment and population which occurred during the booms of the 1960's and the 1970's. Employment grew extremely rapidly between 1965 and 1968, and unemployment levels dropped markedly between 1966 and 1968. A decline phase began in 1969 and 1970 with the loss of 1300 oil and construction jobs as wells and refineries were completed. Unemployment rates jumped again. The production phase replaced the exploration and development phases in Upper Cook Inlet around 1970 and employment and unemployment stabilized at much lower levels than the peak construction years (MSNW/HRPI, 1976, P. 16-21).

The social ramifications of the Kenai Oil Boom were complex, but at the simplest level they can be related to the rapid growth of population. The population of the Kenai peninsula more than doubled from 1960 to 1970, from about 6,000 to more than 14,000 people. In the same period, Soldotna's population more than tripled, while Kenai's quadrupled. By 1970 about 50% of the population of the Kenai Penin-

Figure 2

KENAI-COOK INLET CENSUS AREA  
Population and Employment Trends  
1961-1973



1961-1963: Refinery Construction at Nikiski

1965-1969: Construction of oil platforms in Upper Cook Inlet; Petrochemical, LNG, and refining plants at Nikiski

1975-1978: Expansion of existing petrochemical and refining plants at Nikiski

Sources: MSNW/HRPI, 1976; U. S. Army Corps of Engineers, 1978; Alaska Consultants, 1979a; Alaska Department of Labor, Alaska Labor Force Estimates by Industry and Area, 1970-1978.

sula lived in the Kenai area. One result of this rapid growth was a large population of newcomers, who had few ties either to each other or to the Kenai area.

Residents of the area appreciated the economic benefits which the Oil Boom brought them, including more jobs, more business opportunities, higher wages, and more diverse types of work. Better roads, more stores, and more services also resulted from population and economic growth. But during the late 1960's traffic problems, dust, and shortages of housing, goods and medical care also resulted from general population growth (MSNW/HRPI, 1976).

Some residents regretted the loss of the sense of community and neighborliness which existed before the Boom, and some resented the loss of privacy and the increasing number of strangers. The inability of Alaskans to get the higher paying construction and industry jobs was also a frequent complaint of long term residents.

Most development during the oil booms occurred along the highway system because people wanted good access to jobs and services and it was too expensive to maintain back roads. Trailer courts, businesses, and many homes were built close to the highways. This pattern of development, and the transient attitudes of many who came to the area resulted in the sprawl and bland architecture which characterize the Kenai area today.

## POPULATION AND ECONOMIC CHANGE IN THE 1970'S

With the completion of major refineries and petrochemical plants in the North Kenai area, employment opportunities in the Kenai-Soldotna area declined and then stabilized in the early 1970's. Population growth leveled off. The expansion of the Collier's petrochemical plant resulted in a new employment and population boom from 1975 to 1978 as hundreds of new jobs were created. Many people moved to the Kenai-Soldotna area in response to increasing opportunities in industrial and residential construction, in government, transportation, and other services.

Commercial salmon fishing has also boomed during the last three years. Salmon runs have been extremely good, prices for fish have climbed dramatically, and local canneries have been expanding. Local residents can now make year-round livings from a month or two of salmon fishing in Cook Inlet.

Also important in the recent growth of the Kenai area has been the expectation of further construction and oil related booms. Investments in real estate and businesses have been based on these expectations, and have contributed to further population growth.

Although jobs and employment are major attractions, increasing numbers of people are equally attracted to the Kenai area by the chance to live in a small-town or rural environment in the midst of high quality

hunting, fishing, and boating country. This is particularly true of mobile workers who could work elsewhere, but prefer the Kenai Peninsula lifestyles. These social and environmental values are increasingly important components of people's location decisions.

Completion of the Collier's expansion in 1978 and the failure of Alpetco to locate in North Kenai, as well as delays in other expected projects, such as the proposed Pacific Alaska LNG plant, have been followed by a downswing in the area's economy during late 1978 and early 1979. Unemployment rates have been in the 20-25% range, there are high vacancy rates in apartments, and houses have been selling slowly (Kenai Peninsula Borough Growth Monitoring Program, Jan., 1979).

These changes have created hardships for Kenai area construction workers and businesses dependent upon construction and oil-related projects. These groups have a very real interest in construction projects which provide jobs and business--an interest which is translated into political action by unions, Chambers of Commerce and other special interest groups. As in Valdez during pipeline construction (Baring-Gould and Bennett, 1976), "boom" conditions have attracted people to the Kenai area who now have a vested interest in further growth.

## Sociocultural Impact Categories

### ECONOMIC ADAPTATIONS

The **sociocultural** systems of the **Kenai-Soldotna** area have been continuously adapting to economic change and variability, to rapid population growth, and the fluctuating numbers of newcomers, since the discovery of oil in the Swanson River field twenty years ago. The social structure of the area has undergone dramatic changes in that time. **Kenai** has' grown from a sleepy fishing village of a few hundred people to an oil town of almost five thousand; **Soldotna** has expanded from a few homesteads and small businesses at a road crossing to a sprawling residential and service center; and the homesteads of **Nikiski** **are** sprouting subdivisions and refineries rather than potatoes,

The basic concerns that most residents of the area have about OCS events or other industrial development are economic. Their perceptions of the potential costs and benefits of economic change appear to be closely tied to their economic adaptations. This section examines these adaptations, the attitudes toward development associated with them, and some of the problems brought about by the gap between economic expectations and realities in the **Kenai** area.

#### The Economic Environment

Two fundamental characteristics of the **Kenai-Soldotna** area economy are central to local adaptations. First is the lack of diversification,

the dependence of the sociocultural system upon a narrow export base-- oil and gas. Second, as the historical introduction and Figure 2 indicate, is the cyclic nature of economic growth in the region. Several periods of frantic construction, resulting first from military needs, and subsequently from oil and gas activities (Pedersen, 1976), have been accompanied by population increases and overwhelming optimism. These periods have alternated with times of dropping employment, declining profits for local businesses, and faltering faith.

### Social Organization

The open, loosely-knit social organization of the Kenai-Soldotna area is largely a result of this dynamic, cyclic economy. Construction projects, related both to oil and gas development and to the increasing needs of a growing population, periodically require large numbers of skilled and unskilled workers. Economic and population growth also demand more government employees, professionals, and entrepreneurs.

The tripling of the Kenai-Soldotna area population since the late 1950's from less than 5,000 in 1960 to about 15,000 in 1978, means that most of the residents of the area are relative newcomers. With the exception of the Kenaitze, homesteaders, and a few other early arrivals, most residents have moved to the area within the last fifteen years. About half of them have lived in the Kenai area fewer than five years (Green, et al., 1977). In 1976 the average length of residence in Kenai and Soldotna was about six years, which contrasts markedly with older more stable communities like Seward, where the average



period of residence is about 14 years (Green, et al. , 1977).

The need to accommodate many new residents; the fact that existing cliques and more tightly organized social groups have been outnumbered and overwhelmed by population increases; and the rapidly growing, dispersed form of settlement, with widely scattered residences and businesses, have fostered an open, loose, social structure in which newcomers are free to participate.

Most social relations are loosely structured along lines of friendship or common interest. A wide range of voluntary associations and organizations, ranging from the Elks and American Legion to women's groups and square dancing clubs, offer chances for open social participation. Bars, churches, school and sporting events are particularly important for social integration.

#### Occupational Adaptations

Despite the generally open character of Kenai-Soldotna area society, occupations are nevertheless important determinants of social organization. Fishermen, businessmen, construction workers, roustabouts, and professionals tend to form fairly tight social groups and "subcultures". The requirements of their jobs, the fact that people employed in each occupation tend to associate most with their working peers, and the basic human need for group affiliations give these occupational groups unique **sociocultural** characteristics. Although it is beyond the scope of this study to analyze each of these adaptations in such a hetero-

geneous society as that of the Kenai-Soldotna area, a few important characteristics of three groups, the oil workers, construction workers, and professionals, will be examined. These three groups comprise a large proportion of the work force in the Kenai area. Smaller groups, such as commercial fishermen, who comprise about 5% of the workforce of the cities of Kenai and Soldotna (Green, et al., 1977, Table 122), although not treated here, are nevertheless important in the local society.

A large population of oil workers and construction workers have made the Kenai-Soldotna area home during the last twenty years. In the City of Kenai, for example, over 20% of the total employment in 1976 was in the oil and gas extraction industry, while many more people were employed in petroleum product manufacturing and oil-related construction (Green, et al., 1977). A high percentage of the residents of the North Kenai area are also employed in oil related jobs, and Soldotna is a center for many oil industry support services.

Some of the oil and construction workers who settled in the area during the Kenai Oil Boom days found permanent jobs in the processing industry, when the construction phase ended. Many more depended on shorter term construction jobs or oil jobs in other parts of the country, however. Many of these men found work on the North Slope or on the Alaska Pipeline during the early 1970's, and began commuting to these jobs, leaving their families in the Kenai-Soldotna area. Other pipeline workers invested in land and homes in the Kenai Peninsula throughout

the early and mid-1970's.

The expansion of Collier's petrochemical plant provided jobs for many of these people from 1975 to 1978, and also attracted more construction workers to make homes in the area. Approximately 7% of Soldotna's and 8% of Kenai's residents worked outside the Kenai Peninsula in 1976 (Green et al., 1977), and there is good reason to assume that these percentages have increased as the employment opportunities associated with the Collier's project have declined.

"Oil Workers" who live in the Kenai-Soldotna area can be lumped into two major social groups. The first are the engineers and management people. These are professionals and technicians with specialized skills in managing and running the complex equipment associated with refining and processing petroleum products. For the most part they are transferred into the area by their companies. Few of them stay in the Kenai-Soldotna area for more than two or three years, so they are part of the large number of relatively transients who come primarily for jobs. They are generally "urban" people, with high salaries and high demands for urban services and facilities.

The second group of oil-related workers are roustabouts and oil hands. These are the guys who get their hands dirty, particularly in the development and construction phases. The skills they possess, union regulations, and the fact that many come from "oil country" in the south-central U.S., integrate them as a social group.

In the Kenai-Soldotna area some oil hands are permanent employees of local companies. Some have lived in the area a long time, and they tend to be committed to the community. Others are transients, both the professional transients with special skills and seniority who are moved around from job to job as they are needed, and the Independents, those who have a good reputation and can get a job whenever they want. These "good '01 boys" form a network throughout Alaska, the U.S., and the world, and maintain professional and social contacts which allow them to take advantage of good jobs. Often they work for a few years then take a year or two off. Many of these people have been attracted to the Kenai Peninsula by oil activity, by rural and wilderness qualities, and by opportunities to hunt and fish.

A large number of people who work in the construction trades have made the Kenai-Soldotna area home in recent years because of the large number of jobs available in industrial, commercial, and residential construction. Construction employment is unpredictable and highly variable in Alaska, however, and is subject both to seasonal and annual fluctuations. For this reason unions are a critical part of the adaptations of the construction worker. For an excellent discussion of these social and economic adaptations see Dixon (1978).

Many construction workers have developed a seasonal lifestyle in which work during part of the year enables them to collect unemployment and pursue semi-subsistence activities the rest of the year. Family and social stress is often created by the unpredictability of construction

employment, however. When a man is employed he is often too busy to do anything else, working ten or twelve hour days. This leaves little time for family, and often leads to heavy drinking during off-hours. And when men are unemployed they are often too concerned about where the next paycheck will come from to take advantage of their independence.

Government growth, and increasing demands for a wide range of services resulting from population growth have brought a large number of professionals, including teachers, lawyers, accountants, dentists, doctors, managers, planners, and others, to the Kenai-Soldotna area. The large number of doctors and dentists suggests that many of these **people** come as much for the country and the lifestyle as for the business. Many of them have aircraft, which they use to gain access to wild country and good fishing and hunting throughout southcentral Alaska.

Many professionals participate actively in local social and political events. They tend to be more concerned about environmental issues than many other occupational groups.

As in the case with oil and construction workers, the decision to come to Alaska and the Kenai Peninsula is frequently that of the husband. He is often more attracted by the chance to hunt, fish, and experience that "wilds" than his wife is, and this commonly leads to family stress.

Not all of the services and amenities found in Anchorage or cities in the lower '48 are available in the Kenai-Soldotna area.

### Overbuilding

Overly optimistic expectations of economic growth and opportunities have posed difficult economic, social, and political problems in the Kenai area. The anticipation of continuing "boom" rates of economic and population growth, or of new projects which will set off further booms, have drawn people to the area, resulted in a rising unemployment rate, caused inflation as people speculate in businesses and real estate, and caused local governments to overextend themselves in supplying services and facilities.

Considerable overbuilding, both private and public, occurred in the Kenai area during past boom periods. Many local businesses expanded when the oil industry was developing in the 1960's. They built new facilities, increased inventories and hired new employees to meet peak demands. Some of these suffered when development activities slowed in the early 1970's (CH2M HILL, 1978). Rapid growth in the mid-1970's, and the expectation of Alpetco and LNG plant construction has spurred a flurry of new business expansion in the area, which adds to local residents' concern about the effects of the present economic slump.

It does not seem likely that the 1979 real estate market will easily absorb the many new houses and apartment units which were constructed in the 1975-1978 period. Vacancy rates are high, particularly in Kenai,

which is more oriented toward short-term residents and transients and has more trailers and apartments than Soldotna. Kenai had a vacancy rate approaching 45% in late 1978, while Soldotna's was about 16% (Forsi, n.d.). Builders are apparently recognizing the oversupply, and building permits have dropped off sharply in 1979 compared to 1977 and 1978 (Cheechako News, Feb. 23, 1979; Kenai Peninsula Borough, Jan., 1979).

Local government, too, has been forced to expand to meet the increasing demands and expectations of growing populations and businesses. The City of Kenai overextended water and sewer lines in the 1960's in the expectation that population and industrial growth would fill in the spaces between developed lots (MSNW/HRPI, 1976). This resulted in scattered linear growth along utility lines, under-utilization in certain areas, and high construction and maintenance costs which continue to impose a financial burden on the City of Kenai (Forsi, n.d.).

The social costs of overbuilding include rising inflation rates, since land and housing costs remain high even when the rest of the economy levels off. People hold on to property in expectation of future booms.

These processes are evident in the Kenai area at tax-time. Property assessments have risen greatly in recent years as speculation has raised land values. As the market for houses and real estate dropped off in late 1978 and early 1979, residents began protesting increases

in their tax assessments, which appeared to be 20-30% over 1978 assessments, (Peninsula Clarion, April 10, 1979). Many residents complained that their land was not really worth as much as they paid for it.

### Community Attitudes Toward Economic Development

Green, et al., (1977) conducted comprehensive socioeconomic surveys in Kenai Peninsula communities for the Kenai Peninsula Borough in 1976.

These surveys provide valuable information on community attitudes toward industrial growth and development. Portions of the surveys which assessed resident's attitudes toward different types of development activity were most useful to this study. People were asked which of the following activities they would encourage or discourage in their community: tourism, light manufacturing, lumber industry, petrochemical industries, commercial fishing and processing, transport and storage, supply bases for off-shore oil, education and research, deep water port, small boat harbor, or agriculture. In addition, the survey gave residents a choice between various types of oil related industrial development (support bases, oil storage and tanker terminal, refineries and petrochemical plant, pipelines, and LNG plants). Where appropriate, selected results of these surveys are mentioned throughout this report.

The Kenai-Soldotna community wants oil exploration and industrial development. Many businesses, residents, and even local governments feel that a growing economy and population are desirable and even necessary for financial survival.



In general, Kenai and Soldotna residents favor a wide range of potential economic and development activities; only the lumber industry would be discouraged by a strong majority of respondents to Green's (1977) survey. Light manufacturing, storage and transport business, supply bases for off-shore oil and other types of development would apparently excite little controversy in the Kenai area.

The petrochemical industry, on the other hand, is not so unreservedly favored although about 50% of the respondents to the 1976 survey said this industry should be encouraged in the Kenai area. There appears to be considerable division within the communities on the issue of petrochemical plants, since some 20% of those questioned mentioned petrochemical industries as their most favored choice of types of development, while equal percentages said they were their least preferred choice (Green, et al., 1977).

The main benefits expected from OCS development by Kenai area residents include increased job opportunities, higher wages, and general economic improvements in the area. Concerns about negative effects revolve mainly around population growth and pollution and environmental damage. Less frequently mentioned concerns included negative effects on fisheries and the social quality of the communities.

Most residents (50-60%) would prefer to see new jobs added slowly and steadily to the area's economy than would like to see few jobs added or new jobs added quickly. Almost 80% of those responding would prefer

to see these jobs be long-term jobs, lasting more than ten years (Green, et al., 1977).

Significantly, a large number of Kenai and Soldotna residents express interest in obtaining oil-related employment. Fifty-six percent of Kenai residents, and 46% of Soldotna residents expressed such an interest (Green, et al., 1977).

Oil and gas, fisheries, and tourism, in that order, are viewed as the most promising sectors for basic economic growth in the Kenai area into the 1980's as projected by borough planners (Kenai Peninsula Borough, OEDP, 1978). They anticipate continuing expansion of oil and gas processing facilities, new oil and gas development, expansion of fish processing, and continuing growth of the tourist industry.

The business community of the Kenai area has faced major oil-related disappointments in the past year, most notably the decision of Alpetco, which many residents were certain would locate in North Kenai, to locate in Valdez. The huge Alaska Pacific Liquefied Natural Gas project in the planning stages since 1971, is stalled again. Marathon Oil's reported dry hole in Lower Cook Inlet in 1978, in addition to these other disappointments, has decreased resident's petroleum-related economic hopes.

The Kenai-Soldotna area needs new sources of oil and gas according to some observers. They consider the discovery of new nearby recoverable

quantities of crude oil vital to the maintenance, as well as the expansion, of the regional economy. Oil production in the Upper Cook Inlet and Swanson River fields has been dropping annually for nine years. Several fields are reaching the limits of their economic life and may cease production over the next few years (Kenai Peninsula Borough OEDP, 1978), although rising oil prices may give them a longer life. In any case the existing refineries and processing plants in the Nikiski area are likely to need new sources of crude oil within the next decade.

Nevertheless, many businessmen, politicians, and residents feel that the long run economic prospects of the Kenai area are very good. Many residents expect that the Alaska Pacific LNG project will go ahead in the Nikiski area and that cheap natural gas will eventually attract other industry. Outer Continental Shelf lease sales in Lower Cook Inlet, and onshore exploration continue to fuel expectations of further oil and gas development.

Despite the great economic and population growth which has occurred over the past twenty years, economic reality has not kept pace with Kenai area residents' hopes and expectations. Only during the peak boom period of 1967-68, for example, did unemployment rates in the Kenai area drop to 9%-10% (MSNW, 1976). The normal average unemployment rate in the region, even during the high employment period of 1976, has remained around 14%-16% (CH2M HILL, 1978), an indicator, perhaps, of the gap between economic expectations and realities.

The petroleum processing industry, and to a lesser extent government, have grown steadily in the Kenai area. Because they employ fairly large numbers of people in permanent, long-term jobs, they contribute increasingly to the stability of the local economy. But their growth, and the stability they promote, have been overwhelmed by the construction and oil booms, with their vast labor requirements. Although seasonally and annually stable, they cannot in themselves sustain the high rates of employment and growth to which the businesses and residents of the Kenai area have become accustomed. The Kenai area economy and society is in many ways adapted to, and perhaps "addicted" to construction and oil booms.

## LAND AND ENVIRONMENT

### Environmental Values

The natural **environment**, natural beauty, and the availability of wildlife in the Kenai Peninsula are highly valued by many residents of the Kenai-Soldotna area. The Peninsula has long been famous for its moose, for its trout and salmon fishing, and for its clamming and boating opportunities. The rivers, lakes, and road network of the area have given residents good access to these resources.

Many people have moved to the area particularly because of these environmental qualities, and for many others they are an important way of **life**. Many people also feel that maintenance of these natural resource values is also significant economically to the area since they

are vital both to the fishing and tourism industries. While economic concerns are extremely significant to residents of the Kenai area, environmental and recreational quality are also extremely important to large segments of the local population. To many residents, the availability of moose and salmon, and the opportunity to view and harvest wildlife, are important indicators of the quality of life in the area.

#### Population Pressures on Resources

The increasing population of the Kenai area, in addition to the area's relative accessibility to increasing numbers of recreation visitors, have focused increasing pressure upon these resources. Approximately a third of the sport fishing in Alaska now occurs on the Kenai Peninsula according to some estimates by the Alaska Department of Fish and Game, and such intensive use is having negative effects both upon the environment and upon recreational quality.

Much recreational activity is concentrated in relatively small areas, near good fishing streams, clamming beds, and developed campgrounds, particularly where good roads provide access to resources. Such concentrations of users cause trash and sewage disposal problems, increased stream bank erosion, campground crowding, increasing resource harvests, and demands for greater restrictions. Each summer brings increasing numbers of fights and conflicts over recreation resources according to the State Troopers in the Kenai area (personal communication, Sergeant Myers, 1979, Soldotna).

## Conflicts and Confluences Among Public Objectives

The Alaska Department of Fish and Game has had to institute increasingly restrictive regulations to protect moose and salmon on the Kenai Peninsula in the face of increasing demands for these resources. This means fewer opportunities for individuals to harvest them. Disputes have erupted over the allocation of salmon between sport and commercial users. Each of these interest groups accuses the regulatory agencies of favoring the other group.

The U.S. Fish and Wildlife Service manages the huge Kenai National Moose Range near the Kenai-Soldotna area, which includes major portions of moose and salmon habitat. Although a wide variety of uses are allowed on these lands, protection of wildlife habitat is a primary objective. Although against federal controls over land in general, most Kenai-Soldotna area residents seem to have few specific complaints about the Moose Range. They enjoy the benefits of a large wilderness and wildlife reserve in their backyard. Restrictions on access ' by snowmachine and aircraft to certain areas are the main exception to these generally amicable relations.

There is growing concern in the Kenai area about the subdivision and development of waterfront lands. Inappropriate development, pollution, and erosion can destroy salmon spawning areas, and there is increasing interest in protecting lands along streams to reduce these threats. Increasing private ownership of waterfront land is also reducing public access to fishing areas; many residents are realizing

that greenbelts along streams for habitat protection could ensure both public access and protection of salmon habitat.

This public objective, however, conflicts with strongly held beliefs in the sovereignty of private land owners. Many residents feel that the state and the Kenai Peninsula Borough, which will have title to large acreages in the region, should dispose of land to private individuals, rather than using such land to protect the public's interest in wildlife and access to public land (Alaska Division of Lands, 1979). Many also feel there should be no restrictions imposed on the use of land once it comes into private ownership.

#### SMALL-TOWN SOCIAL RELATIONSHIPS

##### The Small-Town-Urban Transition

Oil development, and the resulting rapid growth of population and more specialized urban functions in the Kenai area in the 1960's and 1970's overwhelmed the small scale fisherman-homesteader-native society which had begun to develop in the 1940's and 1950's (Pedersen, 1976). These processes of modernization continue to transform Kenai and Soldotna from small towns into larger urban forms. This transition is increasingly accompanied by the loss of certain valued social qualities, including a sense of community and small town atmosphere. At the same time it brings a greater range of recreational, cultural, and economic opportunities.

Therefore, many **Kenai** area residents have mixed feelings about the effects of population growth upon their quality of life. Despite the **major** changes which have occurred in the area's economy and population, many people continue to perceive and value **Kenai** and **Soldotna** as small towns where people are friendly, neighborly, and know each other. These small-town values were the most frequently mentioned reasons for liking to live in **Kenai** and **Soldotna**, while deterioration of the environment and population growth were among the changes least liked by respondents to one survey (Green, et al., 1977).

In contrast to the many residents who place a high value on the small-town qualities of these communities, a large (about 18% in **Soldotna**, and 12% in **Kenai**), and probably growing segment feel that the things they like least about the **Kenai** area are the disadvantages of small-town living (Green, et al., 1977). Many newcomers, and many longer term residents too, desire more urban services and amenities.

The communities of the **Kenai** area are too large for everyone to know everyone else, and reciprocity and personal contacts are being replaced by the increasing importance of more impersonal and market relationships. Like small towns everywhere which are in the process of transition to more modern urban forms, small family-owned businesses are being replaced by larger stores, volunteers are being replaced by paid professionals in public services, and it is becoming less and less likely that a family knows its next-door neighbors.



### Local Versus "Outside" Control

This process of transition is illustrated by recent changes in Soldotna and Kenai businesses. The old Soldotna drug store, for example, was located in a small quonset building, and had a personal, general-store atmosphere, in which customers met neighbors and visited with the owner and his wife who ran the business. The owner did well, and was able to replace the old store with a large suburban type "mini-mart". Now the place is antiseptic and impersonal, there are many employees, and the owner and his wife are not in evidence. Similar processes have changed local hardware and grocery stores, and Dairy Queen and Kentucky Fried Chicken chains are competing with small "mom and pop" restaurants. Locally owned businesses are increasingly being bought out by non-resident corporations, or facing competition and underselling by chain operations.

Some Kenai area residents are concerned about the increasing power and influence in their communities of people who are not residents of the community. They want to participate in decisions and in the benefits of growth, and to avoid its costs. They feel lack of local control has been responsible for preferential hiring of outsiders in the petroleum industry. They are also sensitive to the courtesies and attention they receive from industry. Soldotna city leaders, for example, threatened to withdraw the city's support for the Alpetco project because they did not receive invitations to a dinner hosted by the corporation (Cheechako News, October 27, 1978).

Many oil industry employees, particularly those in managerial positions, have experience and energy which some residents feel could benefit the **community**, but they seldom participate in local politics and government. This lack of participation seems to result partly because of **their** mobility, since they are frequently transferred by their companies, and partly from a sensitivity to potential criticism about "oil men" "taking over" local affairs. Therefore a large group of residents are **underrepresented** in local politics.

### "Boomers" and "Transients"

Long time residents of the **Kenai** area associate a loss of sense of community with the arrival of large numbers of oil and construction workers in the late 1960's who came primarily for large paychecks. Many newcomers consider themselves relatively transient. A large proportion of the residents of the **Kenai** area, almost 20% in Kenai, and 16% in **Soldotna**, expect to stay in those communities for less than five years (Green, et al., 1977).

This large population of transients is significant socially and politically. According to many residents it means that many of these **people** are only interested in personal gain, and not in development of the **community** as a good place to live. They say newcomers hesitate to **commit** themselves to long-term community improvements, and they do not participate in public affairs and politics. Many residents feel this adds to the social instability of the area and **the** lack of a sense of community.

The residents of **Kenai** and **Soldotna** differ to some extent in attitudes toward the growth of population in their cities. While a majority of the residents of **Kenai** would prefer to see the city's population remain the same, or smaller, a majority of **Soldotna** residents would like to see their city grow. If growth occurs, residents of both cities would prefer to see a steadily growing population of new permanent residents, rather than transients (Green et al., 1977, Tables 1, 5).

#### POLITICS AND RESPONSE CAPACITY

The political system of the **Kenai-Soldotna** area, like its social and economic organization, has been shaped and influenced, at least indirectly, by oil and gas development. Not only are a large proportion of the residents and voters of the area employed by, or involved in, oil and gas related businesses, but the demands and needs for government services, facilities, expenditures, and regulations in the **Kenai-Soldotna** area have largely arisen from events induced by oil and gas activity. And the oil and gas industry provides most of the tax-base for local government in the **Kenai-Soldotna** area.

As residents and community leaders in the **Kenai-Soldotna** area learned from their own experience with oil development in the 1960's, and from **Fairbanks'** and **Valdez'** experience during construction of the **Trans-Alaska Pipeline**, major oil and gas related projects place complex demands on local political systems. Local efforts to control and manage the effects of energy related projects are not only expensive

and time-consuming, but controversial and potentially divisive as well.

This section examines the trends, concerns, and values related to politics and local government in the **Kenai-Soldotna** area which seem most significant for analyzing the **sociocultural** impacts of OCS events, and for evaluating the capacity of local government to respond to population growth and economic change.

### Governmental Organization

The City of Kenai was incorporated as a home rule city in 1960, in the early part of the Kenai oil boom, and **Soldotna** became a first class city in 1967 after several earlier unsuccessful attempts to incorporate (Parker, 1976). Both cities have mayor and city council forms of government; Kenai also has a city manager. Both cities were incorporated largely to deal with growing populations and demands for public services resulting from oil and gas development in the surrounding region.

Kenai and **Soldotna** provide a wide range of urban public services and facilities to their residents, including police and fire protection, water and sewer services, municipal administration, parks, libraries, and road maintenance. The services each municipality provides are described and evaluated in terms of potential population increases resulting from **OCS** activity in **CH2M HILL** (1978).

Both cities are growing rapidly, and city governments have been hard pressed to maintain existing facilities and provide the services demanded by growing populations. Police and fire protection, sewer services, parks, and road maintenance in both communities are near their limits with existing populations (CH2M HILL, 1978). Residents of Kenai and Soldotna are particularly unsatisfied with road maintenance and city parks, and to a lesser extent with police and fire protection (Green, et al., 1977).

Both cities have taken steps to upgrade their services in expectation of accelerated growth. The city of Soldotna, for example, placed bond propositions before voters in 1978 dealing with expansion of the city's sewer treatment plant, new city administration and police offices, and street improvements. Both Kenai and Soldotna are compiling comprehensive plans which will aid in planning for the expansion of new services and guiding urban growth (Forsi & Associates, n.d.; R.W. Thorpe & Associates, n.d.).

The municipal governments of Kenai and Soldotna, as well as the borough, are constrained to some extent in their attempts to provide services, plan, and otherwise prepare for change and growth, however, due to a number of social and political forces. Rising government costs, local concerns about government growth, the mismatch between sources of local government's revenues and costs, and the changing distribution of population in urban and rural areas all appear to affect local government's ability to respond to further industrial development and

population growth.

### The Dilemma of Government Growth

In the Kenai-Soldotna area, as in other parts of the state and nation, there is a recurring contradiction between people's desire for more public services and fewer government costs and controls. People want the benefits, but not the costs, of government growth.

Many, if not most, of the residents of the Kenai-Soldotna area clearly subscribe to the theory that the government governs best which governs least, and they value the relative lack of restrictions in the local government. The powers of the borough and city governments have been consistently constrained by voters.

The Kenai Peninsula Borough provides little more than the minimum services mandated by state law for a second class borough, and maintains a minimal tax rate, as one borough assemblyman noted with obvious pride. The tax rate is 4 mills, one of the lowest borough tax rates in the state. Borough regulations and controls are also limited. No zoning is imposed outside incorporated areas, and no building permits are required outside the cities, for example. Subdivision regulations are extremely lenient, since paper platting, showing roads and other improvements on survey plats even though they haven't been built, is allowed. Only recently have minimum lot sizes (20,000 Sq. Ft.) been established.

Residents are reluctant to give the borough or cities more money or power. In 1978, for example, Soldotna voters rejected the bond propositions that city leaders said were badly needed to build a public safety building and city hall, and to improve city parks and ballfields. They also defeated a proposition which would have added another 1% to the city's existing 2% sales tax, and passed one which limits the city to nine mills for its operating budget (Cheechako News, Oct. 6, 1978).

An increasing range of public services and facilities are demanded by residents of the area, however. The rapid growth of population in Kenai, Soldotna, and the surrounding area in the 1960's and 1970's, resulting primarily from oil and gas development (MSNW/HRPI, 1976, P. 80) has brought growing needs in such critical areas as education, water and sewer services, and police and fire protection.

The cities and borough are also increasingly called upon to perform new functions. They are taking more active roles in encouraging economic development, for example. Residents also want to have more control over the future of their communities and are pushing the cities and borough into planning for, and guiding, growth. New roles for local government are also encouraged by state and federal programs, such as Coastal Zone Management legislation.

The provision of public services and the performance of these added roles make local government bigger, more expensive, and more powerful, setting the stage for community conflict over the proper level of

government involvement. Rising costs and increasing regulation both conflict with the strongly held views of many "political fundamentalists" in the Kenai-Soldotna area. Many people mentioned the growing power and influence of government as one of the major negative impacts of oil and gas development and population growth in the Kenai-Soldotna area.

Nevertheless, significant **social** improvements have resulted from government growth and the growth of the borough's taxbase. Improvements in health care in the Kenai-Soldotna area, particularly the completion of a well-equipped modern hospital in Soldotna in 1970, and the following increase in the number of physicians in the area, are related to the increasing tax base of the Central Peninsula Hospital Service Area (MSNW/HRPI, 1976, P. 280). Educational opportunities, **police** and fire protection, and many other **services** have also improved as a result of the growing tax base provided by oil and gas-related development in the Kenai-Soldotna area.

#### Impacts of Industrial and Commercial Location Upon Response Capacity

Current trends in residential, **commercial**, and industrial location are greatly influencing the ability of Kenai and Soldotna city governments to deal with population growth. Oil and gas industries have located outside municipal boundaries in the Nikiski area, so that although there has been rapid growth in the population of the cities, there has been no corresponding growth in their tax bases. This has caused fiscal



problems, particularly for Kenai, and has limited both cities' ability to supply increasing demands for public services and facilities (Brogan, et al., 1977; CH2M HILL, 1978).

New businesses are also tending to locate outside municipal boundaries in the Kenai-Soldotna area, compounding the existing imbalances between population and tax base. This process is occurring for several reasons: tax rates are lower outside the cities; fewer regulations exist outside the cities (there is no zoning and building permits are not required); and larger blocks of land are available at lower prices outside the cities (Brogan, et al., 1977).

Several remedies for this imbalance have been suggested, including annexing the Nikiski industrial area to the city of Kenai, sharing revenues between the borough and the cities, and establishing zoning and building permit requirements in the unincorporated areas of the borough to reduce their relative attractiveness to businesses. As the next section shows, however, few of these remedies seem politically likely in the near future, given the developing patterns of residential growth and political power in the Kenai-Soldotna area. The cities seem likely to continue to have problems paying for the services their residents demand.

#### Relations Between Municipalities and the Unincorporated Areas

Two interrelated issues affecting the ability of Kenai-Soldotna area institutions to deal with economic change and population growth arise

from the political relationships between the cities and the unincorporated areas around them. First, problems were **built** into these relationships by the structure of the borough form of local government. Secondly, the balance of power between the two areas is **shifting** toward the outside-city areas, which are gaining population more **rapidly** than the municipalities.

The fundamental conflict between boroughs, cities, and the population near, but outside municipal boundaries, created by Alaska's borough system (**Morehouse** and Fischer, 1971, P. 96-98) is exemplified in the Kenai-Soldotna area. Areas outside the city limits of **Kenai** and **Soldotna** are rapidly urbanizing, and demanding more and more urban services, but there is little agreement on the means of supplying them.

The provision of fire protection outside the cities has recently become a critical issue in the **Kenai-Soldotna** area. City fire departments have provided this protection as much as possible in the past, but as city **and** non-city populations have grown it has become increasingly difficult and expensive for the cities to serve non-city residents (**Cheechako** News, August 18, 1978). In 1978, **Soldotna** announced that its fire department would no **longer** be able to respond to fires outside the city. The borough, created to provide this kind of service to small, scattered populations, may assume powers on an **areawide, non-areawide,** or service area basis. Each of these **potentially** creates problems between city and borough government and between city and non-city residents.

Fire protection is provided by the **Kenai** Peninsula Borough outside the municipalities on a service area basis. Fire Service areas have been created in North **Kenai** and in the Bear Creek area. The creation of fire service areas in the Sterling, **Kalifonsky** Beach, and Ridgeway areas has been under consideration (**Cheechako** News, February 9, 1979), but residents of those areas have been generally opposed to the tax levies which would be necessary to support such services (**Cheechako** News, March 2, 1979). The creation of service areas tends to reinforce opposition to city expansion, annexation, or rationalization of tax and service structures. As Morehouse and Fischer (1971, P. 100) note,

. . .service area status insulates their residents from the cost of city facilities and services that they share or benefit from, perhaps most obviously as owners of property whose value is enhanced simply because the city is accessible. . .

This opposition to annexation is particularly obvious in the North **Kenai** area, where a relatively small number of residents benefit from the huge industrial tax base through the North **Kenai** Fire Service area and North **Kenai** Recreation Service area. It is also apparent in Ridgeway and other areas near **Soldotna**, where residents testifying at a hearing on fire service areas vehemently rejected the idea of annexation to **Soldotna** as a solution to the fire protection problem (**Cheechako** News, March 2, 1979).

Areawide powers assumed by the borough are denied to the cities. Since **Kenai** and **Soldotna** already have fire departments, and since it is unlikely either that they would want to give up control of this

function, or that non-city residents of the borough would want to help pay for services which primarily benefit users closest to fire stations, the borough is not likely to assume fire protection powers on an area-wide basis.

The question of the relationships between city and non-city interests is also related to American social values and myths about the "city" and the "country". Certain groups of outside-city residents in the **Kenai-Soldotna** area place a high value on rural-suburban lifestyles and autonomy from the cities, which they tend to view as corrupt. This moral view of the country versus the city reinforces and is reinforced by the economic advantages of living outside the city, not paying its taxes, but enjoying many of its benefits.

These structural and cultural problems in city-hinterland relationships affecting the ability of the cities and borough to deal with population growth, are intensified by recent trends in population distribution.

A special census, taken in 1978, reveals that although **Kenai** and **Soldotna** have grown greatly since the last census in 1970, the surrounding areas, outside municipal boundaries, have grown more rapidly. While in 1970 almost half (49.5%) of the residents of the borough lived in the cities, in 1978 this proportion had dropped to 44% (**Kenai Peninsula Borough, 1979**). The **Nikiski** area, north of the city of **Kenai**, has grown most rapidly; its 3,489 residents make it the

second largest population concentration in the borough, exceeded only by the city of Kenai.

Representatives from city areas, particularly Soldotna, sought reapportionment of the Borough Assembly in 1977-78, believing that recent population growth entitled them to more votes on the Assembly. The results of the special census, if translated into representation on a one-man, one-vote basis, would give Soldotna more votes at the expense of Kenai, but would give out-of-city representatives even more strength (80.64 votes compared to 63.36 votes for city representatives) (Cheechako News, September 1, 1978).

Reapportionment will potentially affect the ability of the cities to respond to further population growth and demands for services in several ways. Service areas and other special districts will be favored by out-of-city representatives, and few government controls, such as zoning or building permits, are likely to be introduced outside the cities. This will reinforce the existing trends toward industry and businesses locating outside cities. It will also reinforce local resistance to annexation in the Nikiski area (Martin, 1978, P. 2).

Outside-city areas are also likely to receive an increasing share of public works funds from the borough. This could leave the cities at a further disadvantage in dealing with population growth.

Although all of the residents of the Kenai-Soldotna area are actually part of one community in a social, ecological and economic sense, they prefer not to recognize this unity politically. People outside the cities, who benefit from the existence of the cities through employment, shopping, and cultural opportunities, and who have depended on the cities for fire protection, do not want to share in the costs of city government. City representatives push for projects, such as Alpetco, with seeming disregard for their potential impacts upon people outside the cities where the projects would take place (Cheechako News, November 3, 1978).

### Planning

Among the government controls creating conflict in the Kenai-Soldotna area are planning and zoning, which have been political issues since the 1960's. As noted throughout preceding sections, the borough and cities have taken a number of steps to prepare for population growth and changes which could accompany major energy projects in the Kenai-Soldotna area. Although there is considerable recognition among community leaders and administrators that planning provides invaluable tools and methods for preparing for change (Brogan, et al., 1977), planning, and particularly zoning controls, connotes loss of individual rights and freedoms to many residents.

A wide spectrum of views on the planning issue exists in the Kenai-Soldotna community. Borough and city officials note the important role that planning and zoning could have played in avoiding private and

public overbuilding and inefficient, costly, dispersed residential and commercial development in Kenai during the 1960's Oil Boom (MSNW/HRPI, 1976, P. 227).

Some residents see Soldotna and Kenai as the epitome of unplanned, unregulated sprawling growth, with little forethought either for the expense of providing public services, or for maintaining or enhancing a sense of community and social quality. They cite the location of the new Post Office in Soldotna as an example of poor planning. "You can't walk there, and you can barely drive there safely". Some people feel that zoning in Kenai and Soldotna is done out of political expediency, without thought for the future shape or quality of the cities.

While some residents feel there has not been any planning, others say there is too much. People have been extremely resistant to attempts in the past to institute planning or zoning procedures in the Kenai-Soldotna area. A comprehensive plan developed by the borough in the late 1960's, with general land use and zoning recommendations (Kenai Peninsula Borough, 1969) was vehemently rejected by Kenai and Soldotna city councils and the borough assembly. The mayor responsible for drawing up the plan was also defeated at the next election by a candidate running on an anti-planning platform. Since that time, community leaders report, planning and zoning have been too controversial for most local politicians, and no comprehensive plans have been developed or adopted by the Borough.

Comprehensive plans for the cities of Kenai and Soldotna are presently being developed with the use of CEIP funds, and while some zoning changes may occur after they are adopted, they appear to stay away from controversial areas. The Army Corps of Engineers, which has responsibilities in the Kenai River drainage, has recently released the results of a study and classification of wetlands (U.S. Army Corps of Engineers 1978), and required permits for developments which affect these areas. This removed some of the onus for environmentally responsible land-use planning from the Borough, and places it upon the Corps.

The Borough is presently contracting with firms to provide the elements of a Coastal Zone Management Plan, under the terms of the state's Coastal Management Program (Kenai Peninsula Borough, 1977). While portions of this three-year study will involve environmental and land-use considerations, the Borough is emphasizing the portions which deal with economic and industrial potentials on the Kenai Peninsula. Similarly, the Borough is using a Coastal Energy Impact Program grant to fund a study of port and harbor needs. In these ways the unpalatable regulatory connotations of planning are avoided, and substituted by the politically pleasing concept of economic development.

Other important planning efforts have been undertaken, or are underway by the borough. The Kenai Peninsula Borough Growth Monitoring Program (1979) has been mentioned in earlier sections, as have the studies of OCS impacts upon the Borough undertaken by CH2M HILL (1978), and the



water supply studies being made by the borough and the USGS. All of these help provide background data and starting points for planning for future growth in the Kenai-Soldotna area. The Kenai Peninsula is represented on the Alaska Coastal Policy Council by the borough mayor, who is also involved in national level coastal planning councils.

(Kenai Peninsula Borough, 1977). This contributes to the borough's level of preparedness and expertise in dealing with coastal planning issues.

#### SOCIAL HEALTH

Increasing problems of alcoholism, mental health, and crime have accompanied population growth and economic change in the Kenai-Soldotna area. These have necessitated increasing state and local involvement in providing police protection as well as alcoholism and mental health counseling.

Few meaningful statistics describing changes in these social indicators over time are available, however. As an earlier study of the social changes induced by Upper Cook Inlet oil development between 1961 and 1972 points out (MSNW/HRPI, 1976), during periods of rapid change in small communities, public servants have more immediate and pressing concerns than recording data of interest to social scientists. For the most part this continues to hold true, particularly of understaffed, overworked social agencies.

Even where statistics exist, it is difficult to correlate therewith particular socioeconomic changes, to relate cause and effect, without making much more detailed studies of processes.

### Alcoholism and Mental Health

Alcoholism is a serious health and social problem in the Kenai area, as it is throughout Alaska. Alcohol abuse is closely related to crime, and to mental health and family problems. Most, if not all, serious crimes during the late 1960's are reported to have involved the use of alcohol (MSNW/HRPI, 1976), and this pattern appears to remain true today. Few meaningful statistics related to alcohol abuse in the Kenai-Soldotna area exist. Those which are available are difficult to assess because people tend to cover up the fact of alcohol abuse for insurance purposes and social reasons whenever possible.

A high percentage of the ambulance calls to which the Nikiski fire department responds involve alcohol use, however, and all five deaths which occurred in the city of Kenai in 1978 are believed to have been alcohol related (Personal communication, Price, Soldotna).

There are high incidences of mental health problems in the Kenai area. These include depression, and a great deal of child and marital abuse (Dr. Turner, quoted in Peninsula Clarion, Feb. 23, 1979). These problems are all aggravated by alcohol. No meaningful statistics related to the changing incidence of mental health problems exist for

the Kenai area. The Central Peninsula Mental Health Center's monthly patient load has increased greatly during 1979, from 160 to over 200 (Table 1), but this is attributed largely to increasing community acceptance of mental health counseling, and word of mouth advertising (Peninsula Clarion, Feb. 23, 1979), rather than increasing incidence of problems.

Unemployment is probably one of the major contributing factors to alcoholism and other mental health problems such as depression and family abuse (Personal communication, Price, 1979). The high unemployment rates in the Kenai area in 1978 and 1979 (between 17% and 20%, according to officials of the Alaska Department of Labor), have apparently contributed to these problems. Alcoholism and mental health counselors in the Kenai-Soldotna area have been overwhelmed by a growing caseload during early 1979 (Personal communication, Price, 1979; Peninsula Clarion, Feb. 23, 1979).

Besides the alcoholism and mental health counseling centers, which have recently been established in the Kenai area, a women's resource group has recently been organized in Soldotna and Kenai to deal particularly with a growing incidence of incest and child and spousal abuse in the area.

This group runs a phone-in Crisis Center to assist with these and other problems, including suicide prevention. While there are no

Table 1

KENAI COMMUNITY MENTAL HEALTH CENTER  
ADMISSIONS

<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
34	138	80	162	over 200 to date

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Source: Alaska Department of Health and Social Services.  
Office of Information Systems. July 30, 1979.

statistics or concrete evidence bearing on the issue, some residents suggest that the increasing incidence of some of these social problems is due not simply to population increase and recent rising unemployment, but also to the social character of these unemployed, including a large number of poorly educated construction workers, many of whom come from southern states.

### Crime

Local economic conditions appear to play a significant role in the types and rates of crime in the Kenai-Soldotna area. The incidence of property crimes seems to stabilize during heavy construction periods when the economy is up, but the population increases which occur during these periods seem to be reflected in increased numbers of assaults. When the economy is in a slump, particularly after a heavy construction period, the incidence of property crimes increases, while the assault rate decreases. This trend was noted during 1972-1974; when the economy was depressed, crimes against property rose rapidly and assaults declined. This pattern occurred again in late 1977 and 1978 as the economy slumped (Peninsula Clarion, Feb. 14, 1979; see also Tables 2-4).

In 1975-76, when the Collier and other construction in the Kenai area was at a peak, crimes against property in the city of Kenai stabilized and actually decreased, while assaults increased (Table 2). Records of offenses reported to the State Troopers, who cover the entire Kenai Peninsula outside the cities, such as Soldotna, Kenai, and Homer, which

Table 2

CRIMINAL OFFENSES

CITY OF KENAI

1974 - 1978

<u>Major Criminal Offenses</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Homicide	--	--	--	--	--
Rape	--	--	--	--	2
Robbery	1	--	3	2	6
Assaults	22	35	38	30	21
Burglary	38	27	40	48	79
Larceny	111	132	117	189	190
Auto Theft	27	18	45	38	37
TOTAL	<u>199</u>	<u>212</u>	<u>243</u>	307	335
<hr/>					
Total Complaints	2,000	2,105	2,606	3,079	3,422

<sup>1</sup>Total Complaints includes additional categories of offenses, and therefore are higher than column totals

Source: City of Kenai Police Department.

Table 3

MAJOR CRIMINAL OFFENSES REPORTED  
Alaska State Troopers

Kenai Peninsula Borough (Outside First Class Cities)

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971-1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Homocide	3	2	1	**	1	0	2	1	1
Negligent Homocide	2	3	5		5	12	8	6	0
Forcible Rape	0	2	1		1	0	6	4	1
Robbery	2	1	0		1	0	1	3	2
Assault	30	41	19		42	47	39	52	64
Burglary	80	96	55		73	98	8a	117	149
Larceny	132	124	55		145	190	193	221	262
Auto Theft	36	33	9		20	19	30	39	39
Total Reported Offenses	285	302	145		288	366	367	443	518

\*\* Statistics unavailable for 1971-1973.

Sources: MSNW/HRPI, 1976; Alaska State Troopers, Soldotna, 1979.

Table 4

SECONDARY CRIMINAL OFFENSES REPORTED  
Alaska State Troopers  
Kenai Peninsula Borough (Outside First Class Cities)

	<u>1978</u>	1969	1970	<u>1971-1973</u>	<u>1974</u>	<b>1975</b>	<b>1976</b>	<b>1977</b>	<b>1978</b>
Forgery & Counterfeiting	2	3	3		2	5	--	1	4
Embezzlement & Fraud	10	9	17		10	29	9	8	7
Stolen Property	0	0	1		2	4	--	--	1
Weapons	6	13	7		10	9	13	11	11
Prostitution & Vice	1	0	0		2	3	--	--	1
Sex Offenses	8	4	4		9	5	4	8	7
Offenses against Family	3	8	1		10	2	2	1	3
Narcotics & Drugs	4	8	7		15	6	11	4	14
Liquor Laws	58	25	19		1	4	8	8	7
Drunkenness	83	46	8		--	--	--	--	--
Disorderly Conduct	19	8	15		7	--	8	5	8
Vagrancy	1	0	0		--	--	--	--	--
Gambling	3	0	0		--	--	--	1	--
Driving wh. Intoxicated	96	39	63		27	70	58	99	69
Vandalism**						47	42	65	56
Other	<u>77</u>	<u>46</u>	<u>41</u>		<u>118</u>	<u>82</u>	<u>41</u>	<u>56</u>	<u>41</u>
Totals	371	209	186		261	270	198	271	235

(Totals may include additional categories of offenses, and therefore may be higher than column totals.)

Sources: MSNW/HRPI, 1976; Alaska State Troopers, Soldotna, 1979.

\*\* Began reporting in 1975



have city police, show a general annual increase in reported crimes, which is probably related to general population growth (Personal communication, Sergeant Myers, Alaska State Troopers, Soldotna). They also indicate a significant drop in reported offenses during 1976, a peak employment period, and a dramatic rise in property crimes in 1978 (Tables 2 & 4).

Increasing rates of prostitution and gambling, often assumed to be associated with "boom town" conditions (Dixon, 1978), are not reflected in crime statistics available for the Kenai area during the oil boom of the 1960's, or the construction boom of the mid-1970's. From 1968 to 1970, for example, only one arrest for prostitution, and three for gambling, were made by State Troopers (MSNW/HRPI, 1976). Likewise, although three prostitution cases were reported in 1975 during the Collier's construction boom, there were only a total of six such cases between 1974 and 1978. Only one gambling case was reported during the same period. However, it is difficult to evaluate what role reporting methods and community acceptance of these "victimless" crimes may have played in affecting these figures.

The State Troopers note that there are major seasonal fluctuations in crime rates. **Summer** brings dramatic increases in traffic accidents, crimes against property, trespassing, assault, disorderly conduct, etc., which correspond to the heavy recreation use of the Kenai Peninsula by tourists and Anchorage residents from May to September (Personal communication, Sergeant Myers, 1979, Soldotna).

## Summary

In summary, a few basic features appear most important to understanding how the **sociocultural** systems of the Kenai-Soldotna area operate and where they are heading. The economy, society and politics of the area have been shaped and forged by twenty years of involvement with the oil and gas industry, including the exploration, development, and production phases. Therefore LCI Lease Sale 60 is nothing new to residents of the **Kenai-Soldotna** area; its effects are more likely to be variations on a theme than a new composition.

In fact, LCI Lease Sale 60 is vastly overshadowed in the minds of most **local** residents by the prospects of huge projects such as the LNG plant proposed for construction in **Nikiski**. The Kenai-Soldotna area is facing a minor economic slump in 1979 in the aftermath of a vigorous construction boom resulting from additions made to a Nikiski petrochemical plant. Residents are aware of the instability of their economy, but eager for more "booms".

The small-town society of the **Kenai-Soldotna** area, highly valued by most of its residents, is being transformed into a more modern, impersonal **urban** society as population increases and more specialized urban functions develop. Accompanying this transition is a growing demand for urban services and facilities which must be provided by **local** government.

Current trends in population, commercial, and industrial location are greatly influencing the ability of local government to respond to these demands. Population growth in the cities is not being matched by increasing tax revenues, since the industrial tax base is located outside the cities. This is making it more difficult for the municipalities to provide demanded services and facilities, and more expensive for city taxpayers.

Kenai-Soldotna area residents face a typical American dilemma - they need and want more services, but they do not want the increasing regulation which inevitably accompanies government growth. At the same time that local government is being asked to help promote economic development and to prepare for industrial and population growth, it is also facing tax revolts and political fundamentalism which seek to drastically curtail its powers. Public servants and leaders have to walk an ever narrowing line between conflicting mandates.

The population of the rural and suburban areas outside the municipalities is growing more rapidly than urban population, and this changing balance will be reflected in reapportionment of the Kenai Borough assembly, which has been dominated by city representatives in the past. Greater representation of rural residents in the next few years is likely to constrain the borough in attempting to help solve urban problems, since rural residents are unlikely to favor policies which benefit the cities at their expense. It is unlikely for example, that Kenai will be able to annex the North Kenai industrial area, or that

building permits or zoning **will** be imposed in rural areas. Therefore businesses and industry will continue to prefer to **locate** outside the municipalities.

For the most part, however, the **Kenai** Peninsula Borough has been successful in preparing for possible population growth and economic change. It has obtained **state** and federal grants for studies of such important topics as LCI OCS impacts, industrial water supply, and port and harbor needs and demands. It is working with the cities to develop methods of attracting industry through municipal bonding assistance. The borough has designed new schools so that they can easily be added **to** as population growth warrants; it is conducting a growth monitoring program; and it has recently made land selections **which** include potential port **sites**.

In short, population growth and industrial development are largely expected and desired by residents of the **Kenai-Soldotna** area. Certain widely held values, particularly those related to the small-town atmosphere, and recreational use of fish and game, are threatened by these changes over the long-run, but most residents, at least the vocal ones, seem to feel that the economic benefits **will** outweigh these costs

## HOMER AREA

### Introduction

The Homer area is located in the southcentral Kenai Peninsula, on the north side of Kachemak Bay. It includes the cities of Homer and Kachemak, and nearby unincorporated residential areas and commercial clusters, including the Fritz Creek, Diamond Ridge, and Anchor Point areas. The Homer area included about 4,800 people in the 1978 special census of the Kenai Peninsula Borough. The city of Homer, with a population of 2,055 in the same census, is the trade and service center for this large area. People from the surrounding unincorporated areas work in Homer, buy groceries and other goods there, and keep their commercial fishing and pleasure boats in the city's small boat harbor.

The sociocultural system of the Homer area differs significantly from those of the Kenai-Soldotna area, despite the fact that the areas are closely linked by transportation, trade, and political systems. The Homer area is more sparsely populated, it is economically dependent upon commercial fishing and tourism rather than the oil and gas industry, and it has not been subject to the major economic fluctuations which have characterized the development of the Kenai-Soldotna area. The beauty and bounty of Kachemak Bay, rather than boom economic conditions, have attracted people to the Homer area.

The people of the Homer area in general seem more concerned about environmental quality, and less desirous of population growth than those of the **Kenai-Soldotna** area. In line with these attitudes, Homer area votes went to Governor Hammond in the 1978 gubernatorial contest, while those in the **Kenai-Soldotna** area went to his more development-minded opponents.

This portion of the report describes the baseline **sociocultural** characteristics of the **Homer** area. It begins by briefly examining how the Homer area was settled, and who has settled there. This is followed by discussion of the more significant **sociocultural** features of the Homer area which are likely to be affected by OCS activity in Lower Cook Inlet. This analysis of issues and trends provides the background from which future **sociocultural** conditions in the Homer area can be projected under the hypothetical scenarios and socioeconomic projections developed by Dames and Moore and Alaska Consultants.

#### Settlement and Social History

The economy and environment of the Homer area support diverse lifestyles. Neatly suited businessmen contrast with pony-tailed fishermen in wrinkled jeans. The chubby Russian-speaking women in colorful traditional peasant dresses contrast sharply with the shiny new pickup they drive, and the modern shopping center they visit in Homer.

This diversity is an important characteristic of the Homer area, as are the interrelationships, social, political, and economic, which reach across differences to link and integrate diverse peoples into a **community**. Commercial fishing, farming and gardening, religion, arts and crafts, governmental organization, and even OCS development, among other activities and ideas, unite and separate people to create the distinctive **sociocultural** systems of the Homer area.

This section briefly describes the history of settlement and social change in the Homer area. In this area, three intertwining economic traditions, based largely upon Homer's unique geographic situation and resources, have persisted since the turn of the century, despite rapid growth and economic change. Newcomers, arriving in the area for various reasons, have adapted to the three basic ecological-economic niches the Homer area provides, **commercial** fishing, trade, and **semi-**subsistence fishing and farming.

## EARLY SETTLEMENT

The rich waters of Kachemak Bay have supported human cultures for several thousands of years (Workman, 1974). The wide range of marine mammals, invertebrates, **seaplants**, seabirds, and fish that continue to make the Bay so valuable to people today supported a variety of cultures in the past.

Although Kachemak Bay was occupied by Eskimo, and then by Tanaina **Athapaskan** peoples (deLaguna, 1934; Osgood, 1937) and was explored by Russian traders in the 18th century, apparently no remains of these early settlers have been found in the immediate Homer vicinity. The south side of Kachemak Bay, with its bays, islands, and intertidal fauna, was probably more suited to aboriginal use and occupancy.

The earliest known settlement of the Homer area was related to interest in coal and gold in the 1880's and 1890's. Although the presence of these minerals was noted by Russians a century before, systematic attempts to mine coal on the north shore of Kachemak Bay began in 1888 (Barry, 1973, P. 19-23). **American** prospectors began to rediscover gold placers along Kenai Peninsula beaches in the 1880's as well, and by 1890 areas near Homer, particularly at Anchor River, were being worked (Barry, 1973, P. 28).

The **settlement of Homer** was established on the tip of the Long Spit then known as Coal Point in 1896. A party of prospectors landed there and built a large bunkhouse and improved existing cabins left by earlier parties. Around 1899, a coal company mining just west of the present site of Homer built a large dock near the end of the Spit and a railroad to connect it with their mines (Barry, 1973, P. 22). Stores and warehouses were built and the **community** grew to several hundred people. Steamers bringing **gold** prospectors and cannery supplies to Cook Inlet stopped at the new dock to take on coal (Johnson and Coffey, 1955, P. 21).



The coal mines gradually closed, however, and in 1907 a disastrous fire destroyed most of the town, including the dock. Coal mining resumed briefly in 1915, but halted again in 1924. Underground work began again between 1946 and 1951. In 1959 two small strip mines were operated near Homer (Barry, 1973, P. 23). Homesteaders and residents have continued to use coal picked from the beaches and streams of the area for heating and cooking.

#### HOMESTEADING

A few people settled on the benches below the Homer l-tills around the turn of the century. Others joined them after the destructive fire destroyed the town of Homer on the Spit. A few homesteads had been filed on areas around the present town site, and at stream mouths along the Bay by 1915. Increased homestead activity occurred between 1920 and 1930, primarily near Homer and Miller's Landing.

Homer was largely a backwater from 1915 to 1936. During that period most of the activity in Kachemak Bay centered on Seldovia. The small number of settlers living in the area depended heavily on subsistence gardening, hunting, and fishing, and many left Homer seasonally to work at canneries or fish commercially. Many people trapped in the winter, and for a short time after 1914 a number of fox and mink ranches operated in the area.

Transportation difficulties, poor communications, and a lack of markets discouraged many homesteaders. Until 1939, for example, there was no dock at Homer and all **supplies** had to be **lightered** ashore. Many people **left** the area during **WWII** to take construction jobs or join the military. The semi-subsistence economy of the area could not provide the standard of living increasingly available elsewhere.

**WWII** brought major changes: an airfield was constructed at Homer in 1942, and the war created a market for fresh produce at the Naval Base on Kodiak. Homer farmers organized a cooperative to supply the base with potatoes and other vegetables (Kranich, 1976, P. 53).

Following the war, increasing governments' expenditures on the airstrip and roads, the prospects of a major group settlement project like the **Matanuska** Valley colonization effort, and increased interest in recreational assets brought new settlers to the Homer area. Many of these were veterans. Some of them were interested in farming, but most lacked experience. Although 258 new homesteads were entered upon between 1940 and 1950, the population of the area only increased by 14 people, while the number of working farms remained the same (Johnson, 1955, P. 24).

The construction of the Sterling Highway, connecting Homer with Kenai and Anchorage, began a new era in Homer during the 1950's. The highway connection ended Homer's winter isolation and made it easier to get supplies. Speculation on rising land **values** became a strong settlement

influence in the late 1940's and early 1950's, since the highway was viewed as increasing agricultural and recreational possibilities.

## FISHING

Fishing, both for subsistence and cash, has been an important part of the economy of the Homer area. Few of the early homesteaders were able to make a living from their land, and they turned to fishing or cannery work. Fishing provided the major source of income after gold and coal mining subsided in the area in the early 1900's.

During the **Kachemak** Bay herring boom of the 1920's, residents of the Homer area fished out of **Seldovia**. A seasonal cycle of activity developed in which people started their gardens early in the spring, or left their wives to garden, and then travelled to **Seldovia** or Snug Harbor, across Cook Inlet, to fish or work in canneries.

During the 1930's, increasing numbers of residents began to acquire their own fishing boats, rather than using cannery boats. This trend led to an increased demand for boats, and a small logging, lumbering, and boat building industry flourished at several places around **Kachemak** Bay, including Homer. The construction of a dock at Homer in 1939 made it much more convenient for boats to operate out of the area.

By the 1950's salmon runs in Cook Inlet had declined and **Kachemak** Bay fishermen began to participate in the developing King Crab fishery.

King Crab had been packed in Seldovia and on a floating cannery in Kachemak Bay as early as the 1920's, but commercial development really began around Kodiak following World War II (Browning, 1974, P. 34). Homer fishermen became involved in the shrimp fishery during the 1960's.

In the last three or four years, the commercial fishing fleet based in Homer has grown rapidly. Fish prices have been rising and the value of the harvests has increased dramatically. More and more people have been getting into the crab and shrimp fisheries. Where two or three large operators took most of the crab and shrimp four or five years ago, many smaller operators are now sharing the harvest. Some Homer fishermen have become highly capitalized, operating large boats in the salmon, crab, shrimp, and herring fisheries. Others, particularly younger people just getting started, operate on a very small scale with small boats in the halibut and shrimp fisheries.

#### THE NEW HOMESTEADERS

The mild climate and beauty of the Homer area, the possibilities for cannery and fishing jobs, the ease of access to the area by highway, and a growing reputation as a "hip" place have attracted diverse people to the Homer area during the 1970's. Many have come to get a piece of land in a relatively unsettled, undeveloped area; some to build their own homes, and some to grow and harvest their own food. Others have come to the area to start small businesses or to retire.

An insurgence of "hippies" during the early and mid-1970's was resented by some older residents, but in recent years there appear to have been changes, both on the part of old timers and newcomers, which have defused some of this resentment. Many young people with long hair, and other attributes which local residents defined as characterizing "hippies", have stayed in the **community** and become involved in local businesses, fishing, art, and government. At the same time, long hair and marijuana **use** have become more common among longer-term residents (informal interviews).

Many of the people who have moved to Homer in recent years, old and young alike, share common interests and lifestyles with earlier settlers and homesteaders. All value their independence, and many are seeking to establish self-sufficient, self-reliant ways of life. Many are acquiring land, building on it, and raising gardens or livestock. Like earlier homesteaders, many take to commercial fishing to support themselves, or start small businesses, the two traditional options for earning cash in the area. The growing tourist trade and population of **Homer** have provided a new economic niche in arts and crafts fields. The seasonal economy **leaves** time for these pursuits in the winter.

Although the new homesteaders lack the advantages of free land and open fisheries that early-comers enjoyed, they do have better **communi-**cations and transportation, more stores and services, and other **econo-**mic opportunities that did not exist in the past. Like earlier **home-**steaders, many have to leave the **communi-**ty seasonally, or move to

Anchorage temporarily, to work to earn enough money to be able to live in Homer.

#### THE HOMER LAND RUSH

The 1970's have been a period of rapid growth and change in the Homer area. The general growth of population in Alaska as a whole, and on the Kenai Peninsula, accompanying oil development and construction of the Alaska Pipeline, has had spin-off effects in the Homer area. The beauty of the area has drawn both recreationists and new residents.

Although the agricultural development anticipated by early settlers has not materialized, land prices have soared in recent years (Alaska Construction and Oil, Nov., 1976, Nov., 1977, Nov., 1978). The growth of recreation and commercial fishing have strengthened and stabilized the economy of the Homer area, making local land and businesses increasingly attractive investments. Some people have sought land in the area for speculation, others moved their families there and commuted to pipeline jobs, and still others wanted weekend cabins. Many homesteads along the Sterling Highway and in the country around Homer have been subdivided. The number of real estate agents in Homer has grown dramatically for several years.

## Sociocultural Impact Categories

### ECONOMIC ADAPTATIONS

#### The Economic Environment

Commercial fishing and tourism/recreation are the economic bases of the Homer area, while government and a wide variety of service businesses provide secondary employment. Growing markets and rising prices for seafoods have provided an impetus for expansion of commercial fishing in Kachemak Bay over the last decade. Homer's location, natural beauty, and proximity to the sea have attracted growing numbers of **recreationists** and tourists. Agriculture, which played an important part in the settlement of the Homer area, is more significant for subsistence and recreation than commerce today.

The strong demand for recreational and residential land and housing in the Homer area has provided additional occupational niches in real estate, building supplies, and construction. Many Homer area residents are involved full-time or part-time in building-related occupations. Most of the major economic sectors, including fishing, tourism, and construction, are seasonal. The social implications of the nature and **seasonality** of employment opportunities are considered in the following sections.

#### Commercial Fishing

Commercial fishing plays an important role in the **sociocultural** systems

of the Homer area. It is closely tied to t-he whole economy of the area, to social and politics<sup>1</sup> relationships, and to community values. Fishing is at the core of both livelihood and lifestyle for many residents.

About 11% of male heads of households reported their primary occupation as commercial fishing in 1976, and an additional 6% were employed by canneries (Baring-Gould and Heasley, 1977, P. 6, 7). A great many others were involved in fishing and cannery work as secondary or seasonal jobs.

Direct employment in fishing understates the importance of fishing for the community, however, Many other people are involved in small businesses, such as supply stores and welding shops which are closely tied to the fishing industry. Government is part of the fishing system. The city of Homer maintains the small-boat harbor and collects taxes on fishing boats and processing plants. The Alaska Department of Fish and Game stations a number of biologists in the community.

Although in the recent past Homer fishermen have been dependent upon a fairly narrow resource base, a wide range of species are now harvested and processed in the area. The seasonal cycle of fishing activity now extends almost throughout the year. Major species harvested by Homer fishermen include shrimp, king and dungeness crab, halibut, herring, and several species of salmon.



Homer's location has allowed fishermen from the area to diversify by exploiting not only the rich waters of Kachemak Bay but also Cook Inlet, Shelikof Straits, Prince William Sound and Bristol Bay. Homer fishermen have aggressively pursued new opportunities, including the herring fishery in Bristol Bay.

Money from fishing circulates extensively in the Homer area. A number of large boats, particularly the seiners, have three or four man crews, and this helps circulate money within the community. Homer is far enough from Kenai and Anchorage that it has been economically feasible for small businesses to develop locally. The Homer branch of a state-wide bank reports some of the highest earnings of any branch in the state, which it attributes largely to the fishing industry.

Many of the residents of Homer became fishermen largely because it was the only potential source of income in the area, and still others moved to Homer primarily because of the developing fishing opportunities.

Several fisheries, including shrimp, halibut, and to a lesser extent salmon, can be entered with relatively little capital, and many younger people including many of those characterized as "new" homesteaders, have earned grubstakes for themselves by fishing from small boats. Others hire on as crewmembers.

Fishermen in Homer place a high value on the potential profits from fishing, and also on the independence and self-reliance of the way of

life. Fishing involves considerable risks, both to life and property and this can create considerable stress in interpersonal and family relations.

As in other areas of Alaska (Payne, 1979, P. 33) bars and visiting are important parts of the Homer fishing system, since they provide opportunities to transact business, exchange information about weather and fish, find employment or workers, and relax.

The heavy commitment of the Homer community to commercial fishing is represented by their private investments of capital in Homer's multi-million dollar fishing fleet, and public support of port and harbor improvements. The broad based public support for the fishing industry in the area has been demonstrated at numerous meetings and hearings, and in surveys (e.g. Baring-Gould and Heasley, 1977).

Improving prices for salmon and other seafoods, and the possibilities of new opportunities for local fishermen and seafood processors to expand their operations into the developing bottomfish industry have recently reinforced this commitment to the fishing industry. Current proposals for the development of a fisheries industrial park and bottomfish processing facilities on the Homer Spit have met with approval in the community, and the city is planning port and harbor improvements which will support these developments.

## Fishing Conflicts

Kachemak Bay has one of the highest concentrations of fixed fishing gear in the world. Growing rates of marine traffic in Kachemak Bay and Lower Cook Inlet have caused significant fishing gear losses in recent years. The movement of drilling rigs has accounted for some of these losses, but other shipping, including tugs and tankers, has been equally responsible. Homer area fishermen have worked to establish shipping lanes, but these remain voluntary, and gear losses continue. Mandatory shipping lanes are being proposed, to prevent fishing-  
shipping conflicts, but the fishing space of Kachemak Bay and some Lower Cook Inlet waters is already being used almost to capacity. Shipping lanes would significantly reduce fishing space, as would the placement of oil platforms. Homer fishermen fear this will result in increasing loss of fishing opportunities, increasing conflict between fishermen and shipping, and increasing conflict between individual fishermen. Marathon Oil Company, at least, has become increasingly sensitive to complaints about gear losses, and recently quickly compensated fishermen for gear losses which resulted from moving their drilling rig (Homer News, April 12, 1979).

The growth of Anchorage and Kenai Peninsula populations, and rising prices for salmon, have led to increasing demands upon salmon resources from both sport and commercial users. The ADFG has responded to these rising demands by adjusting seasons, bag limits, and fishing areas. Sport, commercial, and subsistence users all feel that these regulations give other groups undue privileges and rights to resources.

Commercial fishermen groups, for example, are suing the State for giving preference to sportsmen in the early king salmon runs and late silver runs.

Population growth in the highway-connected portion of the Kenai Peninsula has also led to increasing destruction of salmon-spawning habitat, both through erosion and siltation accompanying road and residential construction (US Corps of Engineers, 1978), and through increasing numbers of sport fishermen trampling or running boats through salmon spawning areas. This destruction could have a cumulative **effect** on the salmon productivity of the region.

Commercial fishermen have recently voted to tax themselves to undertake habitat enhancement and rehabilitation projects in Cook Inlet. It is too early to determine what effect the activities of the Cook Inlet Aquiculture Association will have in maintaining salmon productivity in the region, however.

At present, the demand for harbor space exceeds supply in Homer, **Seldovia**, and **Ninilchik**. Current plans to expand harbor facilities in all these areas will only catch up with existing demands. Population growth in **southcentral** Alaska is resulting in increasing retreat onal demands for harbor space, while continued expansion of commercial fishing in all three communities is also leading to increasing demands. Use of Homer as an **OCS** service base results in increasing traffic and competition for berthing space at the Homer dock.

### Speculation

Speculation about the future growth of the Homer area has become an increasingly significant sociopolitical force in the community. In the past, many homesteads in the Homer area were entered upon in expectation of future improvements in roads and markets which would increase their value (Johnson, 1955, P. 28). Oil and gas leasing over the entire Kenai Peninsula and major finds near Kenai in 1957, brought high hopes for similar industrial bonanzas in the Homer area and stimulated a flurry of homestead entries in the late 1950's. A small core of old-timers, old homesteaders and businessmen in Homer still harbor hopes of such a boom, and these hopes are periodically renewed by oil and gas leases on the Kenai Peninsula and in Cook Inlet.

There has been a continuous turnover of businesses in Homer in the last five or six years. Only two or three businesses on Pioneer Avenue have not changed hands recently, and most have turned over several times. People have bought businesses, partly as a way of moving to Homer, but always with the thought that values of land and businesses are growing rapidly. The possibility that major oil discoveries might be made in Lower Cook Inlet has frequently clinched real estate sales.

Speculation on land and businesses in the Homer area is closely related to strong community values such as the profit-motive and individualism. These values have reinforced opposition to zoning and other government controls, since it is felt that regulations will limit individual's use of their land and their opportunities for profit.

Real estate values in the Homer area have been increasing phenomenally since the early 1970's (Alaska Industry, Nov. 1976, 1977). Speculation about future OCS activity has doubtless contributed to this inflation, but expanding recreational home and land demands, increasing tourism, and the growing fishing industry, contributing to rapid growth in local wealth and population, are probably just as important.

The failure of oil companies to date to find oil in Lower Cook Inlet, and the general slowdown in the Alaskan economy during 1978-79 have worried some of these people, and many businesses are for sale in spring, 1979.

#### Recreation and Tourism

The other major industry in the Homer area is tourism and recreation, which began to develop steadily after the connection of Homer by road to Anchorage in 1951. Many tourist-oriented businesses have developed in Homer since the 1950's, including gift shops, hotels, charter boats for sightseeing and fishing, and family-run lodges. A number of bars, restaurants, gas stations, sporting-goods shops, and other stores rely on recreation-generated business for their profits.

The **Homer** Spit is a major natural attraction, and it focuses much of the recreational activity in the region through the City of Homer. Residents have recognized the importance of the Spit both for their own recreation and as a 'tourist attraction, and have sought to maintain

the recreational values of the area through protective zoning (City of Homer, 1970).

An increasing number of conferences and conventions are being held in Homer and this offers the potential for major benefits to local businesses. There are few suitable facilities available in the town, however, and a convention center which could attract additional business to the **community** is being promoted.

Tourism and recreation have supported the development of arts and crafts in the Homer area by providing audiences and markets. This has made a much broader range of cultural facilities and events available to residents of the area, including the excellent Homer Museum, the Pier One theatre group, and numerous concerts and performances. The additional markets provided by tourists have supported numerous artists and the development of Homer's reputation as an arts center.

### Subsistence

The use of local resources for personal consumption is an important part of the way of life of many Homer residents. The sea provides a wide range of fish and invertebrates. Many people fish, put out shrimp and crab pots, and gather clams for their own use. The land also provides moose, **black** bear, small game and berries for food. Many families heat with wood, or with coal picked up along the beaches and creeks.

Gardens and livestock also contribute greatly to the diets and lifestyles of a wide variety of Homer residents. Gardens do well in the mild climate and livestock can be pastured on natural grasses. A number of people put up hay for winter feed.

These subsistence activities are important both economically and socially. Most residents greatly value the opportunity to take fish, game and other resources for personal use.

Population growth has caused more competition for certain resources. Kachemak Bay was closed to subsistence salmon set-netting in 1976 and this caused considerable controversy. The Kachemak Bay Subsistence Group was created to act as an advocate in resource use conflicts of this kind.

Among the most important sociocultural implications of the economic adaptations to fishing and tourism is the community stability they make possible. Homer residents contrast this stability with the "boom-bust" character of towns such as Fairbanks and Kenai. Fish and scenery, they say, will last forever if they are protected.

The sociocultural characteristics of fishermen have been discussed in a recent publication (Payne, 1979). Some of the values associated with the fishing way of life, particularly independence, self-reliance, and individualism, are also characteristics of homesteaders and "back-to-the-landers", as well as many small businessmen.



The mix of fishing, farming, tourism, and government employment has resulted in a high degree of social diversity in the Homer area and considerable tolerance within the community for a wide variety of lifestyles. Because of the seasonal nature of the major economies, winter unemployment is expected and accepted by many people. Although this is of concern to many businessmen in the community, since it means people have less money to spend during the winter, many people prefer to work seasonally, utilizing periods of unemployment for subsistence and recreational pursuits.

## LAND AND ENVIRONMENT

### The Use of Land and Sea

The people of the Homer area place a high value upon the aesthetic, economic, and recreational qualities of the land and waters of the southern Kenai Peninsula. Homer's descriptive motto "where the land ends, and the sea begins" illustrates the significance of the city's location at the interface of these two environments to residents of the area. Their environmental values and concerns center on two complementary features--the natural beauty and bounty of Kachemak Bay and the lands which surround it, and the Homer Spit, which is a critical point of access to these environments.

Kachemak Bay plays an important role in the lives of most Homer residents. The Bay not only provides a sparkling foreground to the spectacular peaks and glaciers of the Kenai Mountains, and a medium

of transport, but also produces a wide variety of sea life. The economic and social significance of commercial fishing and tourism, which are both largely dependent upon the quality of the area's land and water, have been noted previously. Homer area residents make heavy use of the Bay's renewable riches for subsistence and recreation as well .

Homer residents place a high value on the productivity of the land, as well as the sea. Homesteading has been an important part of Homer's settlement history and tradition, and the land continues to attract people. Almost 20% of the residents of the area in 1976 said they came for reasons related to homesteading or farming (Baring-Gould and Heasley, 1977, P. 9). Although the lack of markets has made farming a marginal proposition in the area, many families have productive gardens and a number raise livestock and hay. There continues to be a strong interest in acquiring large tracts for agricultural purposes, but rising land prices have made this uneconomical (Alaska Div. of Lands, 1979). The state has recently disposed of some large agricultural tracts in the area, and there continues to be strong interest in seeing more land made available by the state (Alaska Div. of Lands, 1979).

#### Environmental Values

The qualities of sea and land have drawn, and continue to draw, people to the Homer area, and they also keep people there. Close to half the respondents to one survey replied that the natural beauty of the country

was what they valued most about living in the Homer area, while an additional ten percent mentioned homesteading and farming opportunities (Baring-Gould and Heasley, 1977, P. 9).

The land supports moose and other game, in addition to gardens. Like sea life, moose are harvested for subsistence and sport. They are also important commercially to guides and air-taxis. Moose are valued non-consumptively as well. "The availability and occasional appearance of moose symbolize for many local residents the character of life on the Kenai Peninsula" (Kizzia, 1979).

The numbers of moose in the Homer region have declined rapidly in recent years, however, largely because of increases in human population and hunting pressure, and better access. All-terrain vehicle access, for example, has largely decimated the once plentiful moose population of the Caribou Hills (Kizzia, 1979). Many Homer residents view this decreasing opportunity to view and harvest moose as an indicator of a declining quality of life in the area resulting from population pressure.

Other indicators of population pressure upon land and resource capabilities are the soil and water problems constraining house and road construction and the use of on-site sewage disposal and wells in the Homer area (City of Homer, 1978, P. 5-6; ASHA, 1969, P. 10-11 ). House financing in the Homer area has been limited at various times by these

difficulties. Pollution of ground water and wells seems likely as the rural areas around Homer become more heavily developed.

The objectives and values of different groups lead to conflicting and contradictory attitudes and opinions about land and resource policies in the Homer area. On one hand many people favor getting land into private ownership, feeling that land prices are too high in the Homer area, and that large tracts are needed to help encourage farming (Alaska Div. of Lands, 1979). On the other hand, people are also greatly concerned about maintaining particular lands in public ownership, both to protect certain resource values, and to maintain access to these resources.

These conflicting feelings are evident within the city, where people do not want to be regulated in their use of land, yet want to preserve environmental quality and protect the lands around their property. The conflicts are also evident in relation to borough and state plans for their lands.

#### The Homer Spit

The Homer Spit is a focus for residents' land-use values and concerns. It provides not only a unique attraction and identity for the community, but also a major point of access to the beauty and riches of Kachemak Bay. Everyone in the community uses the Spit. It provides driftwood, clams, and long beaches to hike. It shelters boats and people bring the produce of the sea ashore on it for pleasure and profit.

The Spit provides room for camping and for several recreation-oriented businesses. It also provides harbor space for a rapidly growing fleet of recreational and commercial boats. Cargo, fuel, and ferry travelers are loaded and unloaded from the city dock on the Spit, and fish processing plants are located there. The Spit is presently being used as a supply point for drilling rigs operating in Lower Cook Inlet.

In view of these diverse and growing demands upon the limited land area of the Spit, it is not surprising that it has become the focus for political and social conflict in Homer. Many residents fear that increasing demands for more intensive and profitable industrial uses on the Spit will displace recreational and commercial fishing uses. Some of these fears have been confirmed, as the city dock was closed to sport fishing, and small businesses and recreational enterprises have had trouble with city leases (Anchorage Times, May 30, 1976, D-1).

The residents of the Homer area generally would prefer to see the continued use of the Spit for recreational and fishing related purposes rather than as a supply port or storage area. The residents of the city of Homer, however, in 1976, indicated by a small majority (53%) that they would favor use of Homer as an oil supply port, in contrast to residents outside city boundaries, 64% of whom opposed such a use (Baring-Gould and Heasley, 1977, P. 14).

As a community oriented heavily toward the sea, commercial fishing, and recreation, Homer area residents have very real concerns and fears

about the aesthetic and ecological effects of offshore oil development, in addition to the social concerns noted in other sections. The threat of a major spill is an ever present fear for many residents.

The activities of oil companies have gained them little respect or trust in the community. Homer residents have had a whole series of reminders of their fallibility, including the debacle of the rig George Ferris becoming stuck in the mud of Kachemak Bay, crab pots being ripped up repeatedly by the movements of tugs and drilling rigs, and lurid reports of major oil spills in other parts of the world. These have confirmed many Homer residents' perceptions of oil development as a major threat to the continued beauty and productivity of **Kachemak** Bay. The section on politics discusses the response of the community to the growing demands and conflicts over land use and environmental quality in the Homer area.

#### SMALL TOWN SOCIAL RELATIONSHIPS

##### Social Diversity

Residents value the personal, individual scale of social relationships in the Homer area. Small town qualities were the reasons residents most commonly mentioned for moving to the Homer area in one survey (Baring-Gould and Heasley, 1977, P. 9). Neighborliness, friendliness, quietness, and privacy are commonly expressed social virtues in the community.

Homer is no longer the "quiet little town at the end of the road", but in spite of the rapid growth which has occurred in recent years an essential characteristic of Homer society is that it remains small enough for people to identify themselves with it as a community, but open and diverse enough that a wide variety of individuals and lifestyles can coexist. The economic mix of fishing, recreation, and services, and a high value placed on individualism, contribute to social diversity and tolerance. The location and setting of Homer attract people who share many common interests and values, despite their differences.

#### Social Stability

The slower, steadier growth promoted by development of commercial fishing and tourism in Homer attracts people who like the community and country rather than fat paychecks. The slower, steadier rate of growth also allows more time for newcomers to integrate into the existing social structure, rather than overwhelming it. Like Hugh Malone, state representative from the Kenai Peninsula, many residents of Homer favor the development of renewable resources "not because they last forever but for what kind of society they produce. The pattern of development in Alaska is urban. I prefer decentralized development." (Hugh Malone, quoted in Homer News, Feb. 15, 1979).

The unique combination of a small population, with diverse origins and skills, a large seasonal tourist trade, and seasonal occupations which allow time for creativity, have fostered in the development of arts and

crafts in the Homer area. Homer has theater and dance groups, a wide variety of musical groups, and many artists and craftsmen. People are **organizing** to build a new performing arts center in the **community**.

The weekly Homer News plays a major role in informing residents about local social, political, and environmental happenings, and in focusing attention on local issues. It circulates to about 90% of the families in the Homer area (Green, et al., 1977, Table 62).

#### Small Businesses and Small Schools

Hand in hand with a high evaluation of small town characteristics is a strong preference by the residents of Homer for small owner-operated businesses over larger corporate stores (Baring-Gould and Heasley, 1976, P 31). An important part of the quality of the town **environment** as perceived by many of its residents are the small, friendly, "persona" nature of businesses in the **community**. Individualized buildings with "character" are also valued. Even the newest, most modern shopping center in town has been designed to fit into the landscape rather than flattening and paving it. So far there are no **McDonalds** or major chain stores in Homer.

Homer residents also value the small schools of the community, which many feel contribute to the quality of their **childrens'** education. The issue of whether to add **on** to the existing elementary school or to construct a smaller new one has recently excited local opinion, with many residents preferring a smaller one, located out East Road, to the



Borough's plan of adding on to the existing building (Homer News, April 12, 1979). Smaller schools are seen by many as providing the advantages of closer, more personal contacts between teachers and students.

#### Attitudes Toward Population Growth

Homer area residents generally would prefer to see the population of the area remain small. Almost half of the respondents to a 1976 survey, for example, said they would like to see the City of Homer remain the same size or even less over the next ten to fifteen years. City residents, however, were more interested in seeing more growth than people who lived outside the city (Baring-Gould and Heasley, 1977, P. 10). From discussions with residents, however, despite the fact that they would prefer existing population levels, it appears that recent high rates of growth do not generate much public concern about population size as such. There have been no crises, such as disruption of public services, to spark such concerns. Growth has been steady and based upon existing economic sectors, rather than representing a break with the past.

Some long-time residents bemoan the increasing numbers of strangers in the community--"you can't leave the door unlocked any more". But in spite of these social changes many small-town and rural characteristics have persisted in Homer because they continue to tie in closely with the economic structure and the values of old-timers and newcomers alike.

## POLITICS AND RESPONSE CAPACITY

### Political Organization

The City of Homer and the Kenai Peninsula Borough are the political bodies through which Homer area residents most directly work to realize local public objectives. Since Borough politics are discussed at length in the chapter on the Kenai-Soldotna area, the emphasis in this section is upon the City of Homer, although the relations between government agencies and interest groups are discussed where relevant in terms of OCS impacts upon local sociocultural systems.

Despite the individualism and diversity of Homer residents, they have been organizing successfully to accomplish public projects for many years. Early predecessors of city government in Homer were an active women's club, which raised money for community improvements, including a library, health center, and warehouse in the 1930's and 1940's. In 1949 a public utility district was formed to maintain a new dock (Kranich, 1976, P. 55).

In 1964, when state law mandated the formation of the Kenai Peninsula Borough, Homer residents voted to incorporate as a first-class city. The major public services developed by the city during the 1960's were a water system, a city campground, and a city police force. By 1972 a city sewer system was operational.

The City of Homer has a council/manager form of government. The Borough retains planning and zoning authority, but the city has an advisory planning and zoning commission, which together with the city council, largely give direction to planning and zoning in the city. One of the city councilmen is a member of the Kenai Peninsula Borough Assembly.

### Response to Community Growth

The City of Homer has been confronted since the early 1970's with the increasingly **complex** tasks of providing services and facilities to a rapidly growing population, and of guiding community growth. The possibility that even more rapid rates of growth could arise from further OCS activity in Lower Cook Inlet has been a continuous theme in the city's **plans** and public works projects since the mid-1970's.

City government is becoming a big business in Homer. Population growth has created escalating demands upon the whole range of public urban services (CH2M HILL, 1978, 6-11 through 6-14; City of Homer, 1978), and has necessitated the expansion of city staff and budgets. The City employs about 30 people full time, and eighteen people on a temporary basis through CETA programs (City of Homer, 1978, P. 39).

The City of Homer has been extremely successful in seeking out and obtaining state and federal grants and loans, due in part to the cooperation of the City Council in providing required matching funds (City of Homer, 1978, P. 73). OCS activity in Lower Cook Inlet has

made Coastal Energy Impact Program (CEIP) funds available to the Borough and city, which have exploited them to do planning and preliminary engineering for a variety of public facilities. Considerable interaction and cooperation between the City, the Borough, the State Department of Community and Regional Affairs, and other state and federal agencies has been necessary to fund, carry out, and implement these studies. The City has cooperated with the borough in the preparation of several planning documents (Brogan and Waits, 1977; CH2M HILL, 1978). Among the major planning efforts currently underway are a master streets and roads plan, a water systems expansion study, Homer Spit sewer study, master drainage study, Homer Spit city campground study, and a port development study.

Homer residents and city officials have attempted to benefit from the OCS and other oil-related experience of communities such as Kenai, Fairbanks, Valdez, and Yakutat. They have followed issues in those communities in the news, talked to their city administrators and councilmen, and read about their experiences (City of Homer, 1978, P. 20). City council members also participated with residents of Valdez in a roundtable discussion of pipeline-related impacts in Valdez and what Homer might expect from OCS activity (City of Homer, 1976).

Homer city officials say they have attempted to stay at least two years ahead of population growth in providing city services and facilities. This preparedness, they feel, would give the city enough lead time to

plan for further growth if OCS activity in Lower Cook Inlet were to accelerate. See CH2M HILL (1978) and Alaska Consultants (1979a) for assessments of the capacity of Homer's public services and facilities.

#### Conflict Over OCS Development

The community of Homer has frequently been sharply divided over issues related to industrial and OCS development. As in many other Alaska communities, a small group of businessmen and real estate owners wield considerable power over city affairs, and the city council and administration have often been more development-minded than their average constituents. Since Homer also has a relatively large population who either depend on the beauty and bounty of the land and sea for their livelihood, or came to the community for its small-town social qualities and the beauty of the area, there have been a number of conflicts over social and environmental issues.

In 1973, for example, the community was split by a proposal to build a man-made island on city owned tidelands as a base for a major chip-mill. Some businessmen, city council members, and residents favored the project, which would have added a number of new jobs and enlarged the tax base. Fishermen, environmentalists, and the local seafood processor, however, opposed it on environmental grounds (Anchorage Daily News, June 27, 1973). Because of the uproar it caused, the city council rejected the proposal.

During the same period, a state oil lease sale in Kachemak Bay set off a similar, but **larger** and **longer lasting** controversy. A petition signed by many residents of the community requesting a public hearing prior to any oil lease sale **was** ignored by the director of the Alaska Division of Lands, and the sale was conducted. In 1974 Homer area fishermen and residents filed an injunction against the state and several **oil** companies contesting the legality of the sale. In the meantime the state legislature, at the urging of a new governor, set aside **Kachemak** Bay as a critical habitat area, and arranged to buy back the leases the state had sold.

In 1975 and 1976 numerous public hearings on OCS lease **sales** in Lower Cook Inlet were held in the Homer area, and the controversy continued. The **Kachemak** Bay Defense Fund, established in Homer to oppose local oil development, played a major role in attracting attention at the state and national **level** to the oil issue in the Kachemak Bay area. **Testi-**mony by **local** residents at public hearings was overwhelmingly against oil development anywhere near the Bay.

A number of oil-related incidents, including the sinking of the tug Foss, and the Standard **Oil** rig George Ferris becoming stuck in the mud of **Kachemak** Bay and having its legs amputated by dynamite to get it free, did not contribute to local confidence in the capabilities of the oil companies. Faith in the federal government was **also** seriously undermined when, **after** agreeing to omit certain critical tracts off

Kachemak Bay and English Bay from the OCS lease sale in 1976, the Secretary of Interior turned around and put them up for bid.

#### Land-Use Policy and Urban Growth Issues

Policies toward urban growth and industrial development in the Homer area have evolved **slowly** over the last decade in relation **to** controversy over oil development and land use. This process is illustrated by the development of city policy toward land use on the Homer Spit.

Until the 1970's, the Spit was viewed largely in terms of industrial potential. This view was expressed in the objectives of the 1969 city comprehensive plan, one of which was to encourage industrial development on the Spit. The Spit was seen as **having** the advantage of ". . .**being** isolated from residential areas, and therefore, the smoke, noise, and possible unsightliness of industrial activities will not affect other forms of development" (ASHA, 1969, P. 103).

Since 1969, a number of interrelated changes have resulted in a shift in city policy. Among the most important of these have been the growth of commercial fishing and tourism, and a resulting shift in people's perceptions of oil and gas development. These changing perceptions and values have been reflected to some degree in a recent statement of city policy which notes the critical importance of the Spit to the town's major industries, tourism and fishing (City of Homer, 1978, P. 84). The city's zoning now designates the western side of the Spit as open recreation land, and the eastern side for marine-oriented industry.

The city's comprehensive plan recommends that the development of commercial-fishing-related enterprises be supported.

Although some degree of consensus on the future of the Spit has been developed, less agreement and policy direction on other critical urban growth issues has emerged. While many residents want to see the community's small-town image and social scale preserved, there is little agreement about the crucial features of this character or what can be done to maintain them.

Among the major issues related to the future shape of the community is Homer's parking problem. Most businesses in Homer face directly onto the town's main street, and do not have enough parking space to meet the city's recent zoning and parking ordinances (Homer News, April 5, 1979). Some residents claim that city ordinances will promote urban sprawl, tie up 50-75% of the land along main roads in parking, and, since it will be prohibitively expensive for small businesses to acquire additional parking space, will give a competitive edge to large businesses. Some residents feel that such policies will turn the town into a place for autos, rather than people.

The Homer bypass, which passes through largely undeveloped land, is expected to eventually create a new central business district. Unless access to the bypass is limited, it is likely that strip development, with attendant traffic problems, will occur (Homer News, May 17, 1979). While any Homer residents seem to assume that the state's



designation of the bypass as a "limited access" road means that steps have already been taken to prevent unlimited strip-type development, this is apparently not the case. The City of Homer has yet to act to guide future development in the area.

Residents are thinking about some of these things, however. Some innovative suggestions have been made for guiding the development of Homer's future townscape. One concept, which the Homer Advisory Planning Commission voted to explore further, was a proposal for the restriction of auto traffic and the development of a mall and greenbelt along part of the main street through town.

"In order to preserve the flavor of Homer as it is, the very reasons that we enjoy living here, we must make these decisions now while there's flexibility. You can't go back once you have encouraged the paving over of paradise" (Homer resident, quoted in Homer News, May 31, 1979).

Similar issues are being faced in the provision of recreation facilities in the Homer area. The city has taken steps to acquire an additional 40 acres to expand its existing 40 acre city park, and to acquire five acres for park purposes near the high school. It is planning a camper park near the base of the Spit. The State is expected to develop camping facilities out East Road, and elsewhere along the coast in the southern Kenai Peninsula. Eventually, some people feel, it will become necessary to provide a shuttle transportation system from parking and camping areas on the mainland onto the Spit as circulation and parking problems on the Spit intensify (City of Homer, 1978, P. 27). These recreational facilities will all be

needed to satisfy the heavy **and** growing recreational demands in the area. and to maintain **its** attractiveness both to residents and tourists.

### Response Capacity

Although there are a **small** number of people at each extreme of the conflict over oil development and industrial expansion in Homer, a more representative element of the **community** appears to be positively oriented toward changes which will selectively enhance community elements which are consistent with basic values (Baring-Gould and **Heasley**, 1977, P. 33). These values, noted throughout this report, are closely related to the fishing **economy** and **recreational-** subsistence resource use, to qualities of small-town life, and to appreciation of the beauty of the land and Kachemak Bay.

Local government has responded **to** these values by **back**ing the development of support facilities for commercial **fish**ing on the Spit, and **development** of the small boat harbor.

The Homer area **community** has developed an awareness of the potential pressures OCS development could cause upon local government and public services. Although the uncertainty surrounding future OCS development have constrained the city somewhat in planning for population growth, it has acquired expertise in growth management, and has prepared plans for a **whole** range of services and facilities which **will** be affected by future population growth. It has proven successful in providing basic urban services during a period of rapid growth. The City has also

developed ties with the Borough and state and federal agencies, including sources of funding, which enable it to continue to respond to growth.

The residents of the unincorporated areas around the city of Homer are affected in major ways by the policies of the city government, but they do not have a voice in city affairs. Many fishermen live outside the city, but they are dependent upon facilities, including the small boat harbor and fish processors, which are inside the city. The city is in the position of having to raise revenues to support increasing demands for services. City leaders see OCS and other industrial activity as a potential tax base to help pay for public services and facilities, such as a new city dock. This raises the potential for conflict over values and priorities, since many residents of the area would rather have fewer services, fewer taxes, and less activity which potentially conflicts with their livelihood and lifestyle.

## SOCIAL HEALTH

The Homer area has particular social problems which seem to be characteristic of its economic structure and end-of-the-road location. Population growth has apparently exacerbated some of these problems, and there is growing concern among residents of the area about alcohol and drug abuse, and particularly about juvenile delinquency. In general, however, Homer residents see their community as having low rates of crime and other social problems.

## Alcoholism and Mental Health

Alcohol and drug abuse are central to the social problems perceived by residents and specialists in Homer, as they are in most small communities in Alaska. Crime and accidents are closely related to alcohol abuse; the Homer chief of police estimates that 80-90% of his department's work is alcohol related.

Mental health problems are also closely tied to alcohol and drug abuse. Of the approximately 160 cases opened during 1978 by the Homer Community Mental Health Center, 56 were alcohol or drug related. Depression, which is commonly associated with alcohol and drug use, is one of the most common mental health problems among residents of the community, and is also frequently a factor in marital conflict, child abuse, and runaways (Personal communication, Greene, June 21, 1979).

Alcoholism and depression are also-frequently correlated with long winters and winter weather. Since many people are without employment during the winter, economic stress may contribute to mental health problems.

The stresses associated with the fishing way of life also undoubtedly contribute to alcohol and family problems. Men are frequently gone for long periods of time from their wives and families. Heavy drinking is common when fishermen are ashore.

\*

Homer's "end-of-the-road" location, and its booming fishing economy apparently exacerbate mental health problems in the community by attracting, and in some cases trapping itinerants and transients. Many people come to Homer because of its climate, scenery, and reputation as a "hip" place, or as a place to get a fishing job. For those who are marginal to begin with, the stress of no work, no place to live, and no money to leave, can cause a crisis of some kind that gets them in touch with the Mental Health Center. There were at least seventeen admissions to API from Homer in 1978, far more than the 4-5 admissions per year that would be expected from a community the size of Homer (Pers. Comm. Greene, June 21, 1979). Many of these were itinerants. In response to alcohol and mental health problems the Homer Community Mental Health Center was established in 1977. Counseling is provided, and if necessary, referrals are made to facilities in Anchorage.

### Crime

Crime has generally increased along with population growth in Homer. Regional and statewide economic conditions appears to affect the incidence of crime. A dramatic increase in the number of crimes in the early and mid-1970's in Homer may have been associated with increasing numbers of visitors to Homer and construction of the Trans-Alaska Pipeline, which brought transients to many parts of Alaska looking for work.

Since 1977, the incidence of crimes reported to Homer police has declined (Table 6), which Chief of Police Mike Daugherty (Pers. Comm.,

TABLE 5

HOMER COMMUNITY MENTAL HEALTH CENTER  
ADMISSIONS

<u>1976</u>	<u>1977</u>	<u>1978</u>
86	267	223

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Source: Alaska Department of Health and Social Services. Office of  
Information Systems. July 30, 1979.

TABLE 6

## CRIMINAL COMPLAINTS

Homer Department of Public Safety

1970-1978

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<b><u>1974</u></b>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Burglary	16	<b>11</b>	<b>25</b>	24	33	46	46	64	46
Larceny	40	<b>49</b>	82	102	143	103	100	126	<b>163</b>
Assault	7	7	3	11	6	17	21	19	23
Weapon Law	<b>2</b>	7	2	13	5	27	10	23	27
Drug Law	5	5	5	17	9	11	13	12	74
<b>Malicious Destruction</b>	<u>8</u>	<u>20</u>	<b>13</b>	<u>36</u>	<u>65</u>	<u>21</u>	<u>36</u>	<u>86</u>	<u>21</u>
<b>Totals</b>	78	89	<b>130</b>	203	261	275	226	330	344
Total Complaints <sup>1</sup>	340	369	665	1261	<b>1898</b>	1845	1791	2898	2798
Total Arrests						<b>114</b>	--	96	144

<sup>1</sup> Total complaints includes additional categories of complaints, therefore may be higher than column totals.

Source: Homer Department of Public Safety, 1979.

June 20, 1979) attributes to several factors, including a good economy, fewer transients, and improvements in the Criminal justice system. Homer completed a new public safety building and began providing 24 hour a day service and dispatching in 1977, and a full-time judge was assigned to Homer that year. The police force has also increased, and **police** are receiving better training.

Although Homer residents generally feel that Homer is a good place to raise children, and that the area supplies plenty of activities and opportunities to be outdoors, there is concern about juvenile **delinquency**.

A growing incidence of juvenile problems in Homer seems closely related to alcohol and drug use. Of some twenty-five cases of "behavioral disorders" (stealing, vandalism, hyperactivity, etc.) referred by school officials to the Community Mental Health Center during the 1978-79 school year, most were associated with alcohol and drug use (Pers. Comm. Greene, June 21, 1979).

Increasing rates of juvenile problems may be tied to general trends in American society. They may also **reflect the** growing diversity of Homer and the increasing size of its schools. **It has** been suggested that **Homer** society is **overly** permissive, and that juvenile problems reflect the high degree of social tolerance characteristic of fishing and "hip" lifestyles.



## Summary

The Homer area is socially diverse, with a wide variety of lifestyles and ways of life. The population of the area has grown rapidly during the last decade, but in spite of this growth considerable **sociocultural** continuity and stability has been maintained. This is due largely to the strong ties residents have developed to the local natural environment.

Commercial fishing and tourism/recreation, the Homer area's basic industries, are highly dependent upon the bounty and the beauty of the land and sea. For years these environments have provided the major niches to which Homer residents have adapted. The recreational and subsistence use of **local** natural resources, which are important parts of **local** ways of life in the Homer area, are also dependent upon the continuing quality of the natural environment.

The small town character of Homer, which makes it possible for people to know their neighbors and to participate in and feel part of a community, is also a highly valued quality of the Homer **sociocultural** system. **People** have come to the Homer area, and continue to live there, largely because of these intangible qualities of the natural and social environment. The country, **community**, and opportunities to make an independent and self-sufficient living as fisherman, homesteader, craftsman, or small businessman, are important to people of the Homer area.

Because of the diversity and individualism of the area's residents, the politics of the Homer area reflect a continuous dialectic between individual freedom and community, quality and quantity, and public good and private gain. In a few cases, such as land-use issues centering on the Homer Spit, years of conflict and public dialogue, largely precipitated by the threat of oil development, have crystallized into public **policy** which spells out community goals and methods for achieving them. For the most part however, the future of the **community** is decided in a piecemeal way, by non-decisions and lack of public participation as much as by informed debate and conscious policy.

The residents of the areas surrounding the city of Homer have close ties to the town, since they work there, shop there, and pay city sales taxes. They **also** keep their boats in the city's harbor, and utilize many city services. In general they are concerned with protecting the rural **and** small-town qualities of the Homer area, the commercial fishery, and the quality **of** the natural environment. Most city residents also value these qualities, but they are slightly more interested than non-city residents in seeing more population growth, more industrial development, and **more** public services. This is reflected in the composition of the city council and city administration in Homer, which appears consistently more oriented toward industrial and business interests than the area's population as a whole. These differences have been at the root of many conflicts over **land-use** and economic development in the Homer area.

Despite these differences, the city of Homer has been extremely successful in organizing and obtaining funding to meet the demands of recent population growth. City officials have sought to learn from the experiences of other communities affected by energy development projects and rapid population growth. They have also sought to stay several years ahead of population growth in providing community services and facilities.

The people of the Homer area are generally not opposed to growth and change in their community. Rather they support economic growth based on traditional economic sectors such as fishing and recreation. These areas, they feel, will continue to contribute to social stability, and to the preservation of environmental quality and beauty in the Kachemak Bay area.

## SMALLER COASTAL FISHING COMMUNITIES

### Introduction

This section of the report describes the past and present trends in the sociocultural systems of the smaller coastal fishing communities of Tyonek, English Bay, Port Graham, Ninilchik, and Seldovia. With a few minor exceptions, the treatment of these communities is similar to that used earlier for Kenai-Soldotna and Homer. For the larger cities of Kenai, Soldotna, and Homer, the socioeconomic issues are treated in another report (Alaska Consultants, 1979a). As they are not treated elsewhere, this section includes a discussion of the population and economy of the smaller coastal communities. The population is discussed in a separate section, while the relevant economic issues are included in the economic impact category. As noted earlier, this report does not address physical environmental effects of OCS development.

When appropriate, the smaller coastal communities are treated collectively, but as the reader will notice, they are not always discussed together. The five smaller coastal communities stretch from the upper Cook Inlet village of Tyonek to English Bay in Lower Cook Inlet. Due to settlement patterns since prehistoric times, the population of these communities represents a mixture of Indian, Eskimo, Aleut, Russian, Euro-American, and Asian stock. Thus, often it is necessary to discuss the idiographic characteristics in each community in order to adequately analyze and explain the communities.

## Settlement Patterns and Impact History

A number of events, both historic and prehistoric, which occurred in Lower Cook Inlet, influence the pattern and direction of future change throughout the region. This section describes the major past events that modified the social systems in the five smaller coastal communities under study in Cook Inlet. A community's past impact history can often help explain resident's present behavior. This is especially true if previous events have had a profound effect on aboriginal and later populations in the community. An understanding of how a population reacted to various historic events will hopefully provide insights into future responses to change, such as those potentially produced by OCS development. This historic perspective is especially necessary in the smaller coastal communities where the present majority populations have a long time depth in the area.

Many of the agents of change are common to all five communities, and, where appropriate, the communities will be discussed collectively, highlighting significant impacts in individual communities. Though many of the sources of change are similar among the smaller coastal communities, the intensity, duration, and response to these forces varies among the different communities. Each has developed in its own way, and each maintains a strong sense of individual identity. It follows, then, that each community also has its own feeling about future directions of change, including OCS development.

## PREHISTORIC PERIOD

In 1883, a German named John Jacobsen (1977, P. 197-9) tested a village site in Kachemak Bay, but following this isolated incident, no further archeological activity took place in Lower Cook Inlet for the next 47 years. In 1930, Frederica de Laguna began a three season archeological project in Kachemak Bay which culminated in The Archeology of Cook Inlet, Alaska published in 1934. Following de Laguna's pioneering work, archeological investigation in Lower Cook Inlet again entered a period of relative dormancy until the 1970's. Workman (1974) provides a general discussion of the prehistory of the southern Kenai Peninsula. Most research in Lower Cook Inlet has centered around Kachemak Bay. For an analysis of the archeological research conducted in Cook Inlet between 1934 and 1975, the reader should see the preface to the second edition of The Archeology of Cook Inlet, Alaska (de Laguna, 1975). A brief discussion of recent archeological surveys in Cook Inlet can be found in the Alaska OCS Literature Survey (U. S. Department of Interior, BLM, Alaska OCS Office, 1977, P. 252-3). The prehistory of northern Cook Inlet is poorly understood and has been subject to limited archeological excavation, but for an overview the reader is referred to Reger (1974). Dumond and Mace (1968) surveyed the Knik Arm, and Kent et al. (1964) conducted another survey in the 1960's along the Alaska Natural Gas Pipeline corridor. For a report on An Eskimo Site Near Kenai, Alaska see Reger (1973). The direction of recent research in Kachemak Bay, and its implication for the Eskimo-Tanaina problem can be found in Workman (1979).

Cook Inlet prehistory represents a complex sequence of many yet unexplained

population movements by several different groups of people. Early Eskimo influences from Kodiak Island, Prince William Sound, the Alaska Peninsula, and possibly from as far away as Norton Sound have been reported in and around Kachemak Bay (Workman, 1979; de Laguna, 1956). Tanaina Athapaskan Indians, who presently occupy nearly all of Cook Inlet shores, moved out from the interior and supplanted the Eskimos on the coast sometime prior to the arrival of the Russians in the late 18th century. When and why the Eskimos left and Tanaina came are unanswered questions. Additional complexities are added to Cook Inlet culture history as present inhabitants of Port Graham and English Bay call themselves Aleuts, while many linguists and anthropologists call them Eskimos. Thus, all aboriginal groups of Alaska Natives are represented in Cook Inlet (Eskimos, Aleuts, and Indians). This section begins the attempt to explain who the peoples of the Lower Cook Inlet communities are, and how they got there. Pre-history provides only part of the answers, historical events help explain others, while the remainder are yet to be documented.

Although archeologists have conducted relatively little research on the Kenai Peninsula compared with other areas of Alaska, it is generally accepted that culture history in the area spans approximately 3,000 years (Workman, 1974). Early evidence indicates that Pacific Eskimos were the first to inhabit the shores of Cook Inlet (de Laguna, 1934; Workman, 1974). From 1930-33, de Laguna conducted an archeological project in Kachemak Bay which led to the publication of The Archeology of Cook Inlet, Alaska in 1934. Originally, de Laguna sought to determine how long the Tanaina Athapaskans had inhabited Cook Inlet and examine the possibility that an Eskimo culture had preceded them. Although de Laguna did not solve the

problem of the relation between the Pacific Eskimo and the Tanaina Athapaskan cultures, she did provide a broad framework for some 1,500 years of Pacific Eskimo prehistory in Cook Inlet. This long periodization of Pacific Eskimo culture, referred to as the Kachemak tradition (Workman, 1979, P.3), preceded the Tanaina culture now in the region. De Laguna defined four periods of Eskimo culture within the tradition: Kachemak I, II, sub-III, and III. Kachemak I represents the earliest known remains of the Pacific Eskimo in Cook Inlet, and its beginning is estimated at about 3,000 years ago.

For some unknown reason, the Kachemak tradition of the Pacific Eskimo did not last in Cook Inlet until the arrival of the Europeans in the late 18th century. At the time of contact, Tanaina Indians already inhabited virtually the entire shoreline of Cook Inlet (de Laguna, 1934, 1956; Dumond and Mace, 1968, Workman, 1974). For some as yet unexplained reason, they penetrated Cook Inlet from the interior and supplanted the earlier Eskimo culture defined by de Laguna. Many researchers agree on the recency of the Tanaina immigration from the interior (de Laguna, 1934; Dumond and Mace, 1968), but the question of when and why the Eskimos left Cook Inlet has had more than one explanation.

Originally, de Laguna (1934, P. 15) thought the abandonment of Kachemak Bay to the Tanaina probably took place only shortly before the Russian occupation in the last decades of the 18th century. This is consistent with the theory that the final stage of Eskimo culture in Kachemak Bay (Kachemak 111) lasted well into the Second Millennium A.D. Following this premise, the Kachemak tradition of Pacific Eskimo prehistory in



Cook Inlet would have existed from approximately 1,000 B.C. for over 2,000 years, placing its demise concurrent with the immigration of the Tanaina. Dumond and Mace (1968) concluded that the Pacific Eskimo probably occupied all of Cook Inlet, at least seasonally, possibly as late as 1700 A.D., with the Tanaina moving in between 1650-1780 A.D. Thus, this hypothesis has the Eskimo culture in Cook Inlet lasting until the Tanaina Indians moved in. Then shortly thereafter, the Europeans arrived to make contact with the Tanaina.

The recency of the Tanaina occupation of Cook Inlet is not disputed (Dan, 1877; Petrof, 1884; de Laguna, 1934; Dumond and Mace, 1968; Workman, 1974), but evidence that the Eskimos inhabited Cook Inlet up until the arrival of the Tanaina is shaky at best. When de Laguna conducted fieldwork in Cook Inlet in the early 1930's, a Seldovia Indian mentioned a relative of his who was among the first Indian settlers to the area. This added evidence for a recent migration to the coast by the Tanaina. But in order for the Tanaina to move onto the coast it would seem that the Eskimos would have to be already gone or that the Tanaina would have to drive them out. There is little evidence, either prehistoric or historic, that the Tanaina drove the Eskimo from the shores of Cook Inlet. Nor did the Indians of Seldovia have any knowledge of Eskimo sites in the area (de Laguna, 1934). It seems, therefore, that a void would have to exist (i.e. the Eskimos are gone) before the Tanaina could immigrate. Thus, the final question to be answered is when and why did the Eskimo leave.

Usually, archeological sites which date closer to the present are more conspicuous and better preserved than older sites. Thus, one would expect

a solution to the Eskimo-Tanaina problem in Cook Inlet to be readily available in the archeological record. Obviously, the Tanaina were late arrivals from the interior, and since the first 1,500 years (1,000 B.C. - 500 A.D.) of Eskimo habitation (Kachemak I, II, III) in Kachemak Bay are well documented, one would think the last 1,200 years up until contact would be even better understood. Unfortunately, though the Kachemak tradition is fairly well described in Cook Inlet, the more recent periods are poorly known. In fact, most known sites in Kachemak Bay belong to the earlier period of Eskimo occupancy. When the Russians arrived in the late 18th century, it was Tanaina Athapaskans whom they mainly contacted. These Indians had an Eskimoid material culture and had Eskimo names for sea mammals. Apparently no excavation of a contact period site has been undertaken (Workman, 1979). Such an endeavor could help distinguish Tanaina artifacts from those of the earlier Eskimo cultures. The circumstances surrounding the exodus of the Eskimo and the arrival of the Tanaina in Cook Inlet still requires explanation.

Recent research in Kachemak Bay (Workman, 1979) indicates that possibly the culmination of the Eskimo culture in Kachemak III was followed by an abrupt withdrawal from the bay by about 500 A.D. This is over a thousand years earlier than previous researchers postulated. Workman suggests that the first 1,500 years of Kachemak Bay prehistory was closely aligned with that of Kodiak Island, and that shortly after 500 A.D. it became related with Alaska Peninsula cultures which were under strong influences from the Norton culture of the Bering Sea. Thus, the void that the Tanaina later filled might have come into existence over 1,000 years prior to the coming of the Russians (Workman, 1979). Not only is it not known

when and why the Tanaina came into Cook Inlet, the earlier Eskimo prehistory in the area is evidently more complicated than previously thought. According to Workman, a direct Kachemak tradition/Tanaina transition is no longer to be expected.

Though much of the above discussion centers around Kachemak Bay, a similar pattern of occupancy apparently exists for the northern Kenai Peninsula. Though the prehistory of this area is largely unknown at present, available archeological information suggests that both in the Kenai area (Reger, 1973, 1974) and in upper Cook Inlet (Dumond and Mace, 1968) the Tanaina Indians replaced an earlier Eskimo culture. The prehistory on the western shore of Cook Inlet is also essentially unknown.

In summary, the prehistory of the Cook Inlet area sets the stage of a region subjected to influences from many diverse cultural groups. During the prehistoric period in Cook Inlet, which lasted from approximately 3,000 years ago until the arrival of the Europeans in the 1770's, the area hosted many different groups of aboriginal peoples. Available evidence seems to indicate that a series of Eskimo populations first occupied the region. Early influences from the Pacific Eskimo area, including Kodiak Island, are reported for both the Kenai area (Reger, 1974) and Kachemak Bay (Workman, 1979). These Pacific Eskimos formed the basis for the Kachemak tradition. Later alignments seem to be with more northerly Eskimo groups, which indicates numerous population movements in the region. Finally, the Tanaina Athapaskans, late arrivals from the interior, replaced the Eskimos in the Cook Inlet area. The fate of the various Eskimo populations in Cook Inlet is not presently

known, nor is it understood exactly when or why the *Tanaina* took over the former Eskimo habitat.

Before leaving the prehistory of Cook Inlet, one additional Eskimo population should be mentioned as it might possibly offer some insight into understanding the social history of Port Graham and English Bay. This group is the **Chugach** Eskimo of Prince William Sound. In Prince William Sound, a 2,000 year sequence of occupation culminated in the Chugach Eskimo of historic times. Though exhibiting some similarities with the Kachemak III phase in Cook Inlet, Prince William Sound archeology is not included in the **Kachemak** tradition (Workman, 1974). For purposes of this study, it is not the Prince William Sound archeology that is of interest, but rather the area located between Prince William Sound on the east and Cook Inlet on the west. More specifically, of concern is the 120 miles of **Kenai** Peninsula coastline between Cape Puget on the western edge of Prince William Sound and the entrance to Cook Inlet just south of English Bay (Figure 1).

According to de **Laguna** (1956, P. 9, 34-6), there were Eskimo settlements on this south shore of the **Kenai** Peninsula in former times. Though the inhabitants were not considered to be fellow tribesmen by the Chugach, these southern Kenai Peninsula Eskimos were apparently more closely related to the **Chugach** than to the **Koniag** Eskimo of Kodiak Island (de Laguna, 1934, P. 14; 1956, P. 35). Possibly, these southern Kenai Peninsula Eskimos were **remnants** from one of the earlier Eskimo populations that inhabited Cook **Inlet**, and for some reason they were not replaced by the **Tanaina**. It is known that the **Tanaina** occupation in Cook Inlet did not extend this far southward.

Support for the possibility that Eskimos occupying the southern coast of the Kenai Peninsula are remains of earlier Eskimo populations that inhabited Cook Inlet can be found in an analysis of the different landscapes of Lower Cook Inlet. Kachemak Bay not only roughly marks the dividing line between the Tanaina and Eskimo territory, it also represents a change in topography. The south shore of the Kenai Peninsula, including the south shore of Kachemak Bay, represents a typical Pacific Eskimo habitat: a complex shoreline, with deep water and rugged fjords backed by high glaciers. The coast north of Kachemak Bay is less complex, with steep cliffs giving way to rolling hills. This area north of Kachemak Bay represents the heartland of the Tanaina territory on the Kenai Peninsula. Tanaina housepits, usually located along streams or lakes, are scattered throughout the Kenai Peninsula (Reger, 1974, P. 30). In any event, this report will refer to any Eskimos still present on the Kenai Peninsula at the time of contact as Kenai Peninsula Eskimos. Available information indicates that these Kenai Peninsula Eskimos still inhabited the southern coast of the Kenai Peninsula between Cook Inlet and Prince William Sound at the time of contact.

#### RUSSIAN PERIOD

At the time of European contact almost two centuries ago, the Tanaina occupied most of the Cook Inlet region, including the tributary streams, the area around Lake Clark, and the northern part of the Iliamna Lake area. According to Petrof (1884) and Porter (1893) the Tanaina territory extended down Cook Inlet as far as a line drawn from Anchor Point to Iliamna Portage in Kamishak Bay [Figure 1]. Everything south of

this line was Eskimo territory. The confusion surrounding the exact location of this Eskimo - Tanaina boundary is apparent as Porter describes the residents of Seldovia as both Indians (1893, P. 4) and Eskimos (1893, P. 69). In the 1930's, both de Laguna (1934, P. 13) and Osgood (1937, P. 13) include the modern settlement of Seldovia within the Tanaina boundaries. Thus, on the Kenai Peninsula, Seldovia marks the southern limit of Tanaina Athapaskan occupation, leaving the area around Port Graham and English Bay outside Indian territory. On the west side of Cook Inlet, de Laguna and Osgood extend Tanaina tenure to the south shore of Kamishak Bay (Figure 1).

The Tanaina were atypical for an Athapaskan group in that they lived on the sea coast and consequently adapted many marine oriented subsistence techniques. In Kachemak Bay, they subsisted mainly on sea mammals, shellfish, halibut, and salmon. Land mammals were hunted in the interior, but the Tanaina primarily relied on the sea for their food (Osgood, 1937, P. 18). Obvious Eskimo influences, not seen in any other Athapaskan groups, can be found in the Tanaina material culture. The Tanaina of Kachemak Bay hunted seam mammals from skin boats, wore waterproof gut clothing, and utilized floats and harpoons (Workman, 1974, P. 12), all of which greatly resemble Eskimo patterns. These Eskimoid characteristics of the Tanaina makes it difficult for archeologists to distinguish Tanaina artifacts from those made by earlier Eskimo populations. Other aspects of the Tanaina culture were more recognizably Athapaskan, including social organization, the potlatch complex, and mythology. For a description of the Tanaina way of life, the reader is referred to the monograph by Osgood (1937).

Captain Cook, the first European to enter Cook Inlet in 1778, encountered various parties of Natives in the upper inlet. The first group he traded with were **Tanaina** Indians, but Cook described the next party as being indistinguishable from the Eskimos of Prince William Sound (Beaglehole, 1967). Thus, the **Tanaina - Eskimo** problem developed in the prehistory persisted up until the time of contact, and the first written account containing information about the aboriginal peoples of Cook Inlet is not particularly helpful in differentiating Eskimo territory from that held by the Tanainas.

The mobility of these aboriginal peoples should be mentioned. Warfare and trading patterns often took one group far into the territory of another. The **Tanaina**, capitalizing on their strategic position, established extensive trading networks between the coast and the interior. Also, Koniag Eskimos from Kodiak Island ventured into Cook Inlet for raids or trading, as did the Eskimos of Prince William Sound. It is not unreasonable to assume that even prior to the Russian arrival in the Cook Inlet area, the local inhabitants were aware of their presence to the southwest and their enslavement of the Aleuts.

Not long after Cook left, the Russians penetrated Cook Inlet and began a period of intensive culture change among the Native peoples there. During the Russian period in Cook Inlet, which lasted from 1786 until 1867 when the U.S. purchased Alaska, the primary agents of change were the Russian fur traders and the Russian Orthodox missionaries. The fur traders, who came first, had worked their way across Siberia and up the Aleutian Islands reaching the mainland of Alaska in the latter

half of the 18th century. A rough and rugged lot, these Russian fur hunters or *promyshlenniki* relentlessly pursued the sea otter at all costs. Tremendous profits were realized for fur shipments that were safely sent back to Russia. For a description of the Russian period see Bancroft (1886), Petrof (1884, P. 96-123), Makarova (1975), Okun (1951)", Khlebnikov (1973), Chevigny (1951, 1965), Tikmenev (1978), Fedorova (1973}, and Andreyev (1952).

Wherever they went, the Russian fur traders both traded for furs and forced the local Natives to hunt for them. As a guarantee of good faith and behavior on the part of the Natives, the Russians took women and children as hostages (Bancroft, 1886, p. 223). Thus, by enslaving a man's family, the Russians insured themselves of having a submissive and productive sea otter hunter. As the Russians reached the Aleutian Islands first, the Aleuts were the earliest peoples in Alaska to be conquered, subdued, and forced to hunt for the intruders. Thus, as the Russians moved east from these islands, they usually took their Aleut hunters with them.

In 1784, a large party of Russians led by G. Shelikof established a main base of operation on Kodiak Island. Early relations between the Koniag Eskimos and the Russians were not friendly, but in a short time Shelikof managed to subdue the Koniag resistance and set about to expand his territory. Shelikof's goal was to establish a permanent colony in Alaska and use this as a reason for his company to receive a monopoly in the area. The Russians were concerned about foreign ships entering waters claimed by them, and the building of permanent forts



and trading posts helped establish Russian claims. Though Shelikof did not live to see it, his dream became a reality in 1799 with the formation of the Russian-American Company.

Not long after he arrived at Kodiak, Shelikof sent a party of promyshlenniki into Cook Inlet to establish a trading station there. As explained earlier, the Tanaina occupied most of Cook Inlet, with a small Eskimo population apparently scattered along the southern coast of the Kenai Peninsula between Cook Inlet and Prince William Sound. When Shelikof's men ventured into Cook Inlet in 1786, few white men had been in these waters, and none of the communities dealt with in this study existed (with the possible exception of Old Tyonek). The Russians called their first post in Cook Inlet Alexandrovsk, later known as English Bay.

Available information indicates that prior to the Russians building a trading post at English Bay, no village existed either there or at Port Graham. Portlock visited the Russians at English Bay in 1786, the same summer that the latter had arrived in the area. His observations offer valuable information regarding the early history of both Port Graham and English Bay. According to Portlock's journal (1789, P. 100-108), the Russians had both Koniags and Aleuts with them at English Bay. They were all somewhat apprehensive for fear of being surprised by "Americans", an obvious reference to the local population. Portlock saw no sign of a Native habitation near the Russian settlement, an observation that gives credence to the theory that the Russians founded English Bay. Portlock mistook the Russian camp as temporary, apparently

because he didn't realize that the Russians had only themselves arrived that summer and had not yet built more permanent dwellings.

Portlock also rounded the corner and entered Graham's Harbor or the present Port Graham bay. Though he saw no sign of a village at the present site of Port Graham, Portlock did see some huts scattered along the coast, which led him to believe that the inhabitants of this area had fled at **the** approach of the Russians. For other accounts of early explorers and voyagers who entered Cook inlet, the reader **is** referred to Dixon (1789, P. 61-9), Meares (1790, P. 301-14), Vancouver (1798, Vol. 3, P. 100-149), and Lisiansky (1814, P. 187-9).

The Eskimo and Indian residents in the area were apparently unhappy about the Russian intrusion, as in the same year, 1786, a **Koniag** chief enlisted the **help** of the **Tanaina** and Chugach to drive the Russians from their territory (Bancroft, 1886, P. 228). Just as on the Aleutians and Kodiak Island, the **Native** resistance was not successful, and the Russians **severly** chastised the **Tanaina** for their actions (Petrof, 1884, P. 99). Thus, a long period of Native disruption and demoralization at the hands of the Russians began in Cook Inlet.

Combining the data from prehistory, Russian history, and the early explorers, a possible explanation can be offered as to why many scientists call residents of Port Graham and English Bay Eskimos (Workman, 1974; de Laguna, 1934), while they refer to themselves as Aluts. As explained **earlier**, both Port Graham and English Bay are located south of the **Tanaina Athapaskan** territory, and **ava**'lable evidence suggests that

Eskimos were present on the south coast of the Kenai Peninsula between Cook Inlet and Prince William Sound in historic times (de Laguna, 1956, P. 9, 34-6). The scattered huts that Portlock saw in the Port Graham area could have been seasonal fishing camps used by peoples who permanently lived elsewhere, such as along the outer coast. The hypothesis set forth here suggests that Eskimos from the south coast of the Kenai Peninsula were the peoples who used the area around Port Graham and English Bay as summer fishing sites. Good salmon runs occur at different places during different years, and therefore some years the people would remain on the outer coast for summer fishing. Other years, they might go around the corner to the Port Graham area for fishing. When the Russians arrived in the summer of 1786, any people in the area probably left quickly, but as the Russian fort at English Bay remained for years, obviously contact between the indigenous population and the newcomers took place. As also explained earlier, when the Russians established Alexandrovsk, they had Aleut hunters with them. Over time, these Aleuts intermixed with the local Eskimo population, and apparently, the offspring retained the Eskimo language, while calling themselves Aleuts. The Russian fur traders were guiding the direction of change in Lower Cook Inlet during this period, and to be an Aleut meant one was on good terms with these promyshlenniki. The site of the Russian redoubt or fort at English Bay is near or under the present runway (de Laguna, 1975, P. IV; Portlock, 1789, P. 104).

The effect the Russians had on the Native culture in Cook Inlet was disruptive and demoralizing at best. When they entered an area, the Russians usually sought out the head man among the locals, took his and other women

and children as hostages, and forced the men to hunt for them. Consequently, traditional subsistence patterns and social organization were abruptly undermined, and a new way of life began with the Russians calling the shots. Though **often** an occasional traveller in the area reported that the local Natives seemed **to** live in friendship and harmony with the Russians (Vancouver, 1798, Vol. 1, P. 122), it was probably more a result of subjugation than of mutual good will.

In 1786, the Lebedev-Lastochkin Company, which controlled the fur trade on the Pribilof Islands, sent 38 men in search of new territory to exploit. These promyshlenniki first stopped at Kodiak Island where the Shelikof party told them to move on and not interfere with their operation. The Lebedev-Lastochkin men left Kodiak, sailed into Cook Inlet past Alexandrovsk, and established Georgievsk Redoubt (Kasilof) at the mouth of the Kasilof River (Bancroft, 1886, P. 334). Though representing competing fur companies, the men at Alexandrovsk and Georgievsk Redoubts apparently peaceably co-existed both among themselves and with the Natives for a few years. But, when additional employees of the Lebedev-Lastochkin Co. arrived in Cook Inlet in 1791, they did not even stop at Kasilof, and instead sailed up to the mouth of the Kaknu River and established Nikolaevsk Redoubt (Kenai). These strange actions foreshadowed troubled times ahead.

The new promyshlenniki at Kenai had come first to establish themselves as commanders of the Lebedev-Lastochkin Co. in Cook Inlet, and second to prevent Shelikof's men from gaining any further holdings on the mainland and to drive them from the area. Consequently, these new arrivals first fought with their fellow employees at Kasilof, and after winning them over,

the struggle narrowed down to open warfare between the two competing fur companies.

The tactics used by the Russians had disastrous results on the local Natives. Friendly Natives, used to trading freely at both Georgievsk and Alexandrovsk, were intercepted, beaten, and robbed of their furs. The indignant chiefs questioned this behavior as they had given hostages in exchange for guarantees that the Russians would not harm their people. But the quarrel between the two Russian fur companies took precedence over previous agreements with the Natives, and a reign of terror ensued in Cook Inlet in the last decade of the 18th century. The Natives were caught in the middle, and mistrust and resentment against the Russians mounted. Frequently, the Russians, to protect their own interests, set friendly tribes against each other (Tikhmenev, 1978, P. 45). With the Russians spending their time fighting each other, they had little time for work, and this burden fell upon the Native hostages. The Russians developed a new method of procuring furs during this time in Cook Inlet: stealing. Thus, the white man had been in Cook Inlet less than five years and open warfare existed from Tyonek to English Bay.

Finally, in the 1790's, Baranof, the manager of the She' ikof-Golikof Co., captured the antagonists from the Lebedev-Lastochkin Co. By this time, general discontent had greatly grown among the Natives, who had been kept angered by constant feuding among the Russians. Baranof had to exert a strong authority over the area in order to stop a general uprising. The Russian government, also eager to end the strife among the various fur companies in Alaska, sought to have one powerful company take charge.

On 1799, a Royal charter established the Russian-American Company (Shel'ikof-Golikof Co.) as the sole agent for Russian fur trading in the Pacific. The Russian-American Company retained this status until 1867 when the U.S. purchased Alaska. As time passed, the company slowly transformed from a commercial enterprise controlled by profit-motivated merchants "into a bureaucratic institution for the purpose of governing the Russian American colony (Hulley, 1958, P. : 70). For a description of the competing fur companies in Cook Inlet, the reader is referred to Bancroft (1886), Makarova (1975, P. 137), Chevigny (1951, P. 58-61), and Tikhmenev (1978, P. 35-46).

Russia did not want to lose her only colony in America, and one way to substantiate her hold was to establish a permanent and settled Russian population. As the number of Russians in America at any one time was never great, this goal required the Russian government to adopt some special policies in her colony. From the beginning, only Russian men were sent to Alaska as fur traders and hunters. Apparently, the Russian government planned mixed marriages between the Russian men and Native women (Fedorova, 1973, P. 206). This not only served to establish friendly relations with local Natives, but it also created permanent ties. The Russian government went one step further and made the offspring of the mixed marriages (Creoles) a special class of Russian subjects, and therefore, they were not considered Natives by the Russians. Though the Creoles with European blood, felt superior to the Natives, both the full-blooded Native and Russian looked down on the Creole with disrespect and contempt (Fedorova, 1973, P. 212). But, as the Russian American Company was always plagued by a shortage of labor, these Creoles, brought up and educated

at the company's expense, could help fill the company's labor needs.

Many of these Creoles excelled in their service to the Russian-American Company as navigators, managers, bookkeepers, and artisans.

In 1835, the Russian government adopted another policy aimed at strengthening her hold in Alaska. In that year, a "Supreme Command" from Russia permitted former employees of the Russian-American Company with families (Creole children) to remain in the colony permanently and to establish special settlements (Fedorova, 1973, P. 145; Petrof, 1884, P. 114).

The government also recommended that similar settlements be formed for the Creoles. Apparently, Ninilchik's origin is related to these efforts by the Russian government to form settlements in Alaska. Available evidence (Petrof, 1884, P. 27; Fedorova, 1973, P. 145; Okun, 1951, P. 174), indicates that somewhere around 1835, former employees of the Russian-American Company with Creole families settled at the mouth of the Ninilchik River. It seems that these "colonial citizens" were comprised of former employees of the company who had taken Native wives, or those who because of old age, ill health, or family ties, were unable to return to Russia. Besides fishing and fur hunting, these new residents of Ninilchik had gardens and raised cattle, pigs, and poultry. Thus, most early references to Ninilchik consider it an agriculture community. The Russian influence in Ninilchik was very strong, and residents spoke Russian up into modern times. For a discussion of Ninilchik's early history see Gillette (1978a).

This Russian attempt to form permanent settlements out of superannuated Russian-American employees did not really bring the desired results.

Though Ninilchik continued as a viable, though small, community, there were only 94 "colonial citizens" in Alaska in 1867 (Okun, 1951, P. 174). Thus, Russia never did solve the problem of creating a settled and permanent population in Alaska.

Though the Russians appeared to play a role in the formation of many of the Lower Cook Inlet communities, the origin of others is not clear from the literature. As discussed above, English Bay, Kasilof, Kenai, and Ninilchik were all established by the Russians in the late 18th and early 19th centuries. The first three began as Russian fur trading posts, while Ninilchik did not. Tyonek appears early in the literature, and apparently the immediate area has been home to a local group of Tanaina since they first moved to the coast in prehistoric times. Tyonek is also mentioned as the site of an early Russian trading post (Petrof, 1884, P. 26; Tikhmenev, 1978, P. 45). Seldovia, located on the Tanaina - Eskimo boundary, means "herring" in Russian, but its early history is evidently unknown. The first reference to Seldovia found in the literature was in the 1880 census.

The origin of Port Graham is also unclear, but it appears to be related to commercial activities other than fur trading. The sea otter harvest in Cook Inlet rapidly declined until only 100 were harvested in 1812 (Tikhmenev, 1978, P. 151). Thus, the Russian-American Company looked for other business ventures. In 1848, a Russian mining engineer named Doroshin examined a coal vein on the north shore of Port Graham bay. By 1855, the Russians were mining coal there, both for their own use and for hopeful export to California. The company employed 131 men at this mine,



but *many* of them were inexperienced at mining. Also, the coal was of an inferior quality and proved uneconomical to mine. A fire destroyed the facility in 1860, before the principal vein had been touched. Though this mining activity took place just across the bay from the present village of Port Graham, the literature does not mention a community there at this time. Obviously, the beginnings of Port Graham belong to another era - the American period. For a discussion of the Russian coal mining operation at Port Graham, see **Golder** (1916), **Bancroft** (1886), **Hulley** (1958, p. 175), **Petrof** (1884, P. 27), **Tikhmenev** (1978, P. 376), and **Fedorova** (1973, P. 195).

The Russian-American Company not only became the governing institution in the colony, it also supported the Russian Orthodox Church and provided the superstructure within which the church could operate. The Russian missionaries followed closely behind the fur traders, reaching Kodiak in 1791. By 1794, Orthodoxy had entered the Cook Inlet area, and it put down deep roots on the Kenai Peninsula. At first, the priests from Kodiak served the Kenai Peninsula, but by 1845, Kenai had its own church and priest. The Russian priests not only baptized heathens by the hundreds, they also tried to destroy the Tanaina belief system. Their ethnocentric attitude is evident in their writings, and the missionaries had an apparent complete lack of understanding of other cultures. The Russian priests degraded the Natives' customs, and continually referred to the Tanaina as "dirty", "lazy", and "savage". After having their customs treated with contempt for over 100 years, it is not difficult to understand the low self image portrayed by many Natives in Lower Cook Inlet in more modern times (Townsend, 1974). For a full discussion of the Russian

priests in the Cook Inlet area see Townsend (1974).

The arrival of the Russian fur traders in Cook Inlet marked the end of the aboriginal way of life for the local Native population. By taking hostages, the Russians forced the Kenaitze (Russian name for the Tanaina) to work for them. Fur trade was introduced, and many traditional villages were abandoned as the Kenaitze moved to be near the Russian trading posts. The customs, clothing, religion, diet, and social organization of the Tanaina changed, and their decline in fur bearing animals affected their economy. Disease and epidemics spread over the area. The smallpox epidemic of 1838 had a devastating effect on the population and morale of the Alaska Native, including those on the Kenai Peninsula. The Russian Orthodox Church replaced the traditional belief system, at least outwardly. The Russians also introduced alcohol into Cook Inlet. In all, the Russians had disrupted the traditional way of life, and greatly demoralized the Native residents of the Kenai Peninsula.

#### AMERICAN PERIOD

The trends begun with the Russians continued, and in some ways worsened, after the purchase of Alaska by the U.S. in 1867. The War Department administered Alaska for the first 10 years after purchase. Soldiers arrived at Fort Kenai prepared to face the warlike Kenaitze. Instead, they met a friendly, though broken, people. The army closed the post at Kenai ten years later, leaving the area with no government. Again, lawlessness and disorder reigned in Cook Inlet as the U.S. seemingly ignored the Alaskan frontier. Thus, the 19th century closed as it had begun, with

the local Native population at the whim of unscrupulous white adventurers. For a discussion of the effects of both the Russian and early American fur traders on the Kenaitze, see Townsend (1974) and Pedersen (1976).

After the transfer of Alaska to the U.S., white settlers increasingly penetrated the Cook Inlet area. Euro-American fur traders, miners, fishermen, and adventurers were drawn by the rich natural resources in the region. The Alaska Commercial Company dominated trade in Lower Cook Inlet and filled the void left by the exodus of the old Russian-American Company.

In 1883, just three years after the first census in Alaska, Jacobsen (1977), traveling from Bristol Bay to Lower Cook Inlet, left an account of several of the communities under study. Tyonek, with an 1880 population of 109 Tanaina, 6 Creoles, and 2 whites (Petrof, 1884, P. 29), was also the site of an Alaska Commercial Company post. Jacobsen noted that the local Indians demanded high prices for their ethnographic specimens. As they had high earnings from fishing and sea otter hunting, the Tyoneks were familiar with the cash economy and would not accept trade goods. They required cash or no deal would be made. After leaving Kenai, which supported both an Alaska Commercial Company post and a couple of canneries, Jacobsen reached the Russian settlement of Ninilchik "where the vegetables bespoke a settled agricultural community" (Jacobsen, 1977, P. 194-5). Petrof listed the 1880 census of Ninilchik at 53 Creoles. When Jacobsen reached Seldovia Bay, he visited a village called Akedaknak where apparently a former trading post had been abandoned. Some dwellings were visible, but Jacobsen did not elaborate. According to Petrof (1884, P. 29),

the combined 1880 population of Seldovia and a village called Ostrovki was 38 Creoles and 36 Eskimos. Petrof made no mention of Akedaknak, but he did mention a trading post at Seldovia (1884, P. 25). Thus, the early history of Seldovia remains clouded in mystery. Finally, Jacobsen visited the Alaska Commercial Company post at Fort Alexander (English Bay) where he noted that the entire population of 88 (75 Eskimos, 12 Creoles, and 1 white) were engaged in sea otter hunting. Port Graham, apparently not yet settled, is not mentioned by either Jacobsen or Petrof.

Porter did not mention Port Graham in the 1890 census either, but he (1893, P. 69) described a settlement of "100 Kadiak Eskimos and a few Creoles" in Seldovia or Herring Bay. He made no reference to a trading post in Seldovia Bay at this time. Porter described the 120 miles of coast between Prince William Sound and Cook Inlet as virtually uninhabited. He further explained that the residents of the last Chugach Eskimo settlement of this stretch of the coast (Aialik Bay near Seward) migrated, at the suggestion of a Russian missionary, to English Bay in approximately 1880. If true, this migration would help explain the Eskimo influence in present day English Bay and Port Graham. The impact of commercial fishing on the area is evident as Porter stated that some of the 100 Eskimos of English Bay found employment by salting barrels of salmon for the trading post there. The sea provided ample food, and summer sea otter hunting and winter trapping enabled the locals to procure trade goods.

By 1890, Ninilchik's population had grown from 53 Creoles in 1830 to 53 Creoles, 12 whites, and 16 Indians. Thus, the number of Creoles apparently remained the same, but the influx of Indians and whites indicated a trend

that would continue in both Ninilchik and Seldovia. Immigration of whites, Indians, Eskimos, and Aleuts coupled with continual intermarriage between these peoples and the Russian descendants resulted in a very mixed population. Between 1880 and 1890, Tyonek's population changed little. Even though two rival trading stores were located there, and the people had virtually all become Russian Orthodox Christians, Tyonek managed to remain essentially an Athapaskan community.

Both the Russian and American fur trading operations had a profound effect on the aboriginal economy and social organization in Cook Inlet. Fur trade opened up a new economic opportunity, in which the local Natives were more or less forced to participate. Luxury goods and cash altered the traditional subsistence patterns. Diet, dress, social relations, and settlement patterns all changed as a result of fur trade impact.

After the sale of Alaska to the U.S., the Alaska Commercial Company bought out the Russian-American Company, and the new owners continued the established trading patterns between the company and the Natives. The Indians, Aleuts, and Eskimos would receive supplies and trade goods in exchange for furs, and often the company would extend credit against future furs. But with the Americans came free enterprise, and several companies competed for the fur trade business. Consequently, prices paid for furs soared in the late 19th century, the fur market became inflated, and the Indians were permitted to incur large debts. The fur trade supplied luxury goods, and this was a time of great wealth in the area. Cash entered the local economies during this period as independent traders vied for the furs. Alcohol and guns were also used as trade items. But, in 1897,

the bottom fell out of the fur market, and the prices dropped drastically. Credit was no longer extended to the Natives, and the Alaska Commercial Company began to collect their debts. These events had a tremendous effect on the Tanaina wealth and prestige complex supported so well when the times were better. Thus, by the end of the 19th century, the fur market that had supported the Cook Inlet Native for over a hundred years had collapsed. Many Natives were in heavy debt, and it was too late to return to their old ways. Though traditional subsistence on salmon and game still persisted, cash had entered the economy, and a new way to get it had to be found. For a description of the effects of the fur trade on the Tanaina social system and economy, the reader should see Townsend (1970, P. 88-91; 1974) and Porter (1893, P. 247-51). Much of the above discussion is from these sources.

Two new industries helped ease the hardships caused by the collapse of the fur market: mining and salmon canneries. In the 1890's, miners and prospectors entered Cook Inlet. Though the miners did some trading and local hiring, they had relatively small effect on the local Native economy. Some settled in Ninilchik, while others continued up the inlet, stopping at Tyonek before moving on either into the interior or to the Turnagain Arm. According to Barry (1973, P. 61) as many as 3,000 prospectors stopped at Tyonek. Apparently Tyonek became a regular port of call during this period as it was a regular stop for Alaska Commercial ships. From Tyonek smaller vessels transported people and supplies to the mining fields. Few, if any, of the miners settled at Tyonek. For a complete discussion of mining in the area see Barry (1973).

Even though American fishermen salted salmon in Alaska prior to 1867, the salmon fisheries of Alaska did not become important until the advent of canning (Cobb, 1911). The first two canneries in Alaska were built in 1878 in southeast Alaska. In 1882, the first cannery was built in Cook Inlet at Kasilof. Before the turn of the century, two canneries were constructed at Kenai, one more at Kasilof, and C.D. Ladd operated a salt-ery near Tyonek. Between 1907 and 1910, a saltery also operated at English Bay. In 1911, Seldovia Salmon Co. built a cannery at Seldovia, and in 1912, Fidalgo Island Packing Co. constructed a cannery at Port Graham. The first concrete mention of a community at Port Graham seems to be associated with this cannery. If so, Port Graham is truly a cannery town, and it apparently attracted many residents from nearby English Bay. For a discussion of early salmon fishing and canneries in Alaska see Cobb (1911, 1916, and 1930).

As most of the Natives of Cook Inlet could not afford fishing boats and gear, they did not participate fully in the commercial fishing industry for many years. In fact, it is only since World War II that commercial fishing has become of major economic significance for them (Townsend, 1974, P. 5). In the meantime, they were limited to setnet fishing or working in the canneries. But cannery work, requiring attendance every day for a whole work season, was not an easy adjustment for someone more used to a hunting and gathering lifestyle. As a result, the majority of cannery workers were Chinese, and later Japanese, Filipinos, Mexicans, and Puerto Ricans (Cobb, 1916, P. 97; Porter, 1893, P. 69).

Since its beginning, the fishing industry has had periods of alternate

prosperity and adversity. Even in the good years, the money provided by the brief fishing season could not last the Tanaina all winter. Therefore, just as with the fur trade in previous years, the Natives often became indebted to the cannery over the winter months. In recent years, as more and more Natives have entered the commercial fishing industry as fishermen, an arrangement similar to that with the fur companies of the 19th century has emerged between the fishermen and the canneries. Often, the cannery might help with the purchase of a boat, gear, or extend credit in exchange for exclusive fishing for that cannery until the debt is paid.

Though commercial fishing helped provide cash after the fur market had collapsed, it also had some negative effects on the local people. The Euro-American fishermen caught tremendous quantities of salmon and reduced the escapement up the rivers where many Indians fished for food. Also, commercial and subsistence fishermen often struggled for the best fishing spots, with the new commercial fishermen usually crowding out the subsistence fisherman.

In summary, after the transfer of Alaska to the U.S., Euro-American fur traders, miners, fishermen, and fortune seekers came to Cook Inlet in unprecedented numbers. Gold, furs, and fish attracted these entrepreneurs. The Alaska Commercial Company dominated trade in the area and had posts in both English Bay and Tyonek. Though greatly affected by whitemen, these two villages retained their Native character. Many of the Euro-Americans were attracted to the Creole Russian community of Ninilchik, and some settled there. A cannery was built not only in Seldovia, but also in Port Graham, which finally gained a separate identity



from English Bay. Independent traders introduced cash into the economy in order to compete with the Alaska Commercial Company. The fur market first rose and then dropped, greatly affecting the Natives of Cook Inlet who had grown to depend on it.

At the turn of the century, a number of military reconnaissances passed through Cook Inlet on their way into the interior. These expeditions visited many of the coastal villages, and the commanders recorded the condition of the Natives with whom they came into contact. They described the general condition of the Indian along the shores of Cook Inlet as being very poor. The influx of whitemen over the past century had greatly reduced their numbers, leaving the survivors diseased and in poor health. Though there was still plenty of salmon, both Learned (1900) and Glenn (1900) were concerned about the plight of the coastal Indian. They felt that commercial fishing would soon lead to a decline in the salmon population, just as trapping had greatly reduced the fur bearing animals. These American military men made many ethnocentric and derogatory comments about how the "lazy", "shiftless", and "deceitful" Indian should be taught agriculture and made to speak English. Just as the Russian clergy before them, U.S. government officials would attempt to stamp out much of the Native culture.

#### RECENT IMPACT EVENTS

Though other events of the 20th century have had an impact on the five smaller coastal communities in this study, their well being has been closely connected to the ups and downs of the commercial fishing industry.

During the early decades of the 20th century, commercial fishing thrived in Cook Inlet. By the 1920's, the multi-ethnic community of Seldovia had changed from a Native village into a bustling fishing town with four canneries, a school, hotels, Russian Orthodox Church, and saloons. Local citizens built a boardwalk connecting one end of the town with the other. Waterfront property was developed and the boardwalk became the trademark of Seldovia. In the 1920's, the herring boom fueled Seldovia's economy even more. More Euro-Americans arrived, and Seldovia, already a regular port of call, grew in significance. Inter-marriage between whites and Natives intensified, and Seldovia developed a character of a white frontier town (Reed, 1978).

Though Seldovia was affected by the declining fish market during the 1930's, the community prospered again after World War II when the industry revived. Those that weren't fishing worked in the canneries. Isolated by Kachemak Bay, Seldovia was not significantly affected by the construction of the Sterling Highway in 1951, the surge of homesteaders who came to the Kenai Peninsula during this period, or the discovery of oil at Swanson River in 1957. But, the declining Cook Inlet salmon runs of the 1950's did have an impact on Seldovia. Area licensing in 1955 restricted fishermen to a single area, and with the loss of outside fishermen, Seldovia salmon fishing became a local affair. By 1959, none of the salmon canneries in Seldovia were in operation. Some freezing of halibut and king crab took place, but the summer of 1959 was very quiet. When Port Graham's cannery burned in 1960, salmon canning again returned to Seldovia, but the fledging crab and shrimp processing industry promised to return Seldovia to its former position of prominence. Crab was a year round resource, and once again

everyone was employed and housing was impossible to find.

In the early 1960's, while Seldovia was grappling with water, sewer, and harbor problems, a major disaster struck the area. At first, it appeared as though the Good Friday Earthquake had barely affected Seldovia. But when the fall tides came, it became apparent that the land around Seldovia had sunk, and water inundated the boardwalk and waterfront buildings. Federal funds, administered by the State of Alaska, were available to Seldovia to repair the damage. Seldovia residents were faced with a choice between raising the boardwalk and buildings or tearing down the boardwalk and filling the area with rock. The latter alternative, called urban renewal, required buying out the property owners affected. The canneries supported this choice. In fact, the canneries maintained that without urban renewal, they would abandon Seldovia. The townspeople split, but in the end urban renewal won.

The Alaska State Housing Authority bought the shoreline property, and after the canneries received their money, all but one left. The bulldozers moved in and buried old Seldovia. Its boardwalk and charm disappeared, replaced by a dusty gravel pad and road. Many people moved away from Seldovia, and of those who stayed, many old friends became enemies because of the project. "Before urban renewal there were five seafood processors with a labor force of 200, and now there is one employing 60" (Sherwood, 1974, P. 210). It would take ten years for Seldovia to recover. For a description of the urban renewal controversy and effects, see Sherwood (1974). A general description of Seldovia can be found in Pedersen and Pedersen (1976) and Reed (1978).

Like Seldovia, Port Graham's welfare in the 20th century has been tied to the fishing industry. The cannery, constructed in 1912, apparently played a major role in the origin of Port Graham. Attracting Natives from the surrounding area, including English Bay, the cannery has been a significant agent of change for the Native cannery village of Port Graham. The cannery also solidified, if it did not introduce, cash in the local economy. Both in Port (Graham and English Bay, the intense summer activity associated with commercial fishing is replaced by more traditional subsistence hunting, trapping, and fishing during the other months.

Describing the Natives of Port Graham in the 1930's, Nielsen (1948) wrote that because of years of intermarriage, there were no pure bloods left, and that most of the traditional customs had disappeared. Not only the fur traders of the Russian and American period, but also the cannery was responsible for this condition. Incoming cannery crews represented a diverse background, with Chinese, Swedes, and Filipinos apparently leading the list. Additional intermarriage added to the already mixed population of Russians, Aleuts, and Eskimos. Alcohol and disease also came with the newcomers, and Nielsen considered alcohol abuse the biggest problem in Port Graham. The cannery and fishing money provided the necessary cash to buy the booze, and the stores and saloons of Seldovia, just 14 miles away, supplied the spirits themselves.

Both the cannery and the school, first built in 1932, caused significant change in Port Graham. Because of the cannery, the white man had always been present in this village, and, according to local residents, the

whites continually laughed at the Natives and put them down because they spoke their own language and had different customs. Also, during the first half of the 20th century, school administrators and teachers in Alaska enacted very ethnocentric policies toward the Native peoples. The effect was a tremendous pressure to conform to the white ways. Perhaps the most severe tactics were those used in the schools where the Native language was forbidden and only English was accepted. Thus, the Native children spoke one language at school and another at home. An elderly man in Port Graham summed up the situation when he said,

Before the Russians came, we were born into our own customs. Since the Russians and whitemen arrived, we have had two lives. Born as a Native into the American life, we must therefore learn our own way of life and language and also the American way. This is very confusing. . . especially for the children. They learn one way at school, and another at home. At school they were punished for doing what they learned at home. Thus, we live in two worlds.

Similar pressures impacted Native residents of English Bay, Tyonek, Ninilchik, and Seldovia.

This constant contact with and pressure from another culture had a twofold effect on the Native people of Port Graham. First, the continual scorn from outsiders made many of the Natives timid and shameful. They were made to think many of their traditional customs were somehow inferior. Second, the contact situation in Port Graham forced the two groups to learn to live together peaceably. By continually being around the white man, the Native of Port Graham learned about his ways and how to deal with him more effectively. In essence, the residents of Port Graham became a little more progressive than the villagers of English Bay only a few miles away. English Bay remained a relatively isolated

Native village, where the people might commercially fish or work in Port Graham's cannery in the summer, but during the rest of the year they returned to their village and continued their valued traditional way of life.

A major event impacted Port Graham in 1960 when the cannery burned down. Whitney-Fidalgo shifted their cannery operation to a less efficient cannery in Seldovia, but the events after the 1964 earthquake led to its closure. The cannery in Port Graham was not rebuilt until 1968. The eight years that no cannery existed in Port Graham were hard ones for the residents. Their economic base had suddenly disappeared, and many people moved away to seek employment elsewhere. The lack of cash in the local economy made living hard and greatly affected subsistence activities. As one local explained, theirs is a "cash-flow type subsistence; we need 50% money." It costs money to buy the equipment necessary for subsistence hunting and fishing. The modified American way of life which developed in Port Graham was acceptable as long as cash was available. Without the money, life was not easy. Port Graham's reliance on its cannery became apparent after the fire, and most people gradually returned after the cannery was rebuilt in 1968."

English Bay also grew to depend on a certain amount of cash, but due to its isolation, lack of local cannery, and an effort by residents to retain a continuity with past customs, this village had remained more traditional than neighboring Port Graham. In the 1890's, a new Russian Church was built in both English Bay and Seldovia. The social life revolved around the church. In 1958, the BIA built a school in English Bay. The

1964 earthquake damaged many homes, and in 1964-5, the BIA built 16 new houses to replace those destroyed by the earthquake (Svendsen, 1972, P. 6). In the 1970's, when faced with OCS Lease Sale CI, English Bay vigorously opposed it (See U. S. Dept. of Interior, BLM, Alaska OCS Office, 1976, Vol. 2, P. 232-280). The villagers valued their traditional cultural patterns more than any potential benefits from development.

Ninilchik, only accessible by sea for years, remained relatively isolated until the construction of the Sterling Highway in 1951. With no deep water port, the larger ships bypassed this small community, but Ninilchik's pretty setting caught the eye of many adventurers and prospectors, and some of them settled there. Before the construction of the highway, most of the residents lived in the village townsite. The community had a school which taught Russian and a Russian Orthodox Church. After World War II, many new comers came to the area to homestead 160 acre tracts of land, and the community began to spread out into the surrounding countryside. After the highway was built, more homesteaders arrived, and these newcomers slowly began to dominate the community. They claimed much of the good land along the highway, carried a mild air of being just a little better than the local Creole residents, and became leading citizens in the community. Recent events which impacted Ninilchik include the fire which destroyed the cannery in the spring of 1979, and the massive numbers of sports fishermen who flock to the area in the summer. Both of these occurrences will be discussed in the next section, For a profile on Ninilchik, see Gillette (1978a) and Dimmick (1976).

Since 1971, ANCSA has significantly affected all five of the smaller

coastal communities. As Port Graham, English Bay, and Tyonek are mainly Native communities, the effect of ANCSA has been primarily political and economic. But in Ninilchik and Seldovia, which have a character similar to other rural, white frontier fishing towns, ANCSA has had an interesting, though understandable, social impact. In these two communities, a high degree of intermarriage between races coupled with local discriminatory pressures led to a trend to de-emphasize Native heritage and ethnicity. In Seldovia, most people acted white. In Ninilchik, those with Native background stressed their Russian heritage. ANCSA revived the Native identity when it became a means to receive valuable resources. For a full discussion of this phenomenon see Reed (1978). Though these social impacts of ANCSA are most evident in Seldovia and Ninilchik, white-Native relations have also changed in the other villages. These and other ANCSA effects will be discussed in the various impact categories.

Despite the disruption caused by the Russian and American traders, trappers, prospectors, and adventurers in the 18th, 19th, and early 20th centuries, Tyonek managed to essentially remain a traditional Tanaina village. Relatively little intermarriage took place when compared with Ninilchik and Seldovia, and few, if any, of the Euro-Americans settled permanently in Tyonek. The fur bearing animals and the fur market were in decline. The area offered neither a deep water harbor nor a particularly abundant run of salmon when compared with other areas of Cook Inlet. Apparently, few people were interested in living in the area, except for a handful of Tanaina Indians to whom the region was home. When the neighboring residents of Kustatan moved to Kenai in the early 20th century, Tyonek became the only settlement on the west coast of Cook Inlet.



By Presidential Order, the village of Tyonek and the surrounding 26,917 acres became the Moquawkie Indian Reservation in 1915. Later, under the Indian Reorganization Act of 1934 (amended for Alaska in 1936), the Native Village of Tyonek became a federally chartered corporation. The IRA Council became the governing body for the village and the reservation lands.

Prior to the 1960's, routine subsistence tasks coupled with commercial fishing dominated Tyonek life. Apparently, white encroachment (Anchorage is only 40 air miles away) on hunting and fishing grounds dwindled food resources. For whatever reason, poverty beset Tyonek in the 1930's.

The BIA administered social programs to aid the community. In the 1950's, reduced salmon runs led to a territorial law which reduced commercial salmon fishing to two days a week. The new law and the lack of subsistence fish plunged Tyonek into even more poverty, and in the winter of 1955, only an emergency airlift of food saved the villagers.

Prior to 1964, little differentiated Tyonek from many other isolated Native villages in Alaska. The quality of life remained poor, with sub-standard housing, poor diet, and a lack of water and sewer facilities. As many as 13 persons lived in a single room shack, sometimes sleeping in shifts. But, in the past two decades, four events have had significant impacts on the residents of Tyonek. Tyonek has already experienced the effects from development through: (1) royalties received from oil and gas leases on reservation land in 1964; (2) the construction of a large chip mill facility near the village; (3) the implementation of ANCSA, and the consequences it had on former Indian Reserves; and (4) preliminary planning related to the Beluga coal field development (see Battelle

and CH2MHill, 1979).

In 1964, Tyonek, with the assistance of some Anchorage attorneys, sold oil and gas rights under reservation lands for \$12.9 million. Approximately 3(10 people would share in this windfall (including 100 who lived off the reservation land). Tyonek wanted to direct its own planning and development and to manage the money from the sale with a minimum of BIA interference. The BIA cooperated, and Tyonek had the opportunity to establish its own priorities and programs. The Tyonek Village Council formed the Tyonek Management Corporation, and in addition to undertaking many profit oriented ventures, the Council began a program to improve living conditions for community residents. Tyonek money built and furnished 59 new homes, improved the streets and airstrip, installed a community water system, built a guesthouse and store, and helped finance a new school. Among other investments, Tyonek made a loan to the Alaska Federation of Natives, which organized to fight for Native land claims. The village made business investments in Anchorage and developed a Tyonek power plant (fueled by local natural gas).

Then, the expected royalties from the oil companies failed to materialize, and in 1969, the gas wells running the \$4 million dollar power plant sanded up. Other unfortunate setbacks befell Tyonek, and continual pressure from entrepreneurs made Tyonek residents very suspicious of outsiders. For a discussion of the effects of the oil money on Tyonek see Rapoport (n.d.). Though education, health, and living conditions improved, the instant wealth had failed to free Tyonek from dependence on governmental social programs. Other than commercial fishing, permanent employment in the village remained minimal.

## Population and Demography

### TOTAL POPULATION/REGIONAL CONTEXT

The Kenai-Cook Inlet Census Division as a whole dramatically increased from 6,097 persons in 1960 to 14,250 persons in 1970 (a change of 134%), and to 22,271 persons in 1978 (a change of 56% over 1970). This represents a change of 265% from 1960 to 1978 (Table 7). The largest portion of this population increase occurred in the Kenai-Soldotna area and is attributable to immigration closely related to onshore construction activities of hydrocarbon development (MSNW/HRPI, 1976, P. 191).

The aggregate population of the five smaller coastal communities in this study actually decreased from 1,033 persons in 1960 to 968 persons in 1970, but then rose to a 1978 high of 1,605 persons by precinct or 1,315 persons by community. The reader is cautioned about the use of 1978 data in this report. In a special census conducted for the Kenai Peninsula Borough in 1978, the U. S. Census Bureau gathered statistics by election precinct for all communities except the five first class cities in the Borough (including Seldovia). Thus, the figures for Tyonek, English Bay, Port Graham, and Ninilchik are for election precincts and therefore incompatible with 1960 and 1970 census data based on community boundaries. A comparison of the size of these four precincts with that of the corresponding community reveals that the English Bay precinct is small and essentially composed of English Bay. Therefore, the population of 110 is probably quite accurate. On the other hand, the Tyonek, Port Graham, and Ninilchik precinct boundaries are rather large and certainly represent a population larger than the communities themselves.

Table? Population of Five Smaller Coastal Communities  
in the Kenai-Cook Inlet Census Division 1960-78

	1960		1970		Precinct <sup>1</sup> 1978		Author <sup>2</sup> 1978		% Change <sup>1</sup> 1960-78	% Change <sup>1</sup> 1970-78	% Change <sup>2</sup> 1960-78	% Change <sup>2</sup> 1970-78
	Pop	% of Total Pop	Pop	% of Total Pop	Pop	% of Total Pop	Pop	% of Total Pop	(78 Pre- ci net Data)	(78 Pre- ci net Data)	Author's Estimate	Author's Estimate
Tyonek	187	3.1	232	1.6	310	1.4	270	1.2	65.8	33.6	44.4	16.4
English Bay	78	1.3	58	.4	110	.5	<b>110</b>	<b>.5</b>	41.0	8.9.7	41.0	89.7
Port Graham	139	2.3	107	.8	230	1.0	<b>175</b>	<b>.8</b>	65.5	115.0	25.9	63.6
Ninilchik	169	2.8	134	.9	470	2.1	<b>275</b>	<b>1.2</b>	<b>178.1</b>	250.8	62.7	105.2
Seldovia	460	7.5	437	<b>3.1</b>	485	2.2	485	2.2	5.4	11.0	5	<b>11.0</b>
	1,033	17.0%	<b>968</b>	<b>6.8%</b>	1,605	7.2%	1,315	5.9%	55.4%	<b>65.8%</b>	27.3%	35.9%
Kenai-Cook Inlet Census Division	6,097	100.0%	14,250	100.0%	22,271	100.0%	22,271	100.0%	265.3%	56.3%	265.3%	56.3%

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<sup>1</sup> The 1978 census numbers for Tyonek, English Bay, Port Graham, and Ninilchik are by election precinct and therefore incompatible with 1960 and 1970 U.S. Census Bureau data based on smaller community boundaries.

<sup>2</sup> In order to bring the 1973 data in line for comparative purposes, the author estimated the 1978 population for these communities. The community population estimates reflect the author's attempt to correct for seasonality of employment (cannery towns) and differing community boundaries used by census takers.

Sources: 1960 and 1970 figures - U.S. Dept. of Commerce, J.I.S., Census data as cited in Rollins, 1978  
1978 figures - Kenai Peninsula Borough, 1979; U.S. Department of Commerce, 1979.

In order to compare 1978 data with previous census numbers, the author estimated the 1978 population for these three communities.

In estimating the 1978 community population, the chance for error is greater for Port Graham and Ninilchik than Tyonek. Port Graham's population soars in the summer due to a fish processing plant located there. Population statistics vary depending on when the survey is made and whether or not the statistician included the cannery workers. Ninilchik, too, is the site of a fish processing facility, but it also is an unincorporate highway community that extends nearly 30 miles along the Sterling Highway. It is therefore very difficult to determine where exactly the 1960 and 1970 census boundaries were.

As shown in Table 7, the total 1978 population of the five coastal communities makes up less than 6% by community or 7.2% by precinct of that of the Kenai-Cook Inlet Census Division as a whole. In 1960, the smaller communities accounted for 17% of the region's population, but since then the growth rate in other areas of the Borough has exceeded that of the five smaller study communities.

When one analyzes the rate of population increase on the Kenai Peninsula over the past two decades, it becomes apparent that while the smaller coastal communities in no way matched the phenomenal growth exhibited by the Kenai-Cook Inlet Census Division as a whole (especially in the 1960's), they are showing new signs of growth in the 1970's. This growth appears to be caused by fishing and fish processing and natural increases (all five communities), tourism and recreation (Ninilchik and

**Seldovia**), desired benefits related to ANCSA (Port Graham and English Bay), and the desire for a village or rural lifestyle (all communities). Based on precinct data for 1978, the rate of growth in the smaller communities during the 1970's is greater than that of the entire census division (Table 7 ). Using the more conservative community population estimates, the percent of growth for these communities during the first eight years of this decade is **nearly** 36%, while that of the region is 56%.

#### POPULATION COMPOSITION

According to the 1970 Census ethnic breakdown, 1,098 persons or 7.7% of the total **Kenai-Cook** Inlet Census Division population of 14,250 persons belong to a category which includes mainly Alaska Natives (Indians, Eskimos, and **Aleuts**). The five smaller coastal communities dealt with in this study represent 531 persons or **nearly** 50% of the total 1970 Alaska Native population in the entire Census Division. By 1978, the population had increased to 22,271 (an increase of 8,021 over 1970), while the number of Alaska Natives **only** grew 46 persons to 1,144 (a drop to 5.1% of **the** total population). Thus, the proportion of Alaska Natives in the Census Division is decreasing as the number of white residents grows more rapidly. This regional growth appears to be caused by an influx of new white residents associated with oil and gas development.

The regional trend of more whites does not necessarily represent population patterns in each community. For example, in English Bay and

Port Graham, the only communities for which comparative data is available, the total number of Native inhabitants increased from 149 in 1970 to 258 in 1977 (Table 8 ). This represents an increase of 109 Native residents in these two villages. The Census Bureau's figures show an increase of only 46 Natives in the entire Census Division between 1970 and 1978, while over twice that many are reported for just these two Native villages from 1970 to 1977. The discrepancy may be due to poor data or shifts in Native population from one community to another, but it appears that while the Kenai Peninsula on the whole is becoming proportionately more white, this trend does not apply to the predominantly Native villages.

The villages of Tyonek, English Bay, and Port Graham are predominantly Native communities. Tyonek, a traditional Tanaina Athapaskan Indian village had a 1970 population comprised of over 95% Natives. The traditional Native villages of Port Graham and English Bay were also both overwhelmingly Native in racial composition in 1970 (Table 8 ). Data for 1977 in these two villages indicate that both the number of Native residents and the proportion of Natives over whites have increased since 1970 (Table 8 ). The trend of primarily Natives living in these three villages has persisted since records were first kept (Petrov, 1884; Porter, 1893).

Both Ninilchik and Seldovia are multi-ethnic communities with rich histories that combine nineteenth century Native settlements, Russian fur traders, and twentieth century commercial fishing. According to 1970 census information, both communities are predominantly white

Table 8 : Composition of Population by Race and Sex  
of Smaller Coastal Communities

Tyonek, Alaska

RACE	1970			PERCENT OF TOTAL
	SEX		Total	
	Male	Female		
White	2	4	6	2.6
Negro	0	0	0	0
Indian	119	97	216	93
<b>Aleut</b>	2	3	5	2.2
Eskimo	0	0	0	0
Other	4	1	5	2.2
<b>TOTAL</b>	<b>127</b>	105	232	100

English Bay, Alaska

	1970			
	Male	Female	Total	
White	3	2	5	8.6
Negro	0	0	0	0
Indian	0	0	0	0
<b>Aleut</b>	33	20	53	91.4
<b>Eskimo</b>	0	0	0	0
Other	0	0	0	0
<b>TOTAL</b>	<b>36</b>	22	58	100.

1977 (North Pacific Rim Health Department)

Native	100	94.3
Non-Native	6	5.7
<b>TOTAL</b>	<b>106</b>	<b>100.</b>



Table 8: (Continued)

Port Graham, Alaska

RACE	1970			PERCENT OF TOTAL
	SEX		Total	
	Male	Female		
White	4	7	11	10.3
Negro	0	0	0	0
Indian	0	0	0	0
<b>Aleut</b>	51	45	<b>96</b>	<b>89.7</b>
Eskimo	0	0	0	0
Total	55	52	<b>107</b>	100.

1977 (North Pacific Rim Health Department)

Native		<b>158</b>	89.8
Non-Native		18	<b>10.2</b>
TOTAL		176	100.

Ninilchik, Alaska

RACE	1970			PERCENT OF TOTAL
	Male	Female	Total	
White	66	50	<b>116</b>	86.6
Negro	0	0	0	0
Indian	0	1	1	.7
Aleut	6	<b>9</b>	15	11.2
Eskimo	0	2	2	1.5
Other	0	0	0	0
TOTAL	<b>72</b>	62	134	100.

Table 8 : (continued)

<u>Seldovia, Alaska</u>						
<u>1970 Census</u>				<u>1976 (Green et al. 1977: Table 116)</u>		
RACE	SEX		Total	% OF TOTAL	RACE	% OF TOTAL
	Male	Female				
White	185	114	299	68.4	White	74.3
Negro	0	0	0	0	Negro	0
Indian	14	20	34	7.8	Indian	.7
Aleut	38	31	69	15.8	Aleut	11.8
Eskimo	4	1	5	1.1	Eskimo	.7
Other	23	7	30	6.9	Native, not specified	7.2
					Other (Asian)	5.3
TOTAL	264	173	437	100	TOTAL	100

1978 (Special Census)				
RACE	SEX		Total	% OF TOTAL
	Male	Female		
White	187	160	347	71.5
Negro	0	0	0	0
Other	66	72	138	28.5
TOTAL	253	232	485	100

Sources:  
 University of Alaska, Institute of Social, Economic and Government Research. September 1973. Age and Race by Sex Characteristics of Alaska's Village Population. Alaska Review of Business and Economic Conditions, Vol. X, No. 2, College, Alaska; North Pacific Rim Health Department, n.d.; Green et al. 1977: Table 116; Kenai Peninsula Borough, 1979.

(Table 8). But the ethnic composition of these two communities is not as straightforward as the 1970 data suggests. For example, Ninilchik, which began as a Russian Creole (mixture of Russian and Native) community in the nineteenth century, later attracted additional Indians, Aleuts, and Euro-Americans. Continual intermarriage resulted in a very ethnically mixed community, but one with a strong Russian tradition. In the twentieth century, people of mixed descent called themselves Russian rather than Native because the latter were often looked down upon by more recent white arrivals. Thus, the 1970 racial composition data might include many persons of mixed descent as white. Support for this possibility can be found in ANCSA enrollment figures which indicate that 62 Natives were residing in Ninilchik in 1976. This is nearly four times as many Natives as were reported in the 1970 census. (Again, the reader is cautioned about the potential discrepancy in boundaries used by the 1970 census and later surveys).

Table 8 shows that Seldovia's population in the 1970's ranged from 68% to 74% white. The three different surveys seem to be fairly compatible in their findings. But a recent study in Seldovia (Reed, 1978) states that the 1978 population of 530 is made up of 47% whites, 35% Natives, and 18% Asians. These figures indicate that there are more Natives and Asians and less whites in Seldovia than shown in Table 8. ANCSA enrollment figures, which show 144 Natives residing in Seldovia in 1976, tend to support Reed's data. Like Ninilchik, Seldovia's population has been greatly mixed through intermarriage over the years. Also, many Seldovia residents who in the past acted white to conform to community social pressures, turned out to be Native once ANCSA pro-

Table 9 : Population by Age and Sex of Smaller Coastal Communities

English Bay

Age Group	<u>1970 Census</u>				%	of	Total	Age Group	<u>1976 Census (OCS)</u>				%	of	Total
	Male	Female	Total	Total					Male	Female	Total	Total			
Under 5	3	5	8	13.8				5 & under	9	10	18	19.5			
5 - 9	3	2	5	8.6				6 - 10	6	8	14	15.2			
10 - 14	9	2	11	19.0				11 - 15	7	2	9	9.8			
15 - 19	4	2	6	10.3				16 - 18	4	4	8	8.7			
20 - 24	1	2	3	5.2				19 - 25	10	3	13	14.1			
25 - 34	10	3	13	22.4				26 - 35	7	6	13	14.1			
35 - 44	1	2	3	5.2				36 - 46	6	4	10	10.9			
45 - 54	2	2	4	6.9				47 - 55	2	1	3	3.3			
55 - 64	2	3	4	6.9				56 - 60	0	1	1	1.1			
<u>65 &amp; over</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1.7</u>				<u>Over 61</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>3.3</u>			
TOTAL	36	22	58	100				TOTAL	53	39	92	100			
Median Age	29.4														

Port Graham

Age Group	<u>1970 Census</u>				%	of	Total	Age Group	<u>1976 Census (OCS)</u>				%	of	Total
	Male	Female	Total	Total					Male	Female	Total	Total			
Under 5	6	8	14	13.1				5 & under	6	6	12	8.0			
5 - 9	8	6	14	13.1				6 - 10	11	8	19	12.7			
10 - 14	7	8	15	14.0				11 - 15	9	3	17	11.3			
15 - 19	3	5	8	7.5				16 - 18	7	7	14	9.3			
20 - 24	2	5	7	6.5				19 - 25	9	8	17	11.3			
25 - 34	9	2	11	10.3				26 - 35	16	8	24	16.0			
35 - 44	9	7	16	15.0				36 - 46	12	9	21	14.0			
45 - 54	3	5	8	7.5				47 - 55	3	5	8	5.3			
55 - 64	5	2	7	6.5				56 - 60	4	1	5	3.3			
<u>65 &amp; Over</u>	<u>3</u>	<u>4</u>	<u>7</u>	<u>6.5</u>				<u>Over 61</u>	<u>7</u>	<u>6</u>	<u>13</u>	<u>8.7</u>			
TOTAL	55	52	107	100				TOTAL	84	66	150	100			
Median Age	27.2		19.5												

Table 9 : (continued)

<u>Seldovia 1970 Census</u>					<u>Seldovia 1978 Special Census</u>				
<u>Age Group</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>% of Ttl</u>	<u>Age Group</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>% of Ttl</u>
Under 5	20	23	43	9.8	Under 5	19	16	35	7.2
5 - 9	26	16	42	9.6	5 - 9	29	20	49	10.1
10 - 14	24	17	41	9.4	10 - 14	24	31	55	11.3
15 - 19	22	17	39	8.9	15 - 19	26	20	46	9.5
20 - 24	24	8	32	7.3	20 - 24	15	20	35	7.2
25 - 34	31	34	65	14.9	25 - 34	49	51	100	20.6
35 - 44	42	21	53	14.4	35 - 44	37	31	68	14.0
45 - 54	31	16	47	10.8	45 - 54	23	13	36	7.4
55 - 64	25	11	37	8.5	55 - 64	19	15	34	7.0
<u>65 &amp; over</u>	<u>18</u>	<u>10</u>	<u>28</u>	<u>6.4</u>	<u>65 &amp; over</u>	<u>12</u>	<u>15</u>	<u>27</u>	<u>5.6</u>
TOTAL	264	273	437	100	TOTAL	253	232	485	100
Median Age	30.3	26.8			Median Age	27.3	26.4	21.0	

<u>Ninilchik 1970 Census</u>					<u>Tyonek 1970 Census</u>				
<u>Age Group</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>% of Ttl</u>	<u>Age Group</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>% of Ttl</u>
Under 5	6	8	14	10.4	Under 5	16	16	32	13.8
5 - 9	14	6	20	14.9	5 - 9	20	16	36	15.5
10 - 14	10	12	22	16.4	10 - 14	20	17	37	16.0
15 - 19	8	2	10	7.5	15 - 19	11	12	23	9.9
20 - 24	1	2	3	2.2	20 - 24	10	9	19	8.2
25 - 34	5	8	13	9.7	25 - 34	18	20	38	16.4
35 - 44	6	6	12	9.0	35 - 44	11	3	14	6.0
45 - 54	14	7	21	15.7	45 - 54	9	5	14	6.0
55 - 64	4	4	8	6.0	55 - 64	5	3	8	3.5
<u>65 &amp; over</u>	<u>4</u>	<u>7</u>	<u>11</u>	<u>8.2</u>	<u>65 &amp; over</u>	<u>7</u>	<u>4</u>	<u>11</u>	<u>4.7</u>
TOTAL	72	62	134	100	TOTAL	127	105	232	100
Median Age	19.1	26.9			Median Age	18.6	16.6		

Sources: Alaska Dept. of Community & Regional Affairs, Div. of Community Planning, 1974; U.S. Dept. of Interior, BLM, Alaska OCS Office, 1976; University of Alaska, ISEGR, 1973; Kenai Peninsula Borough, 1979.

vial ed potential benefits for them to reclaim their Native heritage (Reed, 1978; informal interview). In summary, although the villages of Tyonek, English Bay, and Port Graham are essentially Native, the racial composition of Ninilchik and Seldovia is mixed and for various reasons (both historic and recent) the racial proportions in these two multi-ethnic communities is difficult to determine.

According to 1970 census data, there were more males than females in all five of the smaller communities. In Port Graham, Ninilchik, and Tyonek, males comprised 51%, 54%, and 55% respectively of the population. In 1970, Seldovia and English Bay had a higher proportion of males with 60% of Seldovia's population male and 62% males in English Bay. By 1976, the ratio had changed little: 56% males and 44% female in Port Graham and 58% male and 42% female in English Bay. In 1978, the ratio in Seldovia dropped to 52% males and 48% females. This shift in the population composition by sex to more females in Seldovia is consistent with a similar shift in the Kenai-Cook Inlet Census Division (Alaska Consultants, 1979a, P. 9). The increase of females in Seldovia can possibly be attributed to more women working in the sea food processing facilities there. The ratio of more males to females in all five of the communities for all the 1970's data is typical of most Alaskan communities.

The 1970 age distribution of the five smaller communities differs somewhat from that of the Kenai-Cook Inlet Census Division and the State as a whole. The 1970 median age for males in Tyonek, Ninilchik, and English Bay was quite young (18.6, 19.1, and 19.4 years respectively), while the

median age for males in Port Graham and Seldovia was 27.2 and 30.3 years respectively (Table 9 ). Census Division figures for 1970, which were similar to Statewide numbers, showed a median age for males of 24.4 years and 22.2 years for females. Thus, the median age for males in Tyonek, Ninilchik, and English Bay was below the regional average. For females, Tyonek and Port Graham fall below the Census Division as a whole with a median age of 16.6 and 19.5 years respectively. The median age for females in Seldovia and Ninilchik was 26.8 years and 26.9 years, higher than the Census Division as a whole.

In 1970, the proportion of persons under 15 years in all of the smaller coastal communities except Seldovia was much higher than the Census Division as a whole. Port Graham, English Bay, Ninilchik, and Tyonek had the following proportion of persons under 15 years in 1970: 40.2%, 41.4%, 41.7%, and 45.3% respectively. Only Seldovia (28.8%) was below the Census Division average of 36.4%. Statewide, 32.3% of the population in 1970 was under 15 years of age. At the other extreme, all communities except English Bay have a much higher proportion of persons aged 65 years and over than either the Kenai-Cook Inlet Census Division or the State, which had an identical 2.2% of the population aged 65 and over. The percentage of persons aged 65 and over in the smaller communities included: Ninilchik (8.2%), Port Graham (6.5%), Seldovia (6.4%), Tyonek (4.7%), and English Bay (1.7%).

Based on the 1970 information, some generalizations can be made. By and large, the population of the smaller communities, except Seldovia, is younger than the rest of the region. The percentage of persons under 15

years in all communities, except Seldovia, is much higher than either the State of the Kenai-Cook Inlet Census Division. Also, the proportion of older people in these five communities is greater than Statewide or regional figures. These findings confirm visual impressions when one visits many Native villages in Alaska. There are usually an overwhelmingly number of young children and more elderly people than in more urban areas of Alaska.

If any age group appears small in the 1970 census, it is the proportion of persons between 20-24 (Table 9). This could be caused by many young people leaving the community in search of better employment opportunities. When the 25-34 age group is added, the proportion of persons in the 20-34 age group brings three of the communities in line with regional statistics. Only Port Graham and Ninilchik, with 16.8% and 11.9% in the 20-34 group, fall below the Census Division figure of 23.2% for this age group.

Comparative data for subsequent years (1976 and 1978) indicates a rise in the 20-34 age group in English Bay, Port Graham, and Seldovia. This follows a regional trend for the Kenai Peninsula as a whole. No later data is available for Ninilchik and Tyonek). Though the reasons for this increase in the Kenai-Cook Inlet region are attributed to an emigration of people related to increased job opportunities (Alaska Consultants, 1979a P. 11), in the villages, the rise in this age group is probably more accurately associated with a desire to participate in both ANCSA benefits and the village way of life.



## COMMUNITY TRENDS

As shown in Table 10, the population of each of the five communities has fluctuated sporadically over the years since 1880, but in nearly all cases, the current population is larger than at any time in the past. In recent decades, all five communities have grown in size, especially in the 1960's and 1970's (Table 10). Some of the changes in population in the various communities are discussed below.

Tyonek's 1880 population of 117 was comprised of 109 Tanaina Athapaskan Indians, 2 whites, and 6 Creoles (Petrov, 1884). In 1890, Porter (1893) reported all 115 residents were Indian. Tyonek's population remained stable until the first few decades of the twentieth century, and by 1920 it had dropped substantially to a low of 58 persons (Table 10). This reduction in population can evidently be attributed to widespread influenza epidemics that eradicated large segments of Alaska's Native population during the first two decades of the 1900's (Tranter, 1972, P. 10). Many independent Euro-American traders, miners, and prospectors entered Cook Inlet during the beginning of the twentieth century and increased the Natives' exposure to unfamiliar diseases. Also, the fur prices dropped sharply in 1897 creating an additional hardship on the village of Tyonek. Since 1930, Tyonek's population has grown steadily and is presently at an all time high of 270 persons.

The populations of Port Graham and English Bay are also larger now than at any time in the past. Located only four miles from Port Graham, English Bay is the older of the two communities and is included in both the 1880 and 1890 census. No further population data is available for English

Table 10 Population of Smaller Coastal Communities

	<u>Tyonek</u>	<u>English Bay</u>	<u>Port Graham</u>	<u>Ninilchik</u>	<u>Seldovia</u>
1880	117	<b>88</b>	n.d.	<b>53</b>	74
1890	115	<b>107</b>	n.d.	<b>81</b>	99
1900	107	n.d.	n.d.	n.d.	149
1910	n.d.	n.d.	n.d.	n.d.	173
1920	<b>58</b>	n.d.	47	<b>87</b>	258
1930	<b>78</b>	107	n.d.	<b>124</b>	379
1940	<b>136</b>	48	93	132	410
1950	132	75	<b>92</b>	<b>97</b>	437
1960	187	<b>78</b>	<b>139</b>	<b>169</b>	460
1970	232	<b>58</b>	107	134	437
1976	n.d.	<b>92</b> <sup>1</sup>	1501	n.d.	6322
1977	n.d.	<b>106</b> <sup>3</sup>	1763	n.d.	n.d.
1978 (Precinct) <sup>4</sup>	310	<b>110</b>	230	<b>470</b>	584
1978 (Community)	2705	<b>110</b> <sup>5</sup>	n.d.	n.d.	4856

Sources: 1880 - 1970 figures - U.S. Department of Commerce, U.S. Census data as cited in Rollins, 1978  
 1976 -<sup>1</sup>U.S. Dept. of Interior, BLM, Alaska OCS Office, 1976;<sup>2</sup>Green et al., 1977, Table 130  
<sup>3</sup>1977 - North Pacific Rim Health Department, n.d.  
<sup>4</sup>1978 (Precinct) - Kenai Peninsula Borough, 1979; U.S. Department of Commerce, 1979  
 1978 (Community) -<sup>5</sup>Author's Estimate; <sup>6</sup>Kenai Peninsula Borough, 1979

Note: n.d. means no data.

Bay until 1930 when **its** population is reported to be 107, identical with that of 1890. Early data for Port Graham is also sketchy, and it is **possible** that due to their close proximity and early history, often the two villages were counted together. It is not until 1940 that both villages are finally reported individually. By that time, Port Graham's population is much larger than that of English Bay. This is not surprising, as by then, Port Graham had been the site of a fish cannery for nearly thirty years.

English Bay's 1940 population of 48 persons grew to 75 by 1950, and then only rose to 78 in 1960. The apparent drop to 58 persons in 1970 is not consistent with other on-site surveys which placed the 1970 village population at 78 and the **1972** figure at 77 (Svendsen, 1972, P. 24). If the latter figures are used, then the population of English Bay barely moved from 1950 to 1970. Since 1970, the village population has increased significantly to its current level of 110. This increase is apparently due to many young people choosing to remain in or return to English Bay rather than live in more urban areas. As one young villager commented,

We don't have a problem with young **leaving...they** are coming instead. If one is born here, he has a good deal. He can get a free lot, and one can live in a village for a long time with **little** money. You can't do that in Anchorage.

Anticipated benefits related to ANCSA have also possibly added to English Bay's population increase in the 1970's. Many births have occurred in the village in recent years, and in 1976, nearly **20%** of English Bay's population was under 5 years of age (Table 9).

Port Graham's population grew to 139 in 1960, but then dropped to 107

in 1970. Because Port Graham's cannery burned in 1960, the village's population probably declined to 70 or 80 during the 1960's (informal interview). Whitney-Fidalgo Seafoods, Inc. rebuilt the cannery in 1968. Therefore, the 1970 population would be expected to be less as the village had not yet totally responded to the new cannery. In time, many families moved back to this cannery town, and in 1977 the village's population was reported to be 176 (Table 10). Thus, Port Graham had grown by 65% in the first seven years of the 1970's. In addition to the employment and fishing opportunities offered by the cannery increased fish runs and hoped for ANCSA benefits also contributed to Port Graham's growth in the 1970's. The population of Port Graham fluctuates greatly during the year as the cannery brings in workers in the summer months.

Ninilchik and Seldovia were both reported in the 1880 census. Seldovia grew primarily as a fishing town, while Ninilchik, apparently first established as an agriculture community, later became more fishing oriented. Ninilchik's population increased steadily over the years, but dropped noticeably in 1950. This seems inconsistent with other information, as many homesteaders arrived in the 1940's. Perhaps World War II had a negative effect on the community. The increase in population to a high of 169 by 1960 is accounted for by the construction of the Sterling Highway connecting Ninilchik with Anchorage in the early 1950's. Additional homesteaders followed on the new road. The reduction of residents to 137 in 1970 might possibly be explained by the different boundaries used by census takers. Also, by this time, many people had moved from the original Ninilchik townsite to the surrounding hillsides. The 1978 population data reflects the larger Ninilchik precinct which stretches along the Sterling

Highway nearly 30 miles from Happy Valley to Clam Gulch. The 500 or so people in the Ninilchik precinct are scattered throughout the area, and more people are moving in all of the time (informal interview). Many work on the North Slope or on the oil platforms in Cook Inlet. In the summer, the population of Ninilchik nearly doubles because of the influx of cannery workers and fishermen.

\* Seldovia's population has long been tied to the ups and downs of the fishing industry. Growing rapidly in the first three decades of the twentieth century, the town's population slowed down by 1940 and only increased minimally between 1940 and 1970. In fact, between 1960 and 1970, Seldovia's population decreased due to a series of events precipitated by the 1964 earthquake. The exodus of 3 or 4 canneries after the earthquake had a negative impact on the community, causing many fishermen and their families to leave. In the 1970's, Seldovia's population first rose as a result of increased logging activity in the area, and then dropped again when this industry declined. The 1976 population of 632 (Table 10) is a summer figure (higher than winter due to fishing and tourism), and also apparently reflects the height of the logging operation. The population dropped again when the mill at Jakalof Bay closed in late 1977. Many community residents feel that the 1978 figure of 485 persons is low, however.

## Sociocultural Impact Categories

### ECONOMIC ADAPTATIONS

#### Current Employment Trends and Concerns

The **sociocultural** systems of the five smaller coastal communities are supported by a limited economic base. Though the economic opportunities vary somewhat among communities, commercial fishing and sea food processing are the main industries in all five communities. Except in **Seldovia**, where crab and shellfish are processed, the fishing economies of these communities depend mainly upon **salmon**. As a result, employment opportunities are highly seasonal, and a lack of jobs during the winter characterizes most of these communities. **Seldovia**, **Ninilchik**, and Port Graham have fish and shellfish processing plants.

Other sectors of the economy important in the smaller coastal fishing communities include government, tourism and recreation, and logging. In the Native villages, a growing dependence on government expenditures provides some economic stability. Tourism and recreation is important to the **Sterling Highway** community of **Ninilchik**, could potentially have a significant impact on **Seldovia**, and is presently not welcomed in English Bay, Port Graham, or **Tyonek**. Once these three villages have decided both how they want to develop and how they will control and manage such development, tourism may be encouraged in the future as a means to improve the local village economies. Past and ongoing timber operations affect all five communities, especially in relation to lands claimed under **ANCSA**. Except for **Ninilchik**, where some locals work on the platforms or at Prudhoe Bay, current oil and gas industry activities have a minimal effect on the economies of the smaller coastal communities.

The typical economy in one of the smaller coastal communities includes a heavy emphasis on commercial fishing and sea food processing, seasonal employment on local construction projects, part-time and seasonal work related to local timber operations, and a "few employment positions such as storekeeper, postmaster, health aid, bilingual teacher, teacher's aid, school janitor, and village council clerk. Except for a few positions, government expenditures provide the money for most of these jobs. Typical government monies spent in the local economies include: Comprehensive Employment Training Act of 1973 (C.E.T.A.) funds for temporary training and employment; Johnson O'Malley funds for bilingual teachers and aids; Indian Self-Determination and Educational Assistance Act funds for local government improvement and clerical work; BIA funds for employment assistance, housing improvement, and other social services; Public Health Service funds, either administered directly by PHS or through the non-profit corporations, for health aids, health services, and public facilities; public assistance monies; and E.D.A. grants. These program expenditures comprise a significant amount of the economic base in the smaller communities. "In 1979, the per capita value of federal spending on programs for Native benefit was approximately \$4,000" (Gorsuch, 1979, P. 148). The better paying jobs, such as school teachers, are usually held by non-Native transients, who work in the community for a while and then transfer.

In the predominantly Native villages, both unemployment and underemployment are problems of great concern to the residents. The limited economic base and lack of "ocal economic opportunity result in few permanent, year round jobs in the community. The villagers, now firmly entrenched in the cash economy, have few of the skills and education necessary to compete in the white job market. Cultural and language differences also

add to the problem. Thus, Native unemployment is different than seasonal unemployment among skilled whites or white unemployed persons who choose to live on the land without much cash. In addition, jobs often conflict with the fishing season, and usually the Native, to whom fishing is culturally important, chooses to fish rather than remain employed.

Full time, permanent employment also often represents a conflict with the casual, day to day subsistence lifestyle. In an area of relatively abundant resources such as Cook Inlet, the Natives traditionally only harvested what they felt they could realistically use. No effort was made to horde an overabundance of food. As the seasons changed, and one food source disappeared, another would take its place. Thus, the subsistence lifestyle was flexible. Even the introduction of cash during the American fur trade period did not drastically alter this approach to life. Though cash upset the economy, and store bought foods entered the system, the work performed to earn the cash (trapping and fishing) was still something to which the Native was familiar. But when it became necessary to have a full time job to earn the cash, a conflict with a more casual lifestyle developed. Working every day for money often conflicts with a way of life where hunting and trapping continued until an adequate food supply was acquired and maybe did not resume again until the food supply had dwindled. This conflict, combined with the lack of education and skills required to get jobs, and the lack of economic opportunity in the villages, often results in a high unemployment rate and a dependence on welfare and government programs. Often, this condition may lead to depression and boredom, which in turn may result in alcohol abuse and other social health problems.



Employment opportunities in Tyonek are derived mainly from fishing, government programs, and the nearby timber chip mill. For a number of reasons (discussed below) relatively few Tyonek residents work in the chip mill. Consequently, fishing and government sponsored programs form the basis of Tyonek's economy. As commercial fishing is seasonal and most of the government related employment is temporary, underemployment and unemployment are major problems in Tyonek. Thus, Tyonek's good fortune in the 1960's did not enable it to escape employment problems. Its economy remains similar to that of other villages in Alaska, in that it is essentially limited to fishing, is seasonal, and only provides a small income.

Thirty-three Tyonek residents hold limited entry fishing permits. According to the Kenai Peninsula Borough (1977), 30 of these permits are for set gill nets and the remaining 3 are for drift gill nets. As there are approximately 60 to 70 families in Tyonek, it is apparent that not all heads of family have limited entry permits.

In Cook Inlet, the commercial salmon season lasts only six weeks (July 1 to August 15), and the open periods vary, but they are usually limited to two days a week. Therefore, the fishermen from Tyonek and other villages usually only leave home for a day or so at a time during the fishing season. This manner of earning cash is compatible with values held by many villagers as they do not like being away from their families and village for long periods of time. More permanent employment may require them to be gone for weeks or even months, a schedule that many of them do not like. Consequently, employers often find themselves with a good employee for a short period, who up and disappears one day. The employer

does not understand, but the employee had earned a few dollars, became homesick, and returned home.

Over the years, the upper Cook Inlet has been characterized by a declining catch, more pressure on the salmon, more regulations, and increasing labor and capital demands. Only the higher price for fish has allowed the value to fishermen to increase. Though the catch is up in recent years, it is primarily the purse seiners and drift gill netters who make the big catches. The catches around Tyonek, though adequate for a hard working fisherman, have not been as large as those in other parts of the inlet. Conflict with sports fishermen, who want to limit commercial periods to allow more escapement, is a continuing problem for the commercial fisherman in Cook Inlet. For Tyonek, an additional problem is its lack of a local buyer. Tyonek has no cannery or freezing capability, and often buyers are hard to find.

An approximate survey of employment in Tyonek in the spring of 1979 revealed that government programs were a very important source of income for the villagers. Of an estimated 54 people who were employed full or part time, 38 persons or 70% of those employed worked in government related programs, 8 worked for the Tyonek Timber Company, 4 worked for the oil company drilling on village corporation land, and 4 worked in Anchorage on modular houses being constructed for Tyonek. C.E.T.A. provided jobs for the majority of those who worked for government programs. Other government monies were provided by the Indian Self-Determination and Educational Assistance Act, the 91A, the Public Health Service, Johnson O'Malley, the Kenai-Peninsula Borough, and the Village of Tyonek. The

54 employed people in Tyonek does not include the 10 fulltime teachers who work for the Kenai Peninsula Borough. These teachers, outsiders who move in to teach temporarily, make by far the largest salaries in the community.

In the spring of 1979, C.E.T.A. positions represented 15 jobs or 28% of those employed in Tyonek. The C.E.T.A. money provides training/employment positions for 18 months with an approximate pay of \$.800 per month for fulltime workers. Without the C.E.T.A. money, Tyonek's employment picture would be even gloomier. As many of the C.E.T.A. trainees are fishermen, they must resign from their positions when they go fishing. Then, they have to wait for 15 weeks to qualify for C.E.T.A. again. (A C.E.T.A. requirement is 15 weeks of unemployment). With a good cause a C.E.T.A. trainee could take time off and then return to work again without waiting the 15 weeks, but fishing is not considered an adequate cause. Villagers consider this conflict between fishing and the government program as depriving them of an opportunity to make a decent wage.

When Tyonek Timber Company, a subsidiary of Kodiak Lumber Mills, constructed a chip mill near the village, many residents hoped the plant would provide permanent jobs for villagers after production began in 1975. The chip mill is located on former reservation land once owned by the village but now owned by the village corporation (Tyonek Native Corporation). From time to time, Tyonek Timber Company employs villagers, but the majority of the workers are transients housed near the facility. Apparently, Tyonek Timber Company did not intend to hire a high percentage of non-Native transients, but many problems developed between the mill and the villagers.

From the industry point of view, the main difficulty was keeping employees who would report to work each day. Flexible work hours were arranged, but apparently absenteeism and drinking problems plagued production, and with a \$30 million investment which was losing money each year, Tyonek Timber Company needed a crew of dependable loggers and mill operators. The villagers, who required specialized training for the jobs, often became disillusioned with the training program. Also, they felt that work schedules were constraining and interfered with more traditional and acceptable activities such as hunting and fishing. The growing presence of outsiders near their village was viewed with suspicion and concern. Some villagers complained that they were harassed by non-Natives at the plant. Others felt the pay was too low when compared to union jobs. A shortage of gas in the village made it difficult to get to and from the timber mill. Possibly one villager summed up the problem when he said, "Natives aren't loggers." The net result is that in a village where unemployment is of primary concern, industry builds a lumber mill within a few miles, and for various reasons, unemployment remains a problem.

In Tyonek, relatively few jobs have resulted from ANCSA. The village corporation, Tyonek Native Corporation (TNC), has its offices in Anchorage and therefore provides little direct employment to the village. Tyonek Native Corporation leased the land to Tyonek Timber Company for its facility. Problems associated with local Native hire at the chip mill were discussed above. A second TNC lease of land to Simasco Production Company resulted in employment for four villagers in the spring of 1979. In addition, commercial quantities of natural gas were discovered. Implications to the village, TNC, and Cook Inlet Region, Inc. (CIRI), who own the subsurface estate, will be discussed later.

With a few minor exceptions, the economies of Port Graham and English Bay are basically similar to that of Tyonek. Employment opportunities are scarce, seasonal, and mainly in the area of fishing and government funded jobs. The small economic base provided by government monies discussed earlier applies to these two villages. For a list of employment positions in English Bay and Port Graham in 1976, see U.S. Department of Interior, BLM, Alaska OCS Office (1976, P 326-7). Nearly all of the positions listed are funded by government funds. Commercial fishing and the Port Graham cannery provide the bulk of the year's cash for the majority of Port Graham and English Bay residents. The Port Graham cannery, the only viable economic entity in the two villages, has had some good years recently, but it only operates for two months of the year. Thus, the majority of the people are unemployed in the winter. Port Graham has two stores (one private and one at the cannery), while English Bay presently has none.

The cannery at Port Graham only processes salmon by canning them. When the cannery is in full operation, it employs approximately 100 people. Seventy five of these are locals from Port Graham and English Bay, while the remaining 25 are from Seattle. The pay is \$4.50 to \$5.00 per hour for roughly 110 days work, which yields approximately \$4,500 to \$5,000 per season. Most of the local employees are from Port Graham, with a lesser number from English Bay. In the past, the cannery owned the fishing vessels and leased them to the fishermen. In 1971, the cannery owned 34 vessels, while 7 were locally owned and operated (Harlow, 1972, P.9). In recent years, the cannery is selling their boats and getting out of the boat business. Most of the boats are old and in need of repair, and many

villagers are unhappy about the situation. Some feel that they are faced with a predicament where either they buy an old and rotten boat from the cannery and fish for them for five years to pay for it, or they don't fish because they cannot afford a boat elsewhere. In the spring of 1979, relations between the cannery and villagers appeared further strained because of a dispute over the price paid for last year's fish.

According to cannery officials, there are 27 fishing boats out of Port Graham. A Kenai Peninsula Borough (1977) study describes the 28 limited entry permits held by Port Graham fishermen as follows (Table 11): 5 ea halibut; 1 ea herring; and 22 salmon (6 ea drift gill net, 12 ea seine, 4 ea set gill net). In the same study, the 7 limited entry permits for English Bay were all for salmon (5 ea set gill net, 1 ea seine, 1 ea drift gill net). Thus, the fishermen from English Bay are primarily set netters, while those from Port Graham are mostly drift gill netters and seiners. The lack of an adequate boat harbor at English Bay retards seiners or drifters from operating out of English Bay. Residents of Port Graham have access to the Whitney Fidalgo dock and boat storage facilities

Timber sales conducted on village corporation lands had local hire clauses (Chugach Natives, Inc. Newsletter, Vol. 4, No. 1, P.7), but due to poor market conditions and the high costs associated with removing the timber, the logging industry in Lower Cook Inlet has not met local expectations. A saw mill does operate at Jakolof Bay, but apparently few of the full time employees are from either Port Graham or English Bay. The saw mill does use 6 to 10 villagers once a month from March to November to load logging ships. For this work, the villagers are guaranteed 68 hours to load each

	Fishermen	set net	Salmon sei ne	drift gill	Crab	Halibut	Shrimp	Herring	Clams	Bottomfish	Total # of Permits
English Bay	10	5	1	1							7
Port Graham	19	4	12	6		5		1			28
Tyonek	33	30		3							33
Seldovia	62	15	9	10	54	10	2	4		1	105
Ninilchik	63	50	2	12	3	7	3	7	3	1	88

2

Source: Kenai Peninsula Borough. 1977. A Profile of the Commercial Fishing Industry. Kenai Peninsula Borough. Draft. Prepared by Overall Economic Development Program Staff. Kenai Peninsula Borough, Soldotna, Alaska.

TABLE 11

Number and Type of Limited Entry Permits

Held By Fishermen Living in the Smaller Coastal Fishing Communities

in 1975

ship (one ship per month). The rate of pay is approximately \$10.50 per hour, and if a villager loads all six ships, he can earn in excess of \$4,000. This pay is similar to the seasonal pay associated with a cannery worker at the Port Graham cannery, but as with so many of the few job opportunities available to villagers, this part time, temporary employment conflicts with fishing. Though it only takes four or five days each month to load the ship, the timing may often clash with the commercial periods for fishing. Evidently, the majority of those who load the logging ships come from English Bay. Possibly, this is because of the higher number of drift netters and seiners at Port Graham, who have more money invested in fishing boats and gear and therefore make sure to fish. Also, there are four times as many limited entry permits held in Port Graham than in English Bay. Though the population of Port Graham is larger, it still appears that there are more permits holders per capita in Port Graham than English Bay. If so, this would explain why most of those who load logging ships at Jakolof Bay are from English Bay.

The area around Port Graham and English Bay has the natural beauty, historic background, and nearby fishing to promote and probably develop tourism and recreation. On the other hand, a lack of hotels, stores, restaurants, and most important, desire inhibit the growth of tourism in the area. As is the case with Tyonek, the residents of English Bay and to a lesser extent Port Graham expressly do not want tourists and sports fishermen in their area. The villagers enjoy and value the peace and solitude of traditional village life without the continuous disruption from outside airplanes, boats, and campers.



As in Port Graham, commercial fishing and sea food processing dominate the economies of Seldovia and Ninilchik. In Seldovia, primarily shellfish and crab are processed, while the Seward Fisheries facility in Ninilchik mainly freezes salmon. This year, the Ninilchik plant also processed herring caught in Prince William Sound. Seldovia's economy also receives a minor stimulus from Southcentral Timber Company's logging operation at Jakof Bay, but logging has declined over the past few years. Both communities receive government expenditures for programs discussed earlier, have retail stores, and are affected by tourism. Ninilchik, located on the Sterling Highway, receives the greatest impact from tourism of all of the smaller coastal communities, but the economic consequences of recreationists and tourists are not necessarily large because most of the people come from Anchorage in campers, carry all of their supplies, and only need to buy gas. As Seldovia can only be reached by boat or air, it has not yet been inundated by recreationists, though an increasing number of people are beginning to learn about this picturesque community. Also, a fair number of Ninilchik residents work on the Cook Inlet platforms and at Prudhoe Bay for the oil industry, and many consider the one week on followed by one week off schedule better than having to move away from Ninilchik to seek other employment.

The periods of boom and bust of the fishing industry in Seldovia were discussed in a previous section, and by the mid 1960's only one processing plant remained in town. A short time later, logging began in the area and helped pick up some of the slack caused by the loss of the canneries. At first logging had a large impact on the community, with some of the loggers bringing in their families which resulted in a housing shortage. But

the declining market, high cost of logging, and questionable quality of some of the timber caused reduced operations. Fishing out of Seldovia is diversified (salmon, herring, crab, shrimp, and halibut), but the main processing involves crab and shellfish. Though salmon canneries used to be the main plants in the past, today no salmon are delivered or processed in Seldovia. The salmon fishermen deliver their fish either to Port Graham or Homer.

The major employer in Seldovia is Pacific Pearl processing plant. This facility employs approximately 50 to 60 workers who primarily freeze crab for an hourly wage of between \$4.17 and \$5.20. Employees who work the entire season (approximately 6 months) can earn from \$8,000 to \$10,000. Thus, this plant puts approximately a half a million dollars annually into the local economy in wages. In the past, Natives comprised an overwhelming percentage of the workers in the crab plant, but today the reverse is true, with nearly 80% of the work force white (informal interview).

The Seldovia Native Association (SNA) recently built a second sea food processing facility in Seldovia and leased it to a Japanese firm. S & A Packers, as it is called, primarily freezes shrimp for export to Japan. Besides this plant., SNA is involved in timber leases and offers recreational cabins in Seldovia Bay. Thus, the local Native organization in Seldovia is becoming an economic force in the community.

The Kenai Peninsula Borough (1977) listed 105 limited entry permits owned by Seldovia residents (Table 11). Fifty-four of these permits were for crab 34 for salmon (15 set gill net, 10 drift gill net, 9 seine), while the

remaining ones were for halibut, herring, shrimp, and bottomfish. These 105 permits were held by only 62 fishermen. The number of permits issued is not necessarily equal to the number of fishermen since one fisherman may use several vessels, hold several permits, or several fishermen may share the same boat. In any event, crab and salmon fishing dominate the Seldovia fleet. In the spring of 1979, 6 crab boats kept the Pacific Pearl plant full.

Though the fishing industry has experienced some good years recently, Seldovia is not really a prosperous community. Other than government expenditures, the only significant employment is offered by the crab plant. Though the fishing fleet is fairly good sized for a small town, and the fishermen earn a decent living, most of the residents live in fairly modest homes, and the tax base in the community is low. In 1974, the whole town was appraised at around \$3 million dollars.

In Ninilchik, 63 fishermen own 88 limited entry permits (Table n). Salmon permits account for 64 of these, and the vast majority of Ninilchik fishermen are set net fishermen. Apparently, the set netters are primarily local residents, while those who gill net are mainly people from outside the community or the state (informal interview). Thus, the Ninilchik salmon fishery is comprised principally of local, set net fishermen. As one resident said, "The local setnetters are the backbone of Ninilchik. We really depend on the silver run because they come close to shore. When we have a poor run, the whole community suffers." Many of the fishermen deliver their salmon to the Seward Fisheries processing plant located at Ninilchik.

During a normal season in recent years, Seward Fisheries employs approximately 130 people in their plant at Ninilchik. The pay ranges from \$5 to \$9 per hour, and the typical employee earns \$5,000 to \$6,000 per season. Many Ninilchik residents have worked in the cannery for 25 or 30 years, and the money they earn during the fishing" season represents the bulk of their income for the year. It is easy to understand why one resident said, "The livelihood of Ninilchik village depends on that plant. Without it and without the harbor, Ninilchik is lost." It is also easy to understand the dismay of the residents when the cannery burned in late May of 1979. One lifetime Ninilchik resident said, "Ninety percent of this town revolves around that cannery. Its going to be a very long, hard winter without it. A long, hard winter,"

Apparently, relations between cannery personnel and Ninilchik fishermen and cannery workers have been good in past years, and after the fire, Seward Fisheries continued to try to help the locals. In past years, the cannery would extend credit to fishermen against next years catch, store gear, and help the fishermen repair their boats. Though Seward Fisheries lost its plant in Ninilchik, with a capacity to process 100,000 pounds of salmon a day, officials planned to continue to buy fish at Ninilchik harbor during the 1979 season and then truck the salmon to their Homer facility. They also planned to daily bus 12 to 15 of their best, long time employees to Homer to work in the plant there. The cannery hoped to employ 25 people at Ninilchik. In spite of these attempts by the cannery to minimize the impacts caused by the loss of the processing plant, nearly 100 jobs would be lost during the 1979 season.

In addition to the cannery, other businesses are important to the Ninilchik economy. Along the highway are a few family owned and operated stores, a cafe, and a lodge. Two smaller fish processing plants are located on the highway, one at Clam Gulch, and the other much closer to Ninilchik at Deep Creek. The Deep Creek facility, Sea-Nik of Ninilchik, planned to employ approximately 30 people during the 1979 season. The oil industry has not overlooked Ninilchik. According to many local residents, it seemed that one of the leading oil companies took most of their Native hire quota from this community. An oil technology class at the college in Kenai is well publicized, and over the years Ninilchik has apparently developed a small, though dependable, work force of trained oil workers. Some locals began as roughnecks in the early platform days in Cook Inlet and worked up into more permanent positions. But fishing remains the basis of the economy, and most people work at their job, whether with the oil industry, in a small family business or in government funded areas, and also fish. It seemed that most people interviewed both fished and also worked at some other job. Fishing appeared interwoven into the schedule of other activities. The cycle of high unemployment in the winter applies to this community also. The Ninilchik Native Association has the potential to become an economic force in the community. It has subdivided land along the highway and is currently negotiating timber sales on other land.

### Subsistence

Although livelihood patterns of the Cook Inlet region are now almost completely dominated by the effect of the area's cash economy, subsistence

dependence on natural food resources in the predominantly Native villages of Tyonek, English Bay, and Port Graham remains high. Usually a low cash income is associated with a high subsistence dependence, and if this is true, the Native villages of Cook Inlet qualify, as from all indications, the per capita income is low. But, the economic importance of subsistence activities does not wholly account for its persistence. If subsistence only involved economic considerations, then when a household earned a sufficient yearly income to purchase most or all of its food from a store, the subsistence harvest would decline. But, because of the high cost involved in hunting, including boats, motors, snow machines, rifles, ammunition, fuel, nets, and other gear, recent research (Wolfe, 1977) indicates that the higher the cash income, the greater amount of traditional food a family harvests. Thus, it is not only those who cannot afford to buy food that continue to participate in subsistence activities. Apparently, even those who can afford to eat store bought food prefer the traditional food. Therefore, cultural preferences and traditional social patterns as well as economics must be considered when discussing subsistence in Native communities

In the predominantly Native villages and for the Native residents of the other communities, the economy is best described as a mixed cash/subsistence economy (see Van Stone, 1960). The Native peoples of the Kenai Peninsula have a long tradition of coastal subsistence dependence. Even after the arrival of the whites to the area, the rich maritime natural resources played an important role in sustaining the local peoples. Though the newcomers introduced cash around the turn of the 20th century, it was used mainly to purchase luxury items, not food. The Natives might buy coffee, sugar, tea, or flour from the traders, but the bulk of their diet came

from locally available food resources. As it became more and more expensive to hunt and fish, cash became a necessary element in the subsistence complex. As one resident from Port Graham said, "We now have a cash-flow type subsistence. It takes 50% cash."

In general, the harvest of local, natural resources for subsistence purposes has nutritional, cultural, and economic importance to the Native residents of the **Kenai** Peninsula. By and large, the local food is very high in protein as opposed to a high carbohydrate content of imported food. Residents of Tyonek, Port Graham, and English Bay, as well as Native members of the other communities consider the continuation of subsistence activities as vital to the perpetuation of their cultural identity. The foundation of the **sociocultural** systems in these villages is still deeply rooted in the utilization of the surrounding natural resources. Typically, villagers gathered food resources and distributed them throughout the community. Thus, social relations were closely tied to subsistence activities. Since the Native residents of Tyonek, English Bay, and Port Graham continue to depend on subsistence resources for a significant portion of their food, social relations and subsistence remain related. Most Natives prefer the traditional food over the processed food available in the store. Though there are two stores in Port Graham, and one in Tyonek, English Bay presently does not have one. Food (especially meat) purchased in the store is too expensive for the villagers to rely on for very long. In addition, the lack of local employment, low incomes, and high cost of living in the villages increases the **economic** importance of subsistence foods. Thus, subsistence activities are cultural and economic in nature and not recreational.

Kachemak Bay is one of **the** most productive bodies of water in the world for marine life. Port Graham, English Bay, and Seldovia are located near the entrance to Kachemak Bay, and residents of these three communities have access to the rich marine life in the area. Residents of Ninilchik and Tyonek, located further up Cook Inlet, also have access to marine and land resources. Traditionally, Tyonek depended on the sea for most of its subsistence, but unlike Kachemak Bay, the winter climate is vigorous, often causing severe hardships (Osgood, 1937, P. 18).

A complete list of the species utilized for subsistence purposes would be extensive, and though most species are found near the communities, often villagers travel outside the immediate vicinity for subsistence foods. For a partial list of species utilized by residents of Port Graham and English Bay see Table 12. Whether smoked, dried, salted, or eaten fresh, salmon is one of the most important subsistence foods in all communities. Many species of birds and shellfish are important during the winter and spring when other food sources are not available. The lack of employment in the winter increases the importance of subsistence activities.

Quantitative data related to subsistence is very difficult to find, but residents of Port Graham reported that approximately 75% of the meat and fish used is obtained locally (informal interview). On a very subjective scale, English Bay appeared to utilize an even higher percentage of local resources for subsistence purposes. According to villagers, the subsistence dependence on natural resources for food was also high in Tyonek. In Seldovia, 56% of the residents surveyed reported that they acquired less than 25% of their food from subsistence activities, while 25% reported



TABLE 12

Partial List of Species Used for Food  
by Residents of Port Graham and English Bay

Fish

King salmon	Herring	Tomcod
Silver salmon	Halibut	Cod
Red salmon	Candlefish	Fish eggs
Chum salmon	Sculpin	Flounder
Pink salmon	Trout	

Marine Invertebrates

octopus	Razor clams	Chiton
Snails	Butter clams	Sea urchins
Cockles	King crab	Sea cucumbers
Mussels	Dungeness crab	

\*

Birds

Ducks	Ptarmigan
Spruce hen	Bird eggs.

Mammals

Harbor seal	Black bear
Sea lion	Porcupine
Moose	Snowshoe hare
Goat	
Dan sheep	

Vegetation

Wild onion	Currants	Seaweed
Wild rice	Horsetails	Kelp
Salmon berry	Wild celery	Ferns (Medicinal)
Cranberry	Fireweeds	Mountain ash "
Blueberry	Wild rhubarb	Alder "

Source: North Pacific Rim, b,c.

that they got over 50% of their food from hunting, fishing, and gardening (Green et al., 1977, Table 98). Thus, even in the city of Seldovia, subsistence **plays** a significant role in the **lives** of residents.

A subsistence issue which could be affected by population growth in Anchorage and the **Kenai** Peninsula involves the competition for local resources between village residents and outside hunters and fishermen. The availability of resources to villagers can be diminished by increasing competition for those resources. For example, in English Bay, residents view sport fishermen as competing with the villagers for resources. In Tyonek, a conflict exists between sport fishermen and villagers over the king salmon fishery. King salmon, a traditional subsistence resource for Tyoneks, currently has an open season for sport fishing, but it is closed to subsistence fishing. Residents of Tyonek consider this unfair, as they rely on the resource for food, not recreation.

In both of the above instances, governmental regulations and restrictions affect local access to subsistence resources. Many villagers view increasing governmental regulations as eroding subsistence activities. In addition, many Tyoneks expressed concern for their subsistence resources because they noticed a decrease in game after the construction of the nearby timber mill. More roads in the area forces villagers to compete for game with additional sport hunters.

Commercial fishing also competes with subsistence fishing in some areas, as fishermen strive to put in their nets in the best spots. Also, in Tyonek, not all residents have limited entry set net permits, and when

commercial fishermen use most of the good spots, there is not adequate room for subsistence fishermen (informal interview). When a commercial fisherman is making money on his location, there is little incentive for him to remove his net for a subsistence fisherman.

### Community Attitudes Toward Economic Growth

The attitudes toward economic growth vary among the various communities and among different residents in each community, but the type of economic growth is important to all. For example, growth in fisheries is favored by most everyone in all of the communities. Growth in commercial fishing and fish processing received almost unanimous approval (98.1%) in Seldovia (Green et al., 1977, P. 52). On the other hand, development of the petrochemical and oil processing industry in or near any one of the five smaller coastal communities appeared to meet disapproval by most residents. Also, the way the growth occurs and whether the community has a voice in the direction of the economic development is important. Most communities are not opposed to change as such, but residents want to control the change. They want to be sure that their goals and values are considered as development occurs.

Tyonek represents an example of a community that is not opposed to change per se, but villagers desire a voice in the course of events affecting their community. As in Port Graham and English Bay, Tyonek residents have very strong feelings about future development in their community, both the type and amount. Though they are concerned about the lack of permanent employment, villagers appear to be unwilling to sanction development if they consider the cost too great. They want to protect and conserve

the natural resources and environment in the area and preserve their cultural heritage and unique lifestyle. Often such goals conflict with economic development. For example, the construction of the nearby timber mill resulted in outsiders moving into the area. White children entered the school. More roads were built, more cars arrived, and more airplanes landed on the roads. Evidence indicates that local food resources received additional hunting and fishing pressure. Residents repeat over and over the incidence where they found a dead moose in the dump. Apparently, someone had shot the moose and not used the meat. Tyoneks do not understand this type of behavior. They didn't mind someone else shooting the moose if they were going to use the meat, but to waste it was inexcusable. Tyonek residents associate this type of activity with the economic development in the area.

Tyonek residents seem to be faced with a dilemma. Their goals appear to include both the protection of the natural environment and their traditional way of life and the improvement in the quality of life of the villagers. They want to improve their village, have better living conditions, and better job opportunities. Currently, government funded programs and grants provide numerous jobs in the community, but villagers say this is like living on welfare. One Tyonek commented, "You don't know when you will be cut off". Year round employment is a primary goal of the village council. But employment independent of government subsidy is dependent upon economic development of some kind. Timber, oil, coal, fish, and natural gas are the prime resources in the area. Development of these results in an influx of outsiders, which, according to residents, leads to the deterioration of their natural environment and valued way of life. It

seems to be a vicious circle which is not always rational. People want jobs, but not development. A similar situation exists in English Bay, and to a lesser extent in Port Graham.

Many residents of Tyonek also feel that economic development in the area is controlled by outside forces beyond their influence and oblivious to their desires. These forces include not only government and industry, but also their own Native corporations. As a result of ANCSA and Tyonek's decision to join the act (Reservations had a choice), Tyonek Native Corporation (TNC) received surface title to the former Moquawkie Reservation lands, and Cook Inlet Region, Inc. (CIRI) received the subsurface estate. Therefore, potential developers in the area negotiate surface use of the land with TNC and subsurface use with CIRI. The offices of both of these profit oriented corporations are located in Anchorage, where the day to day business activities are relatively isolated from the residents of Tyonek. TNC leased the land to both Tyonek Timber Company and Simasco Production Company for their respective activities. Some of the villagers felt that this land had been theirs for many years, and now development was taking place on it without their involvement. Many feel that the money from the leases goes to TNC and not the villagers. Though the residents of Tyonek represent two-thirds of the stockholders of TNC, the Village Council of Tyonek was used to controlling the land around the community. The loss of this power coupled with the commercial lease of some former reservation land has apparently resulted in a feeling that events affecting the community are out of the control of the villagers. Many residents feel they are no longer consulted to see how they feel about development in their area. As a result, they are even more suspicious and concerned

about any new commercial activity on the west side of Cook Inlet. Orre villager commented,

If oil means more people on this side of the inlet, then we are not for oil. More people puts pressure on wildlife, hunting, fishing, trapping, which we want protected. But it doesn't matter if the village does not like it, the corporations will move the oil companies in anyway. One day the only trees will be those in our village.

The most recent economic development in the area concerns the Beluga coal fields. Though still in the conceptual stages and with no firm market established, the possibility of this development has caused some concern in Tyonek. A recent study (Battelle Pacific Northwest and CH2MHill, 1979) discussed the settlement requirements and potential impacts associated with developing the Beluga coal fields. The study included a scenario which called for the construction of a new community of approximately 1300 people in the Beluga area. Included in the study was a conceptual site layout showing a hotel near a lake which local residents said was a traditional recreational area. Villagers wondered why this site had been chosen before they had been asked to voice an opinion. Needless to say, many Tyonek residents were greatly opposed to the building of the hotel, the community of 1300 persons, or the railway on the west side of the inlet.

English Bay has similar attitudes to those of Tyonek towards economic development and growth in their area. Both villages want to improve local employment opportunities for their residents, but the villagers do not want development to engulf them. English Bay was against a road connecting them with nearby Port Graham because they did not want the cannery workers from Port Graham coming to their village. Even the limited air

and boat traffic is too heavy for many residents. In fact, they petitioned to have no airplanes except the mail plane come to their village. Residents are opposed to industrial development in their area, and like Tyonek, they want to protect the village way of life. English Bay vigorously opposed OCS Lease Sale CI in 1977 (see U.S. Dept. of Interior, BLM, Alaska OCS Office, 1976, P. 232-280). One of the more verbal organizations against the lease sale was the English Bay Corporation.

In English Bay, the village corporation offices are located in the village and there appears to be no conflict between it and the villagers of the magnitude of that in Tyonek. All of the village corporations in the five coastal communities are organized for profit, so potential problems could result between more conservative village councils and the more economically oriented corporations.

From available evidence, Port Graham does not appear to have the isolationist point of view of nearby English Bay. Though past actions and informal interviews indicate that Port Graham will not necessarily reject whatever comes along, villagers are clear on one point. They want to maintain control of their community. Most residents appear to disfavor an influx of non-Natives moving into Port Graham, and they view this process as an erosion of their control of the community. More people brings more change. Change alters existing patterns, and over time, traditional Native customs disappear. Resentment over the loss of traditional ways builds up among residents. Though not always verbalized, the sense of loss among villagers exists. The more non-Natives that move into the village, the more this trend continues. The non-Natives represent a constant reminder of change

from the old ways. When asked how he felt about oil development in Lower Cook Inlet, one man responded,

We are not familiar with oil wells. We do not know what they will do to us. Before you ask us how we feel about oil development, we should know what it means. How will it affect us? We do not know the answer to this. We are fishermen, and if oil hurts our fish, we are against it.

Another villager responded,

Our people are fishermen and therefore against oil. Oil spills kill our fish, oil rigs in the fishing grounds interfere with our livelihood, oil ships run over crab gear. There is too much boat traffic in Cook Inlet already. Oil will only bring more people and boats.

Priorities in Port Graham include a fire department, health clinic, boat harbor, and television reception. Except for the boat harbor, none of these have economic ramifications. Currently, fishing boats are drydocked in winter on land owned by the cannery. A boat harbor would provide slips for both village and visiting boats. One council member explained that oil and gas would come to the area regardless of how locals felt about it, and it would be best for the people to prepare for it and keep them out of the village. He explained that the community did not want to provide housing and land to the oil industry, but if an oil ship came by and stopped for water and other supplies, that would be all right. Thus, though both English Bay and Port Graham do not want oil related activities located in their communities, Port Graham appears more willing to accept the reality of the presence of oil in Lower Cook Inlet.

It is difficult to determine what either the oil companies or the village corporations will do in advance, but some village corporations have expressed a desire to lease land to the oil industry. Land use and ownership



will be addressed in another **section**, but for this discussion it should be mentioned that the **Ninilchik** Native Association (**NNA**) and the **Seldovia** Native Association (**SNA**) have indicated a willingness to lease land to the oil industry. **NNA** encourages oil development and apparently wanted the **Alpetco** facility on their land. **NNA** officials seem to favor leasing land for a tank farm if possible. Evidently, they feel that oil will not have a negative impact as so many people already come to the community during the summer recreational months. Similarly, **SNA** has waterfront land between **Port Graham** and **Seldovia**, on the south shore of **Seldovia** Bay, which the corporation offered to the oil industry. **SNA** officials pointed out that their site is located away from **Seldovia**, could be serviced from **Homer**, and would stop oil ships from entering **Kachemak Bay** or upper **Cook Inlet**.

Not all residents of either **Ninilchik** or **Seldovia** are in favor of oil development in their areas. Fishermen in both communities regard oil development as a threat to their livelihood. They worry about both the oil traffic destroying their fishing gear and the consequences of a spill. Both communities have people who value the small town atmosphere which now exists and do not want to see it change. Some residents have strong feelings against certain types or directions of change in their area. As discussed earlier, fishing is favored, while the petrochemical and oil processing industry is not. On the other hand, businessmen in both communities have attitudes more similar to those of the Native corporations. Though not necessarily in favor of the immediate presence of the petrochemical and oil processing industry, they are not necessarily opposed to oil activity in **Lower Cook Inlet**.

Many old time residents of Seldovia, who are concerned about the economy of their community, feel that oil, logging, and fishing can co-exist. Some of these same people also feel that anything good for the SNA is also good for the community as a whole. Economic development is desired by most of these people. Both the City of Seldovia and the SNA are in favor of tourism. The city approved a third grocery store and wants a third sea food processing plant in town. Similarly, many of the old homestead families in Ninilchik favor oil development in Cook Inlet as it will hopefully provide jobs for their children and will not force them to leave to look for work elsewhere. Relative newcomers in both communities, either employed or satisfied with the rural, small town pace of life without employment, disfavor the development of oil in the area. Thus, unlike English Bay, Port Graham, or Tyonek, attitudes toward economic development in Ninilchik and Seldovia vary considerably depending upon to whom one is talking

#### Summary of Economic Adaptations:

- The sociocultural systems of the five smaller coastal communities are supported by a limited economic base with commercial fishing and sea food processing as the main industry.
- Employment opportunities in the smaller coastal communities are scarce and highly seasonal. During winter, unemployment is a major problem.
- The major employers in Seldovia, Ninilchik, and Port Graham are the sea food-processing plants. English Bay residents work in the Port Graham facility.
- Due to the limited economic base and lack of local economic opportunity, there are few permanent, year round jobs in the communities. Those that exist are primarily government funded.
- Many Native residents lack the education and skills to compete successfully in the white job market, and, often, full time, permanent employment conflicts with both fishing and the casual, day to day subsistence lifestyle. These problems and the lack of local economic opportunity results in a high unemployment rate and a dependence on-welfare and government programs.

- Few local jobs have resulted from ANCSA
- A growing dependence on government expenditures provides some economic stability in the communities.
- Except for some **Ninilchik** residents, the oil and gas industry provides very little employment in the smaller coastal communities.
- Tourism and recreation provide some economic base in **Ninilchik**, could potentially add significantly to **Seldovia's** economy, and are not particularly welcomed by residents of English Bay, Port Graham, or Tyonek.
- Logging has not yet had a significant impact in Lower Cook Inlet, apparently due to poor market conditions, high costs associated with removing the timber, and the questionable quality of some of **the** timber.
- In general, the harvest of local, **natural** resources for subsistence purposes has nutritional, cultural, and economic importance to the Native residents of the **Kenai Peninsula**.
- Subsistence issues include increasing competition for food resources between villagers and outside sport hunters and fishermen and government restrictions and regulations which affect **local** access to subsistence resources. Commercial fishing may also compete with subsistence fishing.
- Seasonal wages for cannery work or logging average approximately \$4,000 to \$6,000, except in **Seldovia** where a longer crab season allows workers to gross \$8,000 to \$10,000. Thus, fish processing, the primary employment opportunity in the smaller coastal communities, tends to pay low average wages on a seasonal basis when compared to the average wage in the **Kenai-Cook Inlet** region of \$23,386 (Alaska Consultants, 1979a, P. 180).
- Growth in commercial fishing and fish processing is supported almost unanimously by residents of the smaller coastal communities.
- Development of the petrochemical industry in or near any one of the five smaller-communities appears to be disfavored by residents.
- Residents do not want change to occur without input on community goals and values. Most residents are not opposed to change as such, but they want to control the change in their community in order to protect the natural environment upon which they depend and to preserve their cultural heritage and village way of life.
- In the predominantly Native communities, residents' desire for improved living conditions and increased employment (which appears dependent on economic development) often conflicts with other goals to preserve traditional patterns. Economic development attracts outsiders which apparently leads to the deterioration

of the natural environment and valued way of life. Without economic development, jobs remain scarce.

- As all of the Native regional and village corporations in the area are organized for profit, potential problems could result between the more conservative village councils and the more economically oriented corporations.
- Villagers are concerned that economic development and change induced from outside the village **will** probably engulf the community and disrupt village life. In addition, many residents feel that the oil companies and government will do as they please without adequate consideration of the local communities affected.

## POLITICS AND RESPONSE CAPACITY

### Regional Organizations

Regionally, three political organizations exert influence and make decisions which affect the five smaller coastal fishing communities. These are: the Kenai Peninsula Borough (KPB), Chugach Natives, Inc. (CNI), and Cook Inlet Region, Inc. (CIRI). Both CNI and CIRI are profit-making corporations established by ANCSA. The two non-profit corporations in the area, North Pacific Rim and Cook Inlet Native Association (CINA), also provide important services to the communities. All five of the smaller coastal communities are in the Kenai Peninsula Borough. Port Graham and English Bay are located within the boundaries of Chugach Natives, Inc., while Tyonek, Seldovia, and Ninilchik are encompassed within Cook Inlet Region, Inc.

The Kenai Peninsula Borough is a second class borough with an elected mayor. The Borough Assembly is comprised of 16 members who are elected as follows: 8 at large from areas outside the cities and 8 appointed from the city councils of the five first class cities within the Borough. Each city

gets 1 to 3 representatives depending upon size. Currently, Kenai has 3 representatives, Seward has 2, and Soldotna, Homer, and Seldovia have 1 each. Of the 16 Borough Assembly positions, 11 are from the Kenai-Soldotna area and 2 are from Seward. Therefore, with the exception of Seldovia, which has 1 representative because it is a first class city, and Ninilchik, which has a resident who received one of the at large positions, the smaller coastal communities are not represented on the Borough Assembly. Approximately two-thirds of the Borough population lives in the central area (Kenai-Soldotna) and makes the decisions for the whole Borough. Port Graham, English Bay, and Tyonek have virtually no representation in the Borough, and the assemblyperson from Ninilchik is an at-large position, and therefore not elected to represent just Ninilchik.

As a second-class borough, the government has only three mandatory and areawide powers: assessment and collection of taxes, education, and planning and zoning. As it relates to the smaller communities, the Kenai Peninsula Borough provides primarily two services: education and solid waste disposal. In addition, the Kenai Peninsula Borough plays a role in developing and implementing the Coastal Zone Management Plan within its boundaries.

CIRI and CNI are two of thirteen regional corporations established in 1971 by ANCSA. In exchange for the extinguishment of aboriginal land rights, ANCSA provided land and money to Alaska Natives. ANCSA established regional corporations to manage and develop the land and money for the benefit of the Native people. Though these regional corporations are organized for profit, CIRI recognizes their "responsibility extends beyond

the profit motive to the general welfare of the shareholders whose shares are not transferable until 1991" (CIRI, 1978, P. 1). Similarly, CNI emphasizes not only the profitable industries, but also those which "offer the benefits of increased employment in the southcentral region" (CNI, Newsletter, Vol. 7, No. 1).

CIRI has approximately 6,000 Eskimo, Indian, and Aleut stockholders. Approximately one-half of CIRI stockholders live in the Anchorage area, and another 25% live in the rest of Alaska. Thus, a considerable number (about 25%) live outside the State of Alaska. A larger number of CIRI stockholders are at-large stockholders and therefore not members of a village corporation. Village corporations which fall within the geographic boundaries of CIRI include the Ninilchik Native Association, Inc., the Seldovia Native Association, Inc., and the Tyonek Native Corporation.

Organized to make a profit, CIRI has a relatively successful business investment program (see CIRI, 1978). Besides real estate and other business investments, "the exploration and development of natural resources on CIRI's land is an important part of the future of the corporation" (CIRI, 1978, P. 7). "Many of the lands CIRI will receive under the Cook Inlet Land Exchange were selected for their high potential for coal, oil, gas, and timber resource development" (CIRI, 1978, P. 7). Thus, CIRI is undoubtedly interested in participating in economic development within its region.

ANCSA necessitated the regional corporations to choose potential revenue producing land, because once the act mandated the regions' corporations to select land, massive expenditures were required for technical assistance

and data to enable the corporations to make wise land choices. Therefore, the regional corporations spent large sums of money during the land selection process. The complicated land exchange involving CIRI (see Land and Environment impact category) also cost the corporation considerable time and money. Thus, resource development on corporation land is a logical method for the regional corporations to produce revenues.

As a profit oriented corporation, CIRI wants to participate in the economic opportunity oil development brings to Cook Inlet. In 1977, CIRI leased subsurface rights to **Simasco** Production Company to explore for oil and gas in the Tyonek area. In 1978, CIRI entered into another resource development agreement with a large West coast utility whereby CIRI will actively participate in the joint development of any oil and gas resources discovered on a portion of CIRI's Kenai Peninsula entitlement. In addition, CIRI entered into a mineral lease agreement and also sold an option for "royalty gas" held by the corporation. Related to Lease Sale 60, CIRI is interested in both land development and providing services for offshore development. CIRI is interested in this economic opportunity on a long term basis, not just during a short construction period. In addition, CIRI contracts would contain a special provision for employment of stockholders.

**Chugach** Natives, Inc. (CNI) has a low enrollment of only about 1880 stockholders. Village corporations which are within the geographic boundaries of CNI include both the Port Graham Corporation and the English Bay Corporation. Located on the coastline, CNI is strongly oriented toward the fishing industry, but other ventures include investments in real estate, timber, and pipeline related work. CNI invested indirectly in the Alaska

Petrochemical Company and participated in maintenance contracts with the Alyeska Pipeline Service Company. CNI also planned to participate in OCS oil and gas activity in the Northern Gulf of Alaska and possibly construct a supply port facility (CNI, Newsletter, Vol. 5, No. 2). Thus, CNI is interested in leasing land and acquiring maintenance contracts with the oil companies in their area. Like CIRI, CNI wants to participate in the economic opportunity offered by oil development in Lower Cook Inlet.

Though CNI and CIRI are pro-development, neither corporation anticipates nor desires a direct conflict with the villages within their region. If the villages are opposed to development in their area, both CNI and CIRI have expressed they would respect and be sensitive to village desires (informal interviews). CNI and CIRI policy toward the villages appears to be one of self-determination rather than paternalism. Both regional corporations appear to have a policy of not meddling in village affairs, but only coming in when asked. Both CNI and CIRI seem to view the villages as capable of planning and doing for themselves with the regional corporation available for assistance if desired. Most of the dealings between the villages and CNI or CIRI relate to land issues under the terms of ANCSA. As such, CNI and CIRI deal mainly with the village corporations and not the village or city councils. Both CNI and CIRI expressed a willingness to support opportunities to get the villages to develop their economies, if the villages desire (informal interviews). But, according to the regional corporations, it is up to the village people to begin to establish guidelines on how they want their communities to develop. The regional corporations cannot plan for the villages; they must plan for themselves.



When CIRI negotiates with industry, the profit motive and benefit to local residents are considered. According to CIRI officials, development should offer opportunities to adjacent residents and use Native enterprises or employ Native peoples (informal interview). Unless a nearby village opposes development in its area, CIRI appears to assume that the villages' desire 1) orderly development and 2) reasonable access to economic opportunities. Thus, from CIRI's point of view, development is desirable if it is carefully done and provides benefits to local Natives.

Relations between both CNI and CIRI and the Kenai Peninsula Borough appear reasonably amiable. As CNI holds little land within the borough, the two organizations have relatively few dealings. On the other hand, CIRI dealt with the borough during the Cook Inlet Land Exchange. Though competing over land selections, the two organizations expressed a willingness to work things out without going to court. Good relations with the Kenai Peninsula Borough are important to CIRI because CIRI lands become subject to borough taxes in 1991. There are many unanswered questions regarding the tax status of Native lands, and it would be disadvantageous for CIRI to be on poor terms with the borough. Also, both CIRI and the borough have a common goal in economic development in the Cook Inlet area. Development on corporation lands within the borough provides income to the Native regional corporation and enhances the tax base for the borough.

#### Community Organizations

Community organizations relevant to this study include the village or city councils and the village corporations mandated by ANCSA. All five of the

smaller coastal communities qualified as Native villages under ANCSA, and therefore formed local corporations. Each of the study communities chose to organize as profit corporations.

Both Port Graham and English Bay are governed by an elected village council. This "traditional" council has no real legal powers, but gets its authority from the villagers. Thus, the "traditional" council governs by the consent of those governed. The power comes freely from the residents, and the village council is strong, especially as long as the local people recognize it. Though this form of government has no real legal clout, it is based on tradition and is very durable. This traditional form of government typically controls the social behavior in the community and who lives in the village. In essence, the villagers grant the council authority over all village activities, except in those areas which fall under borough jurisdiction (planning, platting and zoning, and education).

The village councils have no taxing authority, but primarily rely on government grants for funds. Often, the village councils are quite successful in obtaining governmental grants for community projects. An example is the \$800,000 community facility in Port Graham. Other projects which the village council administers include road improvement programs, BIA housing projects, and state airport maintenance contracts.

The predominantly Native villages usually are composed of groups of related families which, by mutual consent, live together in relative harmony. The traditional village government is based on leadership and political viability. Often, one family runs the village for a while, and then another

takes over control. More and more, the group in control is in a position of handing out the federal money in the community, and often a power struggle between families develops. A recent concern of villagers relates to whites in the community. If a white gets on the council, villagers fear that his influence might bring more whites into the community, and ultimately the Natives might lose control of their village.

The Tyonek Village Council is a federally chartered corporation which operates within the provisions of a constitution and by-laws adopted in accordance with law. It is an IRA council which has been strong and active for years. (In 1934, Congress passed the Indian Reorganization Act which applied to reservations. In 1936, this act was extended to Alaska with minor alterations). The Tyonek Village Council manages Tyonek's public affairs, is responsible for public services within the community, and controls the village lands and buildings. Village buildings include the community building which houses the village office, the community store, a shop facility, a guest house, and the medical center. Since the village council is responsible for maintenance of these buildings and streets, it is a source of employment in the community.

The Tyonek Village Council is "in a unique situation. As an IRA council of long standing, it is used to managing its own affairs, including a control of who can and cannot enter on former reservation lands. With oil monies from the 1960's, Tyonek built (and continues to maintain) their own water and sewer system, houses, roads, and clinic. In addition, Tyonek made improvements to their runway and built part of the school. Not many Native villages have paid for so many community improvements as have the

residents of Tyonek. Thus, the Tyonek Village Council, which is responsible for these village buildings and services, has a long history of managing their own community. This IRA council essentially functioned as though it were a recognized municipal government.

One of the purposes of the Indian Reorganization Act of 1934 was to provide Indians with an organization recognized by the federal government. Through this act, village corporations, which dealt with the federal government through the BIA, were formed. The membership of the IRA corporation is limited to Natives living in the area (Alaska Dept. of Community and Regional Affairs, n.d., P.6). Thus, the membership of an IRA council is restricted to Natives. As a result, in a community such as Tyonek where an IRA council is the local governing body, there is no danger of non-Natives gradually taking control of the village (unless the village incorporates as a municipality under state statutes). For this reason, other communities, such as Port Graham and English Bay, which have not incorporated under state statutes, are considering the possibility of incorporating as IRA corporations. The traditional village councils in these two communities are not restricted to Natives. An IRA corporation cannot levy taxes nor does the state recognize an IRA council 'for purposes of revenue sharing.'

All of the smaller coastal communities except Seldovia are faced with the decision of whether to continue with their traditional form of local government or to incorporate as a municipality. To receive community expansion lands under Section 14(c)(3) of ANCSA, the Native villages must be a first or second class city. If no qualifying municipality exists, conveyance of these lands goes to the State of Alaska in trust for the benefit

of any future municipality established in the Native village. Thus, if the Native villages desire to receive patent to 1,280 acres of land, they must incorporate as a municipality, (Even if they choose to remain unincorporated, the village councils retain control of these lands through the trust arrangement with the state).

Many reasons exist why the Native villages should not incorporate as second class cities. Additional responsibilities might overburden the communities. A second class city must hold monthly meetings and annual elections. City taxes may appear where there are none currently. Street maintenance or water and sewer responsibility may become city functions. Though the municipalities will become eligible for federal matching funds, this is not necessarily an improvement over existing conditions. As one villager said,

Under matching funds, the federal government provides 75¢ while the local government comes up with 25¢ for every dollar. Therefore, it will cost us 25¢ to get 75¢. Now we get 100% government grants. Why change?

The federal government does not recognize cities for purposes of BIA funding, Indian Self-Determination Act funds, or special HUD block grants for Indian tribes and Alaska Natives (Alaska Dept. of Community and Regional Affairs, n.d., P. 7). Furthermore, if the villages incorporate under state statutes, they can no longer control who lives in the community or control social behavior in the traditional fashion. Also, any move to incorporate in the villages will probably be resisted by those who want to keep the existing traditional or IRA council. The result might be that the village will have two local governments with different people on both. Potential conflicts could arise in such a situation.

Under ANCSA, Tyonek had the option not to participate in the land claims

act and instead to receive title to their former Moquawkie Indian Reservation (26,917 acres) or to participate in ANCSA like any other village and receive land and money grants specified in the act. Tyonek elected to do the latter. In effect, ANCSA abolished the federal reserve and thus terminated the Tyonek Village Council's authority over these lands. In exchange, ANCSA provided for the surface title to 115,200 acres (including the former Moquawkie Reserve) to go to the Tyonek Native Corporation (the village's profit corporation under ANCSA). In addition, the money grants are also paid to the Tyonek Native Corporation. CIRI receives subsurface rights to lands selected by the village corporation with revenues from these rights distributed to stockholders of both the Tyonek Native Corporation and CIRI. As Tyonek residents are stockholders in both of these corporations, they monetarily benefit from any development venture, but Tyonek Village Council's loss of control of former reservation lands has created many problems for the community. This issue will be discussed further below.

Seldovia is a first class city with a council/manager form of government. Though the borough retains planning and zoning authority, Seldovia has an advisory planning and zoning commission which has been active under borough authority. Seldovia Natives managed to receive village status under the terms of ANCSA, and thus Seldovia is both a first class city and a Native village which is not urban or modern in character. The Natives had certification problems in the beginning (see Reed, 1978), and many local whites apparently felt that "village" status under ANCSA threatened first class city status under state statutes.

Ninilchik is unincorporated and has no formal government. Available evidence suggests that Ninilchik is composed of many independent people who do not necessarily want any form of government. In 1978, residents and landowners in the old Ninilchik village townsite formed the Ninilchik Village Council. The Ninilchik village, distinct from the highway community, is populated by both relative newcomers and some old time residents.

The population of the Ninilchik village is approximately 23 persons. When these property owners called a meeting and formed the Ninilchik Village Council, they effectively excluded all those who did not own property in the village. Thus, many old time Ninilchik people were excluded, as they had long ago moved out of the village proper to live on the surrounding hillsides. Consequently, some resentment exists in Ninilchik regarding the formation of this organization, which represents only a very small fraction of Ninilchik people.

The goal of the Ninilchik Village Council is to protect and preserve the culture, heritage, and private property of the townsite of Ninilchik village. Ninilchik is inundated by tourists during the summer, and the property owners apparently had endured enough disrespect for private property in their village. Thus, they formed this non-profit, organization (not a local government) to protect the village from tourists. Only those who owned property in the village townsite were included as organization members. The Ninilchik Village Council invited an array of state agencies to a public meeting and forced the agencies to work together to help alleviate the tourist problem in the village. Signs were put up informing visitors not to trespass, litter, park, or make noise. Additional trash

cans and parking were made available. Though many Ninilchik residents feel the council has **helped** alleviate some of the negative aspects of a large **influx** of seasonal tourists, others feel that all of the negative publicity actually harmed the tourist business for many merchants. Though the **Ninilchik Village Council** only represents property owners in the village **townsite** (both resident and absentee), its name and publicity had the effect of sounding as though it were the local government in the area.

A brief review of the local governments in the smaller coastal **communities** shows that of the five communities, four different forms of local government are represented. Port Graham and English Bay have traditional village councils, Tyonek has an IRA council, **Seldovia** is a first class city, **and Ninilchik** is unincorporated with no formal government. Thus, it is very difficult to treat these five **communities** as a collectivity. In addition, **all** communities except **Seldovia** are confronted with the decision of **incorporating** as second class cities, and Port Graham and English Bay are considering the pros and cons of incorporating under the Indian Reorganization Act.

All five communities have Native village corporations as a consequence of **ANCSA**. As all five village corporations are organized for profit, they have a potential influence on the economies of the communities. But, to date, ANCSA has not provided **large** cash **distributions** to the villages nor has it improved the wage economy in rural Alaska (**Gorsuch, 1979, P. 178**). Generally speaking, this statement applies to the 5 smaller coastal communities **dealt** with in this study.



When the land claims act passed in 1971, the expectations of many villagers rose sharply. Land, money, and improved living conditions seemed to be forthcoming. The village corporations appeared to be the main vehicles through which the quality of life at the village level would be enhanced. **But**, the cash distributions to the villages were not large, and land conveyances, especially in the Cook Inlet region, were very slow. In addition, most villagers were not prepared to run a corporation. A lack of managerial and administrative skills, education, and knowledge of the corporate structure hampered most village corporations. The concept of land ownership was a new concept to most Natives, and selection of village lands became a time consuming and expensive process. The minimum estimate of the amount of money needed to run a village corporation for one year was \$70,000 (Alaska Native Foundation, 1977a, P.11), a large sum just to keep the corporation doors open.

In the five smaller coastal communities under study, available evidence indicates that the village corporations consider themselves very distinct from the regional corporations. Generally, the village corporations appear to have become symbols to their stockholders of the villages' independence and identity. They are not inclined to merge among themselves (Port Graham and English Bay once considered this possibility), nor do they appear prone to operate through the regional corporations. The villages value their independence, and the village corporations seem to offer residents a possible means by which they can realize this goal.

The business investments and ventures entered into by the village corporations vary among communities, and it seems the slower and more conservative

the **village** corporation went, **the** more solvent it remained. Often, it is very difficult for the village corporation to separate a good investment from a poor one. The villages' isolation, lack of business experience, and desire to be independent can lead to poor investments, especially when the villages are confronted with smooth talking lawyers and outside businessmen.

The Port Graham Corporation took over a state timber sale on lands selected by the corporation and received money from both this sale and as a result of the **land** claims. With this money, the corporation invested in an 86 foot fishing vessel, built a 3,000 square foot office building in Port Graham, and purchased heavy equipment for village work. Also, Port Graham Enterprises, a subsidiary of Port Graham Corporation, purchased acreage in Homer and **built** a 14 unit apartment building on part of the land. It took three offices to manage all of these ventures (a corporation office in Port Graham, a timber manager's office in Seldovia, and a Port Graham Enterprises' office in Homer), and Port Graham Corporation appeared on the road to success. But, overhead greatly increased, **local** people lacked the expertise to repair the equipment and vessel, and some capable leaders took jobs outside the village. By the spring of 1979, all of the offices except the one in Port Graham were closed, the equipment was idle, construction costs of the apartment building in Homer apparently exceeded the appraised **value**, and maintenance, insurance, and payments on the fishing vessel kept the corporation drained of capital. The acting president was a C.E.T.A. paralegal trainee as the corporation could not afford any employees. **Similar** cash flow problems apparently plagued the English Bay Corporation after it purchased a large barge and became involved in logging timber on

corporation lands. One villager commented,

The minute you begin any venture, the overhead begins and consumes all the cash. There are salaries, office expenses, per diem, consultants, and so on. And it seems that everything costs more for a Native corporation.

The village corporations of **Seldovia** and **Niniłchik** hope to pay dividends to stockholders in the near future, and the **Tyonek Native Corporation (TNC)** declared a dividend for the past two years. Besides leasing land to the **Tyonek Timber Company** and the **Simasco Production Company**, TNC apparently has a successful investment program. The **Niniłchik Native Association** feels fortunate to have developable land. It subdivided land near the highway and is working on a timber sale on other lands. After a long struggle, the **Seldovia Native Association (SNA)** completed its **Barbara Creek Subdivision** and gave each of its 254 stockholders a three acre parcel. SNA sold 10 million board feet of timber on corporation lands, but only after they had a professional inventory to determine the quality and amount of timber they owned. This corporation promotes tourism and recreation in the **Seldovia** area and owns a processing plant in town, which it leases to a Japanese firm. The main thrust of the village corporations has been to get title to the lands under **ANCSA**.

Relations between the village corporations and the village or city council vary among the communities. In **Port Graham** and **English Bay**, relations between the village corporations and the village councils seem quite good. As one villager commented, "We are all the same people." In a situation like this, the village corporation will probably act in concert with the wishes of the village council and villagers as a whole. In other words, the profit motivated corporation would more than likely not proceed with

a development opposed by the villagers. In Seldovia, too, relations between SNA and the city appear fairly good. In fact, the mayor of Seldovia is the secretary of SNA. Both SNA and the city are development oriented, and SNA has many businessmen among its stockholders. One SNA official said,

We are fortunate to have many professional people, successful fishermen, and businessmen as members. We are not suffering from lack of business talent; we are suffering from government inertia (referring to the government's failure to quickly deed over lands under ANCSA).

Relations between the Tyonek Village Council (TVC) and the Tyonek Native Corporation (TNC) are poor. As explained earlier, TVC had a long history of land ownership and control in the Tyonek area. After the passage of ANCSA and the formation of TNC, TVC found itself with very little voice in decisions affecting former Moquawkie Reservation lands (the surface rights to these lands are now owned by TNC). Since TNC is a profit motivated corporation with a third of its stockholders living outside of Tyonek (see Table 13), a conflict between the two organizations has developed. TVC is interested in regaining their former control over traditional Tyonek lands and protecting the traditional village uses of these lands. TNC, the new legal owner of the land, has a responsibility to all stockholders, not just those who reside in Tyonek. Consequently, TNC is pro-development in the area, but hopefully with adequate controls so as to keep the impacts on Tyonek to a minimum. Since TNC's offices are located in Anchorage, poor communication exists between the two groups. Apparently, many villagers thought TNC would operate social programs in the community. As a corporation organized for profit, this is not the role of TNC. One villager commented,

Little good will exists between TNC and Tyonek. They would just as soon sue us. I don't even know where their office is located.

TABLE 13 Village Corporation Stockholders

<u>Community</u>	<u>Total Number of Stockholders</u> <sup>1</sup>	<u>Enrolled Residing</u> <sup>2</sup>	<u>Enrolled Elsewhere; Residing in Village</u> <sup>2</sup>	<u>Residing Subtotal all Enrollees</u> <sup>2</sup>	<u>Village Corporation Stockholders not Residing in Village:</u>	
					<u>Number*</u>	<u>Percent</u>
English Bay	71	63	7	70	8	11%
Port Graham	190	117	1	118	73	38%
Tyonek	303	203	10	213	100	33%
Seldovia	254	144	6	150	110	43%
Niniichik	202	62	7	69	140	69%

<sup>1</sup> Figures based on 5/24/74 information

<sup>2</sup> Figures based on 1/19/76 information

Source: U.S. Department of Interior, 131A, Enrollment Office

Many villagers apparently boycott TNC meetings. Thus, a power struggle exists between TNC and TVC. It is difficult to determine how well TVC reflects the views of the residents of Tyonek, who are also stockholders in TNC and CIRI, but available evidence indicates that most Tyonek residents greatly value traditional patterns of living and do not want development to disrupt them.

Current feelings among villagers in Tyonek reflect that maybe they would be better off to have kept reservation status and not have joined the land claims. They did have the option of joining ANCSA or taking their former reserve lands on a fee simple basis, but apparently expectations of wealth and more land prompted the vote to join ANCSA. Some villagers feel that people living off of the reservation possibly swayed the vote in favor of joining the land claims. For those living out of Tyonek, ANCSA meant money. Also, some villagers blame a decline in communication between the village people and the village council on ANCSA. Apparently, in the past, attendance at village council meetings was quite high. But the land claims brought additional meetings related to both the village and regional corporations. The overabundance of meetings at the village level has led to a lack of interest in both the village corporation and council. Village expectations that ANCSA would lead to improved economic opportunities for villagers simply have not been met. In other communities, too, initial interest has given way to indifference to village corporation business. One resident of English Bay referred to the corporations and ANCSA in general as a "paper nightmare going nowhere."

Tyonek is not the only community in which many of the village corporation

stockholders live outside of the community (see Table 13). Though nearly all of the stockholders in the English Bay Corporation live in English Bay, a sizeable percentage of the village corporation stockholders in Ninilchik, Seldovia, and Port Graham live outside of those communities. This condition could possibly lead to a conflict between the goals of the village profit motivated corporation and the wishes of the villagers. In some cases, such as Tyonek, the village corporation could see their obligation for profit ventures as precedent over the more conservative social desires of the residents. Though the profit oriented corporations (including the regional corporations) may hope that development can occur with a minimum impact on nearby villages, the villagers will have to live with the impacts, whether minimum or not. One key to this problem is how well community and corporation leaders get along. As discussed above, in Port Graham and Seldovia, the village corporation and community leadership appears to have common goals.

It is possible that neither the village corporation nor the community council represents a clear majority of opinion or values in the community. For instance, as mentioned earlier, Seldovia had certification problems under ANCSA, and with only 144 stockholders residing in Seldovia, SNA does not represent a majority of Seldovia residents (see Tables 10 and 13). Though business leaders, city government members, and village corporation leaders may agree on a course of action, the majority of residents may have a different opinion. In Seldovia, two groups appear threatened by SNA: those who are against development and those who favor development but feel that Seldovia was so intermixed that there were no Natives in town before ANCSA. Now, ANCSA has given the Natives choice land and money and

made them a major force in Seldovia. As more Natives move into positions of leadership in the community, many non-Natives feel threatened by the Native political and economic success (see Reed, 1978).

In Ninilchik, the stockholders of the Ninilchik Native Association (NNA) are also a minority in the community. The organization seems to fit fairly well into the community and adds a few local jobs. As discussed in a previous section, the population of Ninilchik is greatly intermixed, and apparently the "new Native" phenomenon that appeared in Seldovia after ANCSA (see Reed, 1978) did not occur in Ninilchik. In fact, some non-Natives in Ninilchik feel that NNA should be more aggressive in their approach (informal interview). At the same time, many residents seemed relieved when they said, "Our Natives are not militant".

#### Interrelationships Between Community and Regional Organizations

Relations between the smaller coastal communities and the Kenai Peninsula Borough revolve around three issues: representation, taxes, and services. As explained earlier, with the exception of Seldovia, which has 1 representative because it is a first class city, and Ninilchik, which as a resident who received one of the at large positions, the smaller communities are not represented on the borough assembly. From the point of view of the residents of Port Graham, English Bay, and Tyonek, who are in remote locations in relation to the majority of the borough's population, the Kenai Peninsula Borough represents the interests of Kenai, Soldotna, and Homer. By and large, this is true as two-thirds of the population lives in the Kenai-Soldotna area.



The main service the borough provides to the communities is the school. Solid waste disposal is another borough function in the smaller communities. Before the borough took over the schools on the Kenai Peninsula, the state and federal government funded education in the area. Thus, the villagers **do** not feel the borough is providing a service they could not get elsewhere. Though solid waste disposal was badly needed in many communities, when the borough finally provided the service, many residents considered it inadequate. For example, in Port Graham, **residents** claimed that the borough finally came one day and just dug a **hole** near the runway. It was too small and filled up very quickly, had poor access, and had no turn around. Thus, most villagers feel that the borough does very little for them, and if it were not for tax notices, they would probably forget about it.

Kenai Peninsula Borough expenditures for village schools are very high, and the borough collects little from local taxes to offset the village **ex-**penses just for schools. Though at first this statement seems to suggest that the smaller villages **should** not be so harsh on the borough as they are getting a **sizeable** service without paying for it, the fact is that no one in the Kenai Peninsula Borough pays their own way (including Kenai, Soldotna, and Homer). Fifty-five percent of borough revenues come from oil companies in the area.

In 1978, Cook Inlet Housing Authority approached the borough assembly to request borough cooperation in a HUD housing program which would provide housing for low income Natives in Ninilchik, Seldovia, Tyonek, and Kenai. In order for the houses to be built, HUD required that the local governments

must give up taxing authority; however, payments in lieu of taxes would be made to the borough. Though small, these payments to the borough would actually add to the overall tax revenues because few low income families pay any tax. Under this program, 27 badly needed houses were scheduled to be built in Tyonek. The borough assembly defeated the resolution and would not cooperate with Cook Inlet Housing Authority. Some of the reasons given by borough assembly members were,

The housing project is felt to be discriminatory as it applies to Native housing only; it removes incentive and motivation for our Alaska Natives; and the Natives should go to their own Native corporations rather than HUD (Kenai Peninsula Borough, 1978b, P. 9-10).

This action by the borough assembly greatly added to the resentment toward the borough in the predominantly Native communities. (The homes in Kenai and Ninilchik were not built; Seldovia received the elderly housing as the city gave the tax exempt status; and Tyonek received the 27 houses by somehow circumventing the borough's action).

In Ninilchik, the above action by the borough did not seem to have the negative effect on community - borough relations that it had in the other three villages. In the first place, Ninilchik would have only received 5 houses, and due to the history of extensive intermarriage in Ninilchik, the granting of these houses to some residents and not to others would have caused problems in the community. Whereas, in English Bay, Port Graham, or Tyonek nearly all of the residents would have qualified for the Native housing, in Ninilchik only a few residents would have qualified. Thus, one's neighbor would be given a new home while he would not. To avoid potential social problems in the community, Ninilchik did not attempt to circumvent the borough action and build the houses.

The **Kenai** Peninsula Borough is charged with the responsibility of developing and implementing the coastal zone management (CZM) plan within the borough boundaries. A CZM requirement is for village participation. Therefore, the borough attempted to create a village advisory group to bring the villages into the planning process to voice their concerns. Village mistrust of the borough, apparently fostered by borough assembly actions, and impatience with the bureaucratic process led to a negative response from the communities. Preliminary responses from the villages indicated that residents **did** not want to get involved; there were always too many meetings; and no one listened to what they said anyway. The borough indicated that they would try to involve the villages at a later date.

Many residents of the smaller villages feel that any tax paid to the borough is a waste of money. Villagers feel the borough represents the cities, provides little services to the villages, and therefore has no reason to tax them. Its offices are far away, and many villagers consider the borough an outside organization which unnecessarily interferes with their lives. For example, **Tyonek** maintains many of its own services and therefore can see no reason to pay taxes to the borough. One Tyonek said,

The Kenai Peninsula Borough thinks it owns everything. They do nothing for us. All they do is send tax bills, which we do not pay. We maintain our own roads, water and sewer system, and clinic. Yet, the borough sends us bills. For what? We do not want the borough **to** interfere, we want to remain independent.

In **Tyonek**, the school is the product of a joint effort by the borough, the BIA, and the villagers. Both **Tyonek** and the borough have made capital improvements to the original BIA school. Currently, the borough pays the insurance, maintenance, and teachers, but when a villager discusses whether they should pay taxes for the school, the typical response is,

"No, **we** built it."

In Port Graham, evidently the borough requested village involvement in **school** renovation. Borough representatives went to Port Graham, but, according **to** villagers, they did not listen to **village** suggestions. One villager commented, "You do not feel like being involved when you do not feel like you are being listened to."

Another source of dissatisfaction between Tyonek and the **Kenai** Peninsula Borough is related to the North **Kenai** Peninsula Recreation Service Area. Residents in North **Kenai** formed this service area, and the boundaries included oil platforms in upper Cook Inlet. These platforms are located near Tyonek, and therefore **Tyonek** was included in the service area to increase the tax base. The idea was **to** get as much revenue as possible for a few people. The revenues funded a spacious swimming pool in North **Kenai**. Some Tyoneks point to this swimming pool, to which they have no access, as an example of how the borough operates. In 1978, **the** borough did enter into a \$40,000 contract with the Chugach Council of Camp Fire to provide a recreational program in **Tyonek**, a service apparently overlooked by many **Tyoneks**.

The **Kenai** Peninsula Borough taxes both **real** and personal property. Personal property taxes are rather straightforward and apply to such things as motor vehicles, mobile homes, aircraft, boats, and so forth, Though villagers may object to these taxes, they apply to all residents in the borough and are easy **to compute**. **Real** property taxes, on the other hand, are confusing, especially as they apply to **Native** lands,

In **the** past, most Natives who received title to land did so under a restricted deed and therefore were not subject to real property taxes. Restricted deeds were available under townsite surveys and Native allotments. A reserve, such as Tyonek, is also a form of restricted deed. Therefore, prior to ANCSA, real property in the **Moquawkie** Indian Reservation was not subject to taxation.

Due to **ANCSA**, previously untaxed lands occupied and used by Natives may now join the tax rolls. Under ANCSA, village corporation land cannot be taxed until it is improved, leased to a third party, or until 1991. Therefore, the land TNC received under the land claims and leased to Tyonek **Timber** Company is taxable to the village corporation. Though leased land is easy enough to understand, **ANCSA** did not define "improved" or "developed" real property. Consequently, many unanswered questions remain regarding the tax status of Native corporation lands. For example, in Tyonek the IRA council **holds** the chattel mortgage on the houses built in the 1960's. Under the terms of **ANCSA**, the village corporation became the legal owner of the property under the houses. Thus, from the borough point of view, the village corporation (**TNC**) **now owns** improved property (the houses are on TNC land), and therefore the land is subject to real property taxes. But, the village council owns **the** houses, and the IRA council may argue that is only answerable to Congress and does **not** acknowledge the borough government. The Tyoneks are trying to receive title to their houses and keep the deed restricted in order to avoid paying the borough any taxes. Similarly, in Port Graham, the village council owns the land under the Port Graham Corporation office building. Apparently, the council is exempt from paying **taxes** on the land (restricted deed status), while the corporation

pays taxes on the building (an improvement)..

An additional problem related to taxing real property in the smaller communities is the difficulty of establishing full and true values of real estate in remote villages. The replacement cost versus the market cost is often hard to determine. Borough tax officials are not particularly in a hurry to **establish** values and begin taxing real property in the **villages**. Many potential **legal** disputes could arise which might involve the federal government, and the tax base is presently not large enough to warrant such legal expenses. Available evidence indicates that the borough would push the tax issue on Native lands only if the borough assembly forces the matter or if the **public** complains that the borough is not carrying out state statutes.

The Native corporations appear to **be** the group which will eventually be affected the greatest by **real** property taxes. If the land is leased, then revenues could offset the **tax** liabilities. But, without a healthy cash flow, taxes could become a significant problem in 1991. Also, between the present and 1991, the definition of "improved" or "developed" property could prove helpful. Does a road **make** the property improved? Does clearing a pad for possible future use constitute improved property? These and other questions need **to be** answered to clarify the tax ramifications for the Native corporations.

From **the** village perspective, the regional corporations represent very large organizations, which are located far from the village, and they constitute a **threat** to **the communities**. The villagers realize that the regional cor-

**porations** own the subsurface rights under their lands, and that they are profit motivated corporations with obligations to stockholders outside any particular village. At the village **level**, there seems to be a continuous fear of what CNI or **CIRI** might do to the villagers.

Generally speaking, a lack of communication and trust exists between many village and regional corporations. Many villagers feel that the regional corporation should do something for them. Referring to **CIRI**, one villager commented,

They are always fighting among themselves. They never help us, and we must work under **grants** or go elsewhere for **money**. **CIRI** does nothing for us.

A part of this problem can be attributed to unrealistic expectations by many villagers of what the regional corporation could realistically do in a few short years. After ANCSA passed, many villagers expected millions of dollars and millions of acres of land to be forthcoming. The media **fueled** these expectations. But land conveyances were very slow, and the regional corporations needed time to become organized and define their goals. Village expectations simply could not be met, and many stockholders became disillusioned with the regional corporations.

The regional corporations were faced with many of the same problems which confronted the village corporations. Both groups drew upon the same people to run their organizations, and a lack of managerial **skills** and knowledge of the corporate structure hindered both corporations. The regional corporations are still in their infancy, and delayed land transfers slowed their growth. The villagers' false expectation of what the regional corporation could provide combined with the regional corporation's lack of

expertise in early years seemed to result in poor relations between the two organizations. One cannot assume that the regional and village corporations will cooperate. The village corporations value their independence, and the regional corporations generally treat the village corporations as capable of carrying on their own affairs.

Both at the village and regional level, there is a constant danger of the profit motivated corporations conflicting with the more traditional village councils. Even in the traditional community of English Bay, the village corporation is more development oriented than the village council. The council protects the village while the village corporation is organized for profit. Where the village council and village corporation board members are more integrated, such as Port Graham, increased communication reduces the chances for conflict. It is important to remember that the views of the regional or village corporations or the village council are not necessarily the same.

### Response Capacity

In Chapter II (P. 26-7), response capacity was defined as a community's "capacity or ability to affect, guide, or control change within the context of its own values." Four factors (information, community consensus, organization, and resources) were given as being important in determining a community's response capacity. Comparing these factors with the village and regional political subsystems seems to indicate that if the communities are confronted by both government and industry pressure for oil development, their response capacity might be quite low. The response



capacity certainly would vary from community to community, but for purposes of analysis, a generalized approach is used.

Communication between the smaller coastal communities and higher forms of government or the business sector of the state is not entirely adequate. Four of the communities under study can only be reached by boat or air. Two communities have only one phone. Mail planes are often restricted by poor weather. In general, information from outside the smaller communities is often very slow in reaching them. Sometimes, villagers hear about actions affecting their community only after the fact. Language barriers and a lack of understanding of the bureaucratic process often break down communication.

Organizations with a business interest in a potential development are usually more informed because it is to their economic advantage to be so, but they do not necessarily represent a consensus of opinion in a particular **community**. For example, the village corporations in **Seldovia** and **Ninilchik** and CIRI **would** all like to lease land to the oil companies. **Consequently**, these corporations are more likely to inform themselves of oil activity in Cook Inlet than the average citizen. But stockholders in these corporations represent a **small** portion of residents in the two communities. Even if the stockholders paid attention to the corporation's business, only a small percentage of the community residents would be informed of pending activities.

Community consensus, or agreement on community priorities and a decision on what should be done to implement or protect community values can be

very difficult to determine. For example, at this point in the baseline, it should be reasonably clear that, in general, residents of the smaller communities do not favor the location of a petrochemical plant in their communities, but they do want increased economic opportunities. When confronted with the argument that oil development could occur in or near a community with little or no negative impact to the community, it could increase economic opportunity in the area, and it could coexist with fishing, community consensus may begin to break down. Though all residents might agree that they do not want the worst that development has to offer, different degrees of development may appeal to different residents. Agreement on community priorities cannot be established without an effort by the community. None of the residents in the smaller communities except those of Seldovia have participated in an attitudinal survey to determine how they feel toward growth and development. (Seldovia is also updating their comprehensive plan, which includes an identification of community issues and goals.) Before such a survey is taken in the communities, residents need additional information regarding the nature of oil and gas development.

From the preceding discussion on the regional and community political organizations, it should be reasonably clear that relations between the communities and higher levels of government are not as good as they could be. The communities cannot necessarily depend on the Kenai Peninsula Borough or the regional corporations to protect their interests. Oil and gas development will strengthen the borough by enlarging its tax base, and population growth in the Kenai-Soldotna and Homer areas related to oil and gas development will allow the borough to continue to represent the cities. The regional corporations also have an interest in economic development

in the Cook Inlet area, and it remains to be seen whether they can combine development with a sensitivity to village values.

In the smaller, more isolated villages of Tyonek, English Bay, and Port Graham, there seems to be a recurring theme expressed by residents that outside forces control their lives. The regional corporations, outside government, and industry all make decisions that affect these small communities. The feeling in the villages seems to be that these outside organizations (and in some cases, the village corporations) do not listen to the wishes of the people, but do as they please. If the economics of development are attractive enough, then, residents say, industry and government will develop the area regardless of community desires. This attitude diminishes the response capacity of the community.

In some cases, even the village corporation may not represent a community consensus. Even if the village corporations reflected community goals, their isolation, lack of business experience, and lack of political and financial resources makes it doubtful whether they could affectively resist the borough, the regional corporations, the federal government, and industry. The role of the village corporation is further complicated in that their very survival may hinge on whether they can produce revenues from corporation lands. To do so may mean development, which may conflict with community goals. English Bay vigorously opposed OCS Lease Sale CI (see U. S. Dept. of Interior, BLM, Alaska OCS Office, 1976, P. 232-380). In this case, English Bay Corporation, with the assistance of Alaska Legal Services, acted as spokesman against the sale, but circumstances could change if the oil companies offered to lease English Bay Corporation lands.

The village corporations own considerable waterfront land in Lower Cook Inlet, and if industry desired any of this land, the village corporations would be in a fair negotiating position. The planning and zoning and taxing authority belongs to the borough. Only Seldovia has an advisory planning and zoning commission, which operates under borough authority. The other four communities have no planning and zoning function.

Current developments in the Tyonek area are seen as having a potential **positive** effect on the response capacity of the community. A potential energy related development appears to be organizing the community where it was not organized in the past. Two of the three **Beluga** coal field development scenarios (**Battelle** Pacific NW and CH2MHILL, 1979, Chapter 1) project construction activities to begin in 1980, well before any oil and gas development associated with Lease Sale 60. The **Beluga** scenarios show a map of a **conceptual** community on a lake near **Tyonek**. Though a new coal development settlement, if built, is not likely to be located on Tyonek Native Corporation lands (including the former Moquawkie Reserve), residents of **Tyonek** feel threatened that development might take place in their area without adequate consideration of their cultural heritage, values, and land use. Though they are not opposed to **development** in general, the **Tyoneks** desire to control it as much as possible in order to minimize **negative** impacts on their community. The emergence of **coal** development issues (the **possibility** of leasing land to a mining company and the construction of a permanent community of 700-1400 persons in the **Beluga** area) has served to alert Tyonek residents of potential impacts on their community and forced them to begin to organize. These and other current issues might help to bridge the gap between the Tyonek Village Council and the village corporation,

## Summary of Politics and Response Capacity:

- With the exception of **Seldovia**, the smaller coastal communities are not represented on the **Kenai Peninsula Borough Assembly**. Approximately two-thirds of the borough population lives in the **Kenai-Soldotna** area and makes the decision for the entire borough.
- As profit oriented corporations, **CIRI** and **CNI** want to participate in the economic opportunity oil development brings to the Cook Inlet region. The regional corporations are interested in leasing land, providing services, and acquiring maintenance contracts with the oil companies.
- The regional corporations represent a wide variety of stockholders with neither a common history nor sense of shared **ethnicity**. Many regional corporation stockholders are not members of a village corporation, but live either in Anchorage or out of Alaska.
- Though both **CNI** and **CIRI** are pro-development, neither corporation desires a direct conflict with the villages in their region. The regional corporations hope development can occur with a minimum impact on nearby villages, but that is no guarantee it will do so.
- Both regional corporations anticipate that any development of which they are a part will provide employment opportunities to local residents.
- The regional corporations and **the Kenai Peninsula Borough** have a common goal in economic development in the Cook Inlet area. Development on corporation lands within the borough provides income to the Native regional corporations and enhances the tax base for the borough.
- Relations between **CNI** and **CIRI** and the **Kenai Peninsula Borough** seem reasonably amiable; especially relations with the current borough mayor. Most regional and village leaders **expressed** a fondness for the borough mayor, if not for other representatives of the borough or borough policies as a whole. Any change in borough leadership could deteriorate these relations.
- The type of local government varies in the smaller coastal communities. Port Graham and English Bay **have** traditional **village** councils, **Tyonek** has an IRA council, **Seldovia is** a first class city, and **Ninilchik** is unincorporated with no formal government.
- Tyonek, **Ninilchik**, English Bay, and Port Graham are faced with the decision of whether to continue with their traditional form of local government or to incorporate as a municipality in order to receive title to community expansion lands under Section 14(c)(3) of **ANCSA**.
- **Residents** in the predominantly **Native villages** of English Bay, Port Graham, and **Tyonek** want to keep Native control of their communities. The IRA council **is** one method to accomplish this,

- ANCSA has not provided **large** cash distributions to the villages nor has it improved the wage economy in rural Alaska,
- Both the village and regional corporations were hindered by a lack of managerial skills and knowledge of the corporate structure. Both are still young organizations, and delayed land transfers have slowed their growth.
- Village corporations consider themselves very distinct from the regional corporations, and they value their village independence and identity. The village corporations are not inclined to merge among themselves, nor do they appear prone to operate through the regional corporations.
- The regional corporations generally treat the village corporations **as** capable of carrying on their own affairs, and generally do not interfere in village corporation matters unless asked to do so.
- Most of the dealings between the villages and the regional corporations relate to land issues under the terms of ANCSA. As such, the regional corporations primarily deal with the village corporations and not the village or city councils.
- Not all village corporation **bus**·ness ventures have proven profitable, and the degree of success among the village Corporations varies among the different communities
- In four of the **five** communities, a **large** percentage of **village** corporation stockholders live outside of **the community**. Thus, a conflict could develop between the village profit corporation, which has a responsibility to all stockholders, and the village residents. In some cases, such as Tyonek, the village corporation could see their obligation for profit ventures as precedent over the more conservative social desires of the residents,
- An overabundance of meetings **at** the village level has led to a lack of interest in both the village corporation and council in some communities. The high **number of** meetings necessitated by ANCSA has caused much of this reaction. Villagers are impatient with the bureaucratic process.
- Village expectations that ANCSA would provide improved economic opportunities and improved living conditions have not materialized.
- Relations between the Native villages and borough are poor and many villagers feel the borough has little concern for their welfare. Villagers mistrust the borough and feel that borough officials do not listen to what they have to say.
- None of the communities in the Kenaï Peninsula Borough pay their own way. Fifty-five percent of borough revenues come from oil companies.

- Many villagers feel the borough represents the cities, provides little services to the villages, and therefore has no reason to tax them.
- Due to ANCSA, previous untaxed lands occupied and used by Natives may now join the tax rolls. Borough real property taxes on Native lands are muddled in confusion, and in some cases, the property and not the building is taxed and in others, the opposite is the case.
- At the present, borough officials are not aggressively pushing tax issues on Native lands. Legal expenses might be greater than the tax revenues. Untimely land conveyances have slowed down the whole process.
- The Native corporations will be affected the most by borough taxes. Without a good cash flow, taxes could overburden some Native corporations in 1991 (or whenever the lands become taxable). Clarification of many tax issues is necessary for the Native Corporations to prepare to meet their tax liabilities.
- From the village perspective, the regional corporations are remote, large, profit oriented organizations which own the subsurface rights under their lands, and therefore constitute a continual threat to existing village lifestyles.
- Many villagers had unrealistic expectations of what the regional corporations could provide for them. Unmet expectations often resulted in many stockholders becoming disillusioned with the regional corporations.
- One cannot assume that the regional and village corporations will cooperate.
- Both at the village and regional level, there is a constant danger of the profit motivated corporations conflicting with the more traditional village councils or village residents.
- If confronted by both government and industry pressure for oil development, the response capacity of the smaller coastal communities might prove inadequate for the communities to control change within the context of their own values. The communities do not have adequate information regarding the nature of oil and gas development. None of the communities except Seldovia have made formal efforts to identify community issues and goals. The communities cannot necessarily depend on the borough or the regional corporations to protect their interests. In many cases, the communities do not have adequate political and financial resources to effectively resist the borough, regional corporation, government, and industry.

## LAND AND ENVIRONMENT

### Land Ownership

Land settlement patterns in the **smaller coastal communities** reflect the **historic dependence on marine natural resources**. Local dependence on fish, sea mammals, and other marine resources is reflected in the coastal location of these communities. Historically, many people ignored land ownership patterns and assumed **land** for their own use. Occasionally, the federal government made attempts to legally deed land to the Natives. Land ownership patterns in and around the smaller coastal communities are generally the product of the 1906 Native Allotment Act, the 1926 Native Townsite Act, and the 1971 ANCSA (dates reflect Alaska inclusion into the respective Legislation).

Many **Native** allotments line both sides of Port Graham bay and the coast near English Bay. This land, claimed by Natives based on traditional subsistence use and occupancy, is held under a restricted deed issued by the Department of Interior. Any sale of this land by the owner must have the approval of BIA officials. Native allotments are generally located outside of the community.

The **townsite** survey enabled people who **lived** in close proximity to each other a means by **which** they could **acquire** title to the land under their homes. Other federal public land laws only dealt with larger parcels of land. Both the Native allotment and homestead acts were for **160** acres, and the federal homesite was for 5 acres. Therefore, before the **townsite** survey, people in the villages in Alaska had no means by which to gain title to their land because the houses were usually quite close together.



Ninilchik, Seldovia, Port Graham, and English Bay all received townsite surveys, and generally the Native occupants received restricted deeds and therefore are not subject to borough taxes. With a restricted deed the owner must also gain BIA approval to **sell** his property. For a community to qualify for a townsite survey, a majority of residents must request it. All the land under existing improvements and additional vacant lots were surveyed and subdivided, plus additional tracts were surveyed (but **left unsubdivided**) for future growth. The whole **townsite** was then patented over to the BLM townsite trustee, who in turn issued deeds to lots applied for by occupants. All lots which remained unoccupied and unclaimed were then offered for sale to the highest bidder at a public auction. Lots remaining unsold in an unincorporated town could be offered for sale again if local demand warranted such a **sale**. The **unsubdivided** tracts were not offered for **sale**, but instead they were held for future settlement. As long as the community does not incorporate, title to the vacant lots and tracts remains with the townsite trustee. The **local** village council has jurisdiction to approve or disapprove of action regarding the vacant lots, and in effect, they control lands within the townsite. After the public sale and upon proof of the incorporation of the town, all lots then remaining unsold were deeded to the municipality. The townsite regulations are vague regarding the status of the **unsubdivided** tracts. Whether they remained open for occupancy after **ANCSA** is a **legal** question.

**Seldovia** applied for a townsite survey in 1927, incorporated in 1945, and by 1947, the **townsite** trustee had deeded the entire 101 acres in the **Seldovia** townsite either to residents or the city. In **Seldovia**, land is primarily **owned by private parties, the** State of Alaska (**public** facilities

such as the airport), the **Kenai** Peninsula Borough (the school), and the city (scattered parcels including the city dock). Ownership of waterfront property on **Seldovia** Bay is divided between private parties and the city. The city acquired the urban renewal waterfront property from the state after the 1964 earthquake. The city is currently in the process of selling many of these lots to **small** businesses (not industrial use). Most of the **land** outside of the city limits is subject to **ANCSA**, and therefore, the **Seldovia** Native Association (**SNA**) is the new, big private landowner in the area. For a discussion of land ownership and use in **Seldovia** see Brogan and Waits (1977b). **Seldovia** is also updating their comprehensive plan which includes land information.

Recent trends in land ownership patterns in **Seldovia** show a gradual shift to more and more absentee land owners. Many people from Anchorage purchase vacation homes and cabins in **Seldovia**, which apparently increases real estate prices. Many residents feel that **Seldovia** is becoming Anchorage's hide-away. Because of the limited land base, they say any land in **Seldovia** will sell, especially to non-residents. Apparently, many people show up in **Seldovia** just looking for a place to buy. They do not plan to settle permanently, but instead are looking for a weekend retreat. This seems to keep prices high, and available land scarce,

In English Bay and Port Graham, the **townsites** (approximately 120 and 324 acres respectively) were surveyed in the mid-1960's, and all occupants received **title** to land on which they lived. Restricted deeds were issued to most residents. As neither community has incorporated, the townsite trustee **still** holds title to the **remaining** unoccupied lots and tracts in

these two villages. Other patented lands in the communities include the school (borough), the airport (state), and churches. The only commercial/ industrial property in either village is the cannery in Port Graham. (Port Graham does have a store in the Port Graham Corporation building).

Outside of the townsite boundaries of Port Graham and English Bay, land tenure is basically of two types: Native allotments and village **corporation** selections. Virtually the entire coastline in the area falls into one or the other of these groups. (An exception is one large private parcel on the north shore of Port Graham bay in Coal Cove. It is the site of a non-operating coal mine). The village corporations top-filed on the Native allotments in case some of them are denied. The Native **allotment** claims are located along both sides of Port Graham bay, along the coast between Port Graham and English Bay, south of English Bay, and up the English Bay lagoon and river.

In 1978, the **townsite** trustee deeded over the few remaining unoccupied lots in the original 48 acre **Ninilchik** townsite to the **Ninilchik** Village Council. Though not a municipality, the townsite trustee felt that the community would never incorporate, and rather than hold the lots indefinitely, he transferred them to this non-profit organization. The **Ninilchik** Native Association feels that it should have received title to these remaining unoccupied lots in the original **Ninilchik** townsite. It was their ancestors who initially settled the community, and now, vacant lots in the original townsite are in the hands of relative newcomers. (A quirk in ANCSA did not allow the village corporations to select vacant lands within the townsites. This will be discussed below).

**Ninilchik** is the only one of the smaller coastal communities studied in which the homestead act contributed to land ownership patterns. Beginning in the 1940's and especially after World War II, many homesteaders claimed lands near **Ninilchik**. The **homesteaders** settled the **upland** areas away from the old **Ninilchik** townsite, and the center of the community gradually moved out of the old townsite. Seward Fisheries owns approximately 10 acres on the coast near the original townsite.

Prior to ANCSA, **Tyonek** lands were comprised of the **Moquawkie** Indian Reservation, which was established in 1921. These lands were controlled by the **Tyonek Village Council**. After ANCSA, **Tyonek** residents chose not to receive patent to their reserve (26 917 acres), but rather join the land claims like any other village. As a result, the surface estate to the former reserve lands, plus **additional** acreage, will be deeded to the **Tyonek village corporation**.

Under Section 14(c)(3) of ANCSA, the village corporations must convey a minimum of 1280 acres for community expansion to the municipality or if none, to the state in trust for a future municipal corporation. As trustee for the unincorporated communities, the state manages these lands for the benefit of a future city. Thus, the state trust officer may **sell**, grant rights-of-way, or lease these community expansion lands for the benefit of the villagers. Much like the BLM townsite trustee, the state municipal lands trust officer will administer these lands subject to the approval of the appropriate village council. As **Seldovia** is a first class city, it will receive the community expansion lands from the village corporation. Before they could receive patent to these lands, the other four

communities would have to incorporate as municipalities. In the meantime, the state municipal lands trust officer will probably recognize the traditional village councils in Port Graham and English Bay as the appropriate village entity which speaks for the residents. In Tyonek, the traditional village IRA council will probably be recognized. In **Ninilchik**, a **determination** will have to be made on which organization, if any, represents the community.

If the intent of Section 14(c)(3) of ANCSA is to provide for community expansion, it seems logical that the communities would like to receive the vacant land within the existing townsite surveys. Public uses for community expansion lands would include schools, power easements, sewer lagoons, or future housing projects. It seems reasonable that the **community would** like lands for these purposes in or near the existing village site. Vacant lots and tracts within the **townsites** seem ideal. Both Port Graham and English Bay have such lands, but the village corporations were not allowed to select **ANCSA** lands within the **townsite** surveys. Because townsites were already patented to the BLM townsite trustee, they were not eligible for selection by the village corporations. Therefore, they could not become community expansion lands. As a result, a new school or housing project would have to be located outside of the townsite. As this did not make much sense, D-2 legislation before Congress contains appropriate amendments which authorize the BLM townsite trustee to treat vacant lands within the townsite as 14(c)(3) lands. But, in the meantime, and since 1971, specific land ownership patterns in the communities remain unclear.

Potential conflicts could arise between the village corporations and the village councils or municipalities when they try to decide which 1280 acres are to be set aside for community expansion. In Port Graham, where the village corporation and council leadership is integrated, the decision on 14(c)(3) lands should be smooth. But, in other communities, where the **village** corporation and village or city council are not integrated, both entities might desire the same property.

In Tyonek, where there was no petition for a **townsite** survey, it seems logical that the villagers would select the village core as **community expansion** lands. Since Tyonek is not incorporated as a municipality under state statutes, the 1280 acres will probably be administered by the state municipal lands trust officer. But, the Tyonek Village Council is a federally chartered corporation qualified to accept lands, and they could argue to receive the community expansion lands in their area. In fact, a recent Department of Interior Solicitor's opinion apparently considered the Tyonek Village Council eligible to receive 14(c)(1) and (2) lands from the village corporation. These lands include primary places of residence or business, subsistence campsites, and churches. Many villagers evidently do not want **individuals** to own any of this land for fear that they might sell it someday to non-residents. **Also**, if the Tyonek Village Council, an **IRA** council, **gains** title to this land, then potentially there is no tax liability to the borough on these lands. Conveyance of any or all of 14 **(c)(1), (2), or (3) lands** to the Tyonek Village Council would be one method of allowing it to regain control of village lands.

In the Cook Inlet region, land transfers under ANCSA were considerably

delayed by a complicated land trade. CIRI is in the most developed part of the state, and when the corporation began to select land, it found much of its region owned by the state or privately, and the "in lieu" acreage set aside by the Department of Interior contained primarily mountain peaks and glaciers. After a lengthy process, CIRI negotiated the Cook Inlet Land Exchange between CIRI, the state, and the federal government. This land trade took considerable time and delayed CIRI in developing resources in their region. Under the land exchange agreement, CIRI received patent to the surface and subsurface estate of 1.23 million acres and the subsurface rights to another 1.15 million acres of land, the surface of which is either patented to the village corporations or is within the Kenai National Moose Range (CIRI, 1977, P.5). For a full description of the Cook Inlet Land Exchange see CIRI, 1977, P. 8-10. (CNI does not have much land in the Lower Cook Inlet area).

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In 1978, CIRI received approximately 115,033 acres of subsurface estate (CIRI, 1978). Most of this land underlies village corporation surface selections. In early 1979, CIRI received 300,000 acres of surface and subsurface rights under terms of the Cook Inlet Land Exchange. This land is located in the Tyonek/Beluga area, and the regional corporation is investigating the possibilities of participating in the development of the coal reserves in the area (CIRI, 1978, P.7). A large portion of CIRI land will be on the west side of Cook Inlet. The Kenai Peninsula Borough has planning and zoning powers in the region. (Seldovia is the only one of the smaller coastal communities with an advisory planning and zoning commission).

Under the terms of ANCSA, title to village lands goes to the village corporations, not to the local village councils. Therefore, except for community expansion lands, the village corporations are the big land owners in the area. Land is the biggest **asset** of the village corporations. Often it is **diff**icult for the Native corporations to make the adjustment to being large land owners. It takes considerable money and experience to manage land. Most of the village corporation **lands** are located out of the **vil**-**lage** core. Since none of the **villages within** the Cook Inlet region could fulfill their entitlements within Section 11(a)(1) of ANCSA, deficiency areas were established on the west side of Cook Inlet and in the upper **Susitna** and **Talkeetna** River drainages.

The **Seldovia** Native Association (**SNA**) has a large land base in Lower Cook Inlet and is actively trying to attract the oil industry to use some of their waterfront property. With an enrollment of 254 stockholders, SNA is entitled to select 115,200 acres of **land** under ANCSA (see Table 14). The corporation first chose land within the village township, but because of limitations imposed by the Kachemak Bay Wilderness State Park, it also selected land outside of the immediate **Seldovia** area. All of SNA's (and other village corporations'] **plans** for development hinge on conveyance of their land. **SNA** saw one of **its** first obligations to reconvey some land to **its stockholders**. Therefore, after a **complicated** land trade involving the borough, **CIRI**, and the state, SNA platted a subdivision 2 miles from **Seldovia** on the **Jakolof** Bay road. Each stockholder in SNA received, by lottery, a 3 acre **lot** in the 800 acre Barbara Creek Subdivision. Shareholders may retain the land or sell it, but if they put it up for less than the appraisal price of \$2,000 per acre, SNA has the right of first



TABLE 14 Status of Land Conveyances to Village Corporations under ANCSA

<u>Community</u>	<u>Village Corp. Entitlement 14(a) Lands</u> <sup>1</sup>	<u>Conveyed to Village Corp. as of 6/1/79</u>	<u>Remaini ng to be Conveyed</u> <sup>1</sup>
Tyonek	115,200	64,550	50,650
<b>Ninilchik</b>	115,200	70,564	44,636
<b>Seldovia</b>	115,200	52,969	62,231
English Bay	69,120	44,702	24,418
Port Graham	92,160	65,334	26,826

<sup>1</sup> Does not include 12(b) lands.

Source: Department of Interior, BLM, Division of ANCSA

refusal. The land shortage in **Seldovia** may be relieved when SNA stockholders put some lots on the market. SNA has only  $\frac{1}{2}$  acre of land in the city of **Seldovia**. Regarding the 1280 acres which will be conveyed to the city under 14(c)(3) of ANCSA, neither SNA nor the city appears to have identified these lands yet. This issue appears to be the only area where conflict could develop between the city and SNA in an otherwise open relationship.

It was nearly five years after the passage of ANCSA before the **Ninilchik** Native Association received title to any of their lands. Then, they received title to some 70,000 acres. Most of **NNA's** land is in the **Ninilchik** area, and it is located inland away from the coast. **NNA** has some choice property along the Sterling Highway, and it has subdivided some of this land and sold lots. In addition, **NNA** hopes to reconvey 40 acres to each of its 202 stockholders. The BLM has already conveyed most of the land to **NNA** that it will get around **Ninilchik**; the rest will come from across the inlet or the upper **Susitna** area. Vacant lands within the **Ninilchik** townsite have already been conveyed to the **Ninilchik** Village Council.

**Tyonek** Native Corporation's entitlement includes the former reserve (26,917 acres), additional acreage on the west side of Cook Inlet, some acreage in the upper **Susitna** River drainage, and approximately 30,000 acres on the Kenai Peninsula within the **Kenai** National Moose Range. Lands selected by English Bay and Port Graham are mainly located around these villages. Between the village corporations of English Bay, Port Graham, and **Seldovia**, the Natives will own the majority of coastal lands in the southern Kenai Peninsula.

## Land Use

In general, existing land use patterns in the smaller coastal communities include settlements, timber operations, recreation, subsistence, **commercial** fishing, and boat berths. Since all the smaller coastal communities are fishing communities, they are oriented toward the sea. Residents' values reflect a long use of local marine and land resources for subsistence and commercial purposes.

**Seldovia** Bay provides a natural, protected harbor which is ice free all year. Both commercial and residential land uses in Seldovia are **concentrated** along the waterfront on Main Street. Retail stores, the city dock, restaurants, the grocery store, and the **small** boat harbor are **all** located along the waterfront. Both of the community's seafood processing plants are also on the waterfront. For a discussion of land ownership and use as of December, 1976, see Brogan and Waits (1977b, Chapter II). The major changes since then are 1) SNA ownership of land outside the city limits; 2) the urban renewal land conveyed to the city; and 3) the implementation of a local zoning ordinance. With the addition of **local** zoning ordinances, the city has the potential to guide and control development, but due to **Seldovia's** small land base and lack of developable land within the city, any large industrial/commercial development would probably be outside the city limits.

**As Seldovia** is a relatively old town by Alaska standards, many structures are nearing the end of their economic **life**. If **Seldovia** enters a period of sustained economic growth, the land values would rise, **while** the older

residential dwellings would depreciate. **Since** many lots in **Seldovia** are too small to meet modern development standards and **land** use regulations (Brogan and **Wai ts**, **1977b**), a period of economic growth in **Seldovia** might provide adequate incentive to demolish the older buildings and combine several lots for redevelopment.

Land use in **Ninilchik** first centered in **the** original **Ninilchik** townsite and later spread to the surrounding hillsides. As homesteaders moved into the area in the 1940's and 1950's, land along the Sterling Highway slowly began to be developed. Currently, the community almost seems like two: the original townsite located on the coast near the mouth of the **Ninilchik** River, and the highway community. The old village is primarily residential now, and the Seward Fisheries cannery is located on 10 acres on the waterfront near the old townsite. Most of the commercial establishments are located along the highway. These include the retail stores, gas station, shops, **NNA** building, school, camper park, and laundromat. In recent years, many residences have been built along the oil well road, which extends inland from **Ninilchik**. **NNA** has subdivided land along the highway for **residential** use. With its beautiful scenery, small town atmosphere, and available property (3 subdivision are in the vicinity), **Ninilchik** is a bedroom community **for many** people who work in oil related activities out of **Kenai**. **Ninilchik** is also a popular wayside for recreational fishing, **clamming**, and other beach activities.

Land use in Port Graham and English Bay is primarily comprised of **residential** use. Development in both villages is haphazard, and the plats are the product of as-built townsite surveys. In Port Graham, the Whitney

**Fidalgo** cannery uses approximately 7 acres (including the dock and warehouses, and boat storage) for commercial purposes, and the Port Graham Corporation has an office building in which it leases space. English Bay has no land used for commercial purposes except for local beach set net sites. Public uses include the schools (borough), the airports (state), churches, cemeteries, and the edge of the English Bay lagoon for boat **moorage**. For a discussion of land use in English Bay and Port Graham see Svendsen (1972) and **Harlow** (1972), respectively.

Following the oil and gas sales in the mid-1960's, the Tyonek Village Council basically designed and built a new community. Therefore, development in this community was not haphazard, and the streets and houses were laid out in an orderly fashion. All lots front on roads (unlike Port Graham and English Bay), and the community provided for future expansion. Developed land primarily consists of residential lots, the store, community center, guest house, church, health clinic, school, airstrip, generator plant, work shops, and fire department. Land used for commercial purposes is small (store, guesthouse, and gas station), and the only industrial use is located a few miles from the village (Tyonek Timber Company). The Tyonek Timber Company entered into a 20 year lease with the Tyonek Native Corporation to build a chip mill plant and deep water dock. **Simasko** Production Company also **leased** drilling sites and other support sites from Tyonek Native Corporation. **CIRI** leased the subsurface rights to the oil company. Both of these leases are for lands located away from the village. For a discussion of land use in **Tyonek** see Tranter, 1972.

In general, residents of the smaller coastal communities desire to protect the natural resources and environment in the area for future use by their people. The local people in all of these communities have a long history of subsistence use of land and marine resources, and they fear a steady encroachment by non-residents. For example, in the summer of 1979, the English Bay Village Council unanimously passed a resolution "disapproving of encroachment by non-resident set net permit holders regardless of whether they have acquired permits from villagers" (Homer News, Vol. 7, No. 26, June 28, 1979). In the resolution the village council also disclaimed any responsibility for "violence that could develop from the emotionally charged atmosphere" (ibid.). To commercial set net in Cook Inlet, the fisherman needs both a limited entry set net permit and a site. A fisherman who buys a permit has no guarantee of a place to anchor his net. The difficulties in English Bay apparently began when a Homer resident bought two set net sites from an English Bay resident. The English Bay Village Council reacted to protect their traditional set net sites from outsiders. The Homer fisherman sold the two set net sites back to the English Bay Natives. Apparently, this is a case where individual action did not meet village approval, and the village council stepped in to protect the local use of beach sites around English Bay.

#### Development Constraints

Land requirements for OCS development appear to be of two types: 1) level, vacant, waterfront property capable of being served by ocean going vessels, and 2) land needed to support industry generated population growth. The first type of land is related to direct industry needs. Generally speaking,

none of the smaller coastal communities meet the requirements for this type of land. (The village corporations have selected waterfront lands suitable for these industry needs. These lands are located away from the communities.) The only community with a public deep water dock is **Seldovia**. Land needed to support industry generated population growth relates to housing and utilities. Most of the communities are confronted with unclear land ownership patterns, water shortages, housing shortages, sewer problems, and financing difficulties. In general, the borough benefits from any increase in the tax base in Lower Cook Inlet, not the smaller communities. Therefore, the communities' capacity to provide additional services is not enhanced by additional growth.

In general, **all** of the smaller coastal communities have housing shortages and water and sewer problems. The communities barely have adequate services to keep pace with existing demands, without bringing in additional personnel related to oil and gas development. In addition, title problems exist in many of the communities. The status of ANCSA 14(c)(3) municipal expansion lands is waiting on D-2 legislation in some communities. Interim conveyance is not recognized by banks or other traditional forms of financing. Federal housing programs seem to be the **only** way to get additional housing in many of the communities. As explained in a previous section, some of these programs have problems meeting the approval of the **Kenai Peninsula Borough Assembly**.

In townsites where the community remained unincorporated, the vacant lots and tracts remained patented to the townsite trustee. Whether the **unsubdivided**, surveyed tracts, which were held for future growth, could be

entered upon after **ANCSA** will probably be decided in court. No less **confusing** is the status of the vacant, subdivided **lots** in the unincorporated villages. Other than a public auction, which the BLM **townsite** trustee will not hold, there is no **legal** means by which the townsite trustee can convey these lots to potential occupants. Legally, neither residents nor non-residents can move onto them. They appear to be **held** in limbo by the BLM townsite trustee for a future city. If no one can legally move onto the lots, then there are **title** problems if a villager decides to simply build on a vacant lot in his village. He cannot gain title to the land, and therefore, funding becomes a problem. This is seen as a development constraint **in** Port Graham and English Bay, (A solution to the townsite lands may be found in amendments in D-2 legislation currently before Congress).

Development constraints in **Seldovia** are numerous. **Level** land within the city limits with good access to the bay is limited. Therefore, it is not likely that a major support facility would **locate** within the existing **Seldovia** city **limits** (Brogan and Waits, 1977b, Chapter II). In addition, a number of other factors constrict development in **Seldovia**. The small land base leads to a shortage of developable **land** in the city. Many of the lots in **Seldovia** are very small, and the majority contain less than 10,000 square feet. The rights-of-way in the original **townsite** survey are as **small** as 15 feet. Presently, this does not cause a **large** problem because there **is** little automobile traffic **in** the community. But, with any economic growth, more people would live in **Seldovia**. Due **to** the scarcity of land, they would probably live further from town and thus rely on automobiles to get back and forth. With more cars, the **small** rights-of-way could cause



significant problems. **Seldovia** continually suffers from a shortage of fresh water. Without water, it is difficult to attract new industry. (The community recently received an EDA grant to construct a 500,000 gallon water storage tank). There is no gravel source in **Seldovia**, and it is barged in from Anchor Point. This makes the price of concrete very expensive. The rocky terrain and shallow depth to bedrock in the area increases the cost of building roads and utilities. **Seldovia** has a very small land base hemmed in by mountains and water. The SNA subdivision could help relieve this problem and open up some land. Also, the 14(c)(3) conveyances could help with this problem. Expansion in other communities is also limited by similar conditions.

Negative community attitudes toward an influx of outsiders in some communities is also seen as a development constraint. By now, the reader should be aware that in the predominantly Native communities of Tyonek, English Bay, and Port Graham, many residents do not want a large influx of non-Natives to move into their villages. Though they might support village corporation negotiations with the oil industry regarding the use of Native lands located away from the village, they do not want traditional village life disrupted by industry.

Only two of the smaller coastal communities, **Ninilchik** and **Seldovia**, have small boat harbors. **Seldovia** has 120 slips which are occupied by both fishing and pleasure boats. Owners of most of the fishing boats live in **Seldovia**, while those who own most of the pleasure craft reside in Anchorage. The harbor is usually ice free, and the waiting list for slips had 65 names on it in the spring of 1979. **Ninilchik's** harbor is a half

tide harbor and is even more crowded than that of **Seldovia**. The boats can only get in and out during full tide, and in a low tide the boats are high and dry. The **Ninilchik** harbor, **built** in 1961 by the Corps of Engineers, was designed to accommodate 32 boats. Presently, during the fishing season, nearly 145 boats have crowded into the harbor. Many **local** fishermen cannot use the harbor because of insurance restrictions. The **Ninilchik** Chamber of Commerce is continually trying to get the harbor improved, but only first **class** cities qualify for harbor funds. With a **large** harbor, residents feel the local economy will improve. In the meantime, the local community has no authority or money to enlarge the already overcrowded harbor. **Whitney-Fidalgo** in Port Graham, the city in Seldovia, and **Tyonek** Timber Company near Tyonek **all** have deep water docks capable of serving ocean going vessels.

#### Summary of Land and Environment

- In the Cook Inlet region, **land** transfers under **ANCSA** were **considerably** delayed by the complicated Cook Inlet Land Exchange between **CIRI**, the state, and the federal government. A large portion of CIRI land will be on the west side of Cook Inlet.
- The **Kenai** Peninsula Borough has the planning, zoning, and taxing powers in the region. In general, the borough benefits from any increase in the tax base in Lower Cook Inlet, not the smaller **coastal** communities. (**Seldovia** is the only one of the smaller coastal communities with an advisory planning and zoning commission).
- Land use and ownership patterns in the smaller coastal communities are oriented toward the waterfront. The land settlement patterns in these communities reflect the historic dependence on marine natural resources.
- **Ninilchik**, **Seldovia**, Port Graham, and English Bay all received townsite surveys, and generally, the **Native** occupants received restricted deeds and therefore are not subject to borough taxes.

- o In the unincorporated communities of Port Graham and English Bay, the BLM townsite trustee retains title to the vacant lots and tracts. The local village council has jurisdiction to approve or disapprove of **action** regarding this vacant land, and in effect, they control lands within the **townsite**.
- o Under terms of ANCSA, title to village lands goes to the village corporations, not to the local village councils. Therefore, except for 14(c)(3) community expansion lands (1280 acres), the village corporations are the major landowners in the area. Most of the village corporations' lands are located away from the communities.
- Prior to ANCSA, Tyonek lands (**Moquawkie** Indian Reserve) were controlled by the Tyonek Village IRA Council. ANCSA created a second entity, the Tyonek Native Corporation, which now owns the surface estate to **Tyonek's** lands.
- In general, land located outside of the communities in Lower Cook Inlet falls into two categories: 1) Native Allotments, which were claimed by Natives based on traditional subsistence use and occupancy and is held under a restricted deed, and 2) village corporation selections under **ANCSA**. Thus, the Natives control the majority of coastal lands on the southern **Kenai** Peninsula.
- In the unincorporated communities (Port Graham, English Bay; Tyonek, and **Ninilchik**), the state municipal **lands** trust officer administers the 14(c)(3) community expansion lands subject to the approval of the appropriate village council. In effect, the village council controls the disposition of these lands.
- The Native village corporations are the **new, big** landowners in Lower Cook **Inlet**. In general, they **will** own little land within the communities, and most of their lands **will** be located outside of the communities.
- Village corporations were not allowed to select **ANCSA** lands within the townsite surveys, and therefore, until D-2 legislation passes, the 1280 acre community expansion lands in some communities cannot come from within the **townsite**. In the **meantime**, specific land ownership patterns in the communities remains unclear.
- Potential conflicts could arise between the village corporations and the village councils or municipalities when they try to decide which 1280 acres are to be set aside for community expansion.
- In **Seldovia**, there appears to be a gradual trend toward absentee landowners who buy vacation cabins. This added demand keeps the land prices high, and available land scarce.
- The Tyonek Village Council, though not a municipality, is a federally chartered IRA corporation, and it may hope to gain title to the 14(c)(1), (2), or (3) lands. Many villagers apparently do not want individuals to own land in and near Tyonek for fear that they

might sell it someday to non-residents. As an IRA council, TVC is potentially exempt from borough property taxes. Conveyances of any of these lands to TVC would help restore local control of land in the immediate vicinity.

- SNA's subdivision near Seldovia may help relieve the local land shortage when SNA stockholders put some lots on the market.
- Most of the village corporations' plans for development hinge on their land base.
- Between the village corporations of English Bay, Port Graham, and Seldovia, the Natives will own the majority of the coastal lands on the southern Kenai Peninsula.
- In general, existing land use patterns around the smaller coastal communities include settlements, timber operations, recreation, subsistence, commercial fishing, and boat berths.
- Residents' values reflect a long use of local marine and land resources for subsistence and commercial purposes.
- Other than sea food processing plants, local retail stores, and such uses as airfields, schools, and churches, land use in the smaller coastal communities is mainly residential.
- Land use is concentrated along the waterfront in most of the communities.
- Village corporations have leased some of their lands away from the communities for commercial purposes (timber operations, gas exploration).
- In general, residents of these communities desire to protect the natural resources and environment in the area for future use by their people. The local residents have a long history of subsistence use of land and marine resources, and they fear a steady encroachment by non-residents.
- Due to legal entanglements and topography, the land base in many of the smaller coastal communities is inadequate to meet the demands of major industrial growth. But, away from the villages, the village corporations own adequate land to meet OCS demands.
- Except for Tyonek, whose lands transferred from TVC to TNC, land ownership patterns within the townsites in the other four communities remained essentially unchanged after ANCSA. It was not within the boundaries of the communities that ANCSA had its major effect, but rather, in the area surrounding the communities. In effect, the village corporations became the largest landowners in the Cook Inlet region.
- Thus, between the village corporations (who own most of the land

in the area) and the village or city councils (who control the land within the townsites and the 1280 acre municipal expansion lands), the local residents have a firm control of lands in the area.

- Except for individual Native Allotments in the area, the village corporations and village or city councils in Port Graham, English Bay, and **Seldovia** will have control of the majority of coastal lands in their area. The restricted deed status of Native Allotments requires the approval of BIA officials before any sale. The **BIA** will probably look at potential impacts on the nearby community before approving of a sale, and if they are great, they will probably not allow the sale.
- Most of the smaller coastal communities are confronted with unclear land ownership patterns, water shortages, housing shortages, sewer problems, and financing difficulties. The communities barely have adequate services to keep pace with existing demands without bringing in additional industry related personnel.
- Only **Ninilchik** and **Seldovia** have small boat harbors. Both are **more** than full. Whitney-Fidalgo in Port Graham, the city in **Seldovia**, and **Tyonek** Timber Company near Tyonek all have deep water docks capable of serving ocean going vessels.

#### SMALL TOWN/VILLAGE SOCIAL RELATIONSHIPS

##### Social Relationships

The extended family and kinship network is the basic focus of both social and economic organization in the small, predominantly Native communities of English Bay, Port Graham, and **Tyonek**. By and large, these communities are tightly knit villages made up of many interrelated families. Everyone knows one another, and the villagers' lifestyle and values are generally similar from house to house. These family ties are also important among the Native residents in **Seldovia** and **Ninilchik**. The web of family ties extends throughout much of the area, and there is much visiting of relatives and friends between the communities. Subsistence and commercial fishing activities, as well as visiting, recreation, and political rela-

**tionships**, are primarily based upon the complex web of kinship networks and family relationships in these villages. **Continual** face to face interaction is characteristic of the social relations in all of the smaller coastal communities.

Residents feel a strong bond to their village; both to the physical surroundings and to their relatives and friends. The peaceful, day to day existence of village life, including the freedom to hunt and fish when they want, is very important to the Native residents. Often, decisions made outside of the community (ANCSA, Kenai Peninsula Borough, and governmental agencies) seem impersonal to villagers who are **familiar** with more neighborly, kin-oriented relationships. Sometimes, this leads to feelings of helplessness by residents.

Both **Seldovia** and **Niniłchik** are small communities where nearly everybody knows everybody else. **The family** serves as an important economic unit, and residents enjoy the rural atmosphere and good schools. Though in summer the identity of both communities changes because of an influx of **tourists**, residents consider **Niniłchik** and **Seldovia** good rural places to raise a family.

Prior to the **1964** earthquake, social relations in **Seldovia** centered around the boardwalk. Apparently, problems were discussed **daily** on the boardwalk, and many difficulties were resolved in this manner. People would pass daily on the boardwalk going to and from their homes, and a sense of **community** held residents together. More than one **Seldovia** resident referred to the "Boardwalk Culture" as being more friendly and closer knit than

the present lifestyle (informal interview). Evidently, people **intermingled** while they walked, and a family atmosphere pervaded the community.

But, urban renewal transformed, and according to many residents, divided **Seldovia**. Families split over the issue, and old friendships apparently broke apart. Currently, people drive where they once walked and talked to their neighbors.

When asked how he visualized social relations in his community, one resident replied that there was the bar group and the non-bar group. As in other small fishing communities, the bar is often an important focal point of social activities (see Pedersen and Pedersen, 1976 for a discussion of Seldovia's bar life in the early fishing days). Another resident divided Seldovia between the bar group, the church group, and those who belonged to neither. (In addition to the family, the church is an important integrating force in all of the smaller coastal communities). Available evidence indicates that the bars used to be more social in the past. Potluck dinners and parties were often held there with many couples dancing, but rarely does one see such activities in the Seldovia bars now. Some residents feel the bars are rougher now, and more drifters detract from the family atmosphere of days past.

Generally, the church **plays** a strong social role in all of the smaller coastal communities. Many social events revolve around church activities. These social events, provided by the church, contribute to the sense of community in many of the settlements. In the **smaller**, predominantly Native **communities** of Tyonek, English Bay, and Port Graham, the social and family life centers around the church.

The Russian Orthodox Church persists in all of the five communities, but to varying degrees. In English Bay and Tyonek, it is the only church in the community. In English Bay, residents resist the introduction of any other church and actively discourage missionaries from entering the village. As in other facets of their lives, residents want to be left free from outside interference in their community. In Port Graham, there is also a Baptist Church. In these communities, many of the social and family functions revolve around the church. In addition to the weekly Sunday services, Christmas, Easter, Thanksgiving, birthdays, the Fourth of July, and religious "Name Day" dinners are celebrated. Large, potluck dinners bring the residents together on these occasions.

In Seldovia and Ninilchik, the Russian Orthodox Church is no longer the largest, as an influx of outsiders over the years has tended to socially diversify these two communities. The Russian Orthodox Church is still active in Ninilchik when a priest comes from Kenai, but the Catholic Church is the largest now. In Seldovia, a non-denominational church is most active, but only a minority of the residents are related to this church. Community social functions such as monthly potluck dinners or the Youth-Get-Together attract larger numbers of residents than the regular Sunday services. The role of the church in Seldovia does not appear as great as in the other smaller communities. Evidently, in the past a hard-core approach towards religion by church leaders alienated many Seldovia residents from the church. But, the "God-Squad", as this group was locally referred to, is no longer in operation, and consequently, more residents are returning to participate in church activities.



## Interethnic Relations

**Seldovia** and **Ninilchik** are multiethnic communities which have a character similar to other rural, white frontier fishing towns. A high degree of intermarriage between groups coupled with local discriminatory pressures led to a **trend** to de-emphasize Native heritage and ethnicity in these two communities. In **Seldovia**, most people **acted white**, while in **Ninilchik**, those with Native background stressed their Russian heritage. ANCSA revived the Native background in these communities when it became a means to receive land and money. In both **Seldovia** and **Ninilchik**, white residents make comments like, "We did not have any Natives here until ANCSA," or "After they passed ANCSA, the Natives came out of the woodwork." After generations, being Native or non-Native did not matter, until **ANCSA** passed, and suddenly it did matter.

Other than a few minor problems after **ANCSA** first passed (a few non-Natives resented the "windfall" to the Natives), the **interethnic** relations in **Seldovia** and **Ninilchik** appear rather amiable. Though some of the old time non-Native residents still carry some of their old prejudices against Natives, these feelings are not overt enough to cause any obvious problems. Also, the Natives in **Seldovia** and **Ninilchik** have intermarried with whites for so long that there are practically no pure Natives left in these communities. As one white resident of **Ninilchik** said, "The Natives here are already Americanized. They are not militant like in some places. Here, we **all** get along pretty **well**." In **Seldovia**, some of the best fishermen and businessmen are Natives. One Native man in **Seldovia** is chairman of the board of SNA, a city councilman, and on the borough assembly.

Any problems at the canneries in **Seldovia** and **Ninilchik** seem to be more **local** versus outsider than Native versus non-Native. A big issue **at the** beginning of the fishing season is whether **locals** are hired before outsiders. Once the cannery **is** in operation, available evidence indicates that employee problems are minimal.

In addition **to** any holdover prejudices against Natives in **Ninilchik**, a potential trouble area exists among the Natives themselves. Some of the **older** Native residents prefer the past subsistence lifestyle, while other younger Natives are more corporate minded **deve**'opers. Development issues which confront the community **could potentially split** the Natives. Also, many of the relative newcomers that moved into the **old Ninilchik townsite** are environmentally conscious and may oppose development in the area. Already at odds with the **Ninilchik** Native Association over the selection of the vacant lots in the **Ninilchik** townsite (see Land and Environment), these two groups could become further polarized over development. If so, some of the older Native residents who favor past ways may become aligned with the newer white population living in the old townsite.

Port Graham, English Bay, and **Tyonek** residents do not necessarily want to become integrated; they **would** rather retain the Native identity of their villages. Though there has been relatively little marrying-in by non-Natives in these communities, the little amount that has occurred has served to warn Native residents of a potential danger of **losing** control of their village. Villagers are concerned about the growing number and power of non-Natives in their communities as they see newcomers gaining in economic and political influence. As a result, Port Graham and English Bay are

considering the possibility of incorporating **as** an IRA community to protect Native control of their villages. Generally, residents of these three villages want **to** maintain their ethnic and village identity, and they may resist all efforts to integrate them into the **larger** society. Commercial fishing, the Russian Orthodox Church, family ties, and the formation of the Native corporations have all contributed to the Natives of Lower Cook Inlet maintaining their distinctive identity.

Because of the cannery at Port Graham, residents there expect to **see** strangers coming in and out of town. Cannery crews with diverse backgrounds has led to more social diversification in Port Graham than in Tyonek or English Bay. Another effect of the cannery in Port Graham is that the continual contact with whites has enabled villagers to become more **familiar** with white behavior, and people may not be as mistrustful of outsiders as residents in more isolated, traditional villages. But, by and large, Native residents in these villages are suspicious of whites, and many of them are quick to recall how the non-Natives moved into **Kenai** and **Ninilchik** and took most of the best land.

Though not necessarily vocal about it, the Natives of Lower Cook Inlet have felt the effects of prejudice and discrimination over the years. The Russian priests in the 19th century treated Native customs with **contempt** **and** often degraded the Natives. The American military men of the late 19th century made many ethnocentric and derogatory comments about the local Cook Inlet Indians. Natives in Port Graham reported that in the past white cannery workers laughed at them because they spoke their own language and had different customs. School policies during the first

half of the 20th century were very ethnocentric, and pressures were applied to force the local peoples to conform to white ways. Even recent comments by the **Kenai** Borough Assembly hint at paternalism. Though, in the past, this continual scorn from whites made many of the Natives timid and shameful, more **recent** Native attitudes reflect a new Native awareness and desire to retain a distinctive Native village life without white interference.

Increasing recreational and sport expansion by non-Natives into traditional Native areas further strains interethnic relations. The villagers view the intruders as competing for resources which, based on tradition, belong to them. As the non-Native population grows in the **Kenai Peninsula**, this **condition will** continue to worsen.

#### Attitudes Toward Population Growth

From the preceding sections it should be **clear** that the **residents** of **Tyonek**, English Bay, and Port Graham prefer to keep **small**, Native **villages**. Residents of these villages value the quiet, relaxing, uncomplicated lifestyle characteristic of Native villages (North Pacific Rim Health Department, **n.d.**, P. 129). These people feel a strong **bond** to the physical surroundings of their village and have a strong personal attachment to their village family and friends (North Pacific Rim Health Department, **n.d.**, P. 141). Generally, residents are opposed to industrial development in their area if it **would** disrupt their **valued** way of **life**. If the trade-off were between money from an oil sale or other industrial development and the chance to retain their distinctive Native village life, it seems the vil-

lagers would choose the latter, even though it might mean a poorer standard of living.

As discussed in previous sections, residents in these three predominantly Native villages do not favor the growth of non-Natives in their communities. One councilman in **Tyonek** commented, "We do not want anybody in the village other than the people who are here now." Though not necessarily apparent to an outsider, his presence in the village often causes a certain amount of stress. For example, when a stranger walks around the village, his presence often irritates villagers. Outsiders are noticed immediately, and people wonder why this new person is in the village. People are not as relaxed when outsiders are around, and their presence often distracts from the peaceful village life for some residents. This situation is magnified in a small community like English Bay. Even when Port Graham residents visit neighboring English Bay, they are considered "outsiders" because they do not live there.

According to an attitudinal survey conducted in **Seldovia**, the most common reason given for moving to **Seldovia** was work availability (fishing and cannery work), but the small town qualities of **Seldovia** itself (the slow pace, friendly people, and aesthetic beauty of the area) were mentioned most frequently as factors that were highly valued (Heasley and Baring-Gould, n.d., P.6). Residents indicated a strong commitment to remain in **Seldovia** permanently, and they expressed an appreciation and commitment for its small town qualities. For example, 75% of the residents surveyed rated living in a quiet community as very important to them (Heasley and Baring-Gould, n.d., P.7). Approximately 60% of those surveyed expressed

a desire to maintain the current population size in **Seldovia**, and those who favored more people in the community still desired to keep **Seldovia** relatively **small**. Assuming the possibility of growth, **Seldovia** residents seemed to prefer a slow expansion of new long-term jobs attracting new permanent residents as opposed to new jobs added rapidly attracting transient workers.

The type of **economic** development activity desired by respondents reflected existing economic conditions in **Seldovia**. Over 98% of those surveyed favored additional commercial fishing and fish processing activities (**Heasley** and Baring-Gould, **n.d.**). Other activities which 75% of the respondents would encourage included **small** boat harbor expansion, light manufacturing, and educational and research facilities and other office jobs. The community appeared closely divided on the issue of tourism and the lumber industry. Petrochemical industries were the least preferred **activity**, followed by supply gases supporting offshore oil development (**Heasley** and Baring-Gould, **n.d.**, **P.11**).

Of the five potential onshore facilities associated with offshore oil and gas development (support base, oil storage and tanker terminals, pipelines, refineries, and LNG plants), **all** but support bases were strongly opposed by **Seldovians** (**Heasley** and Baring-Gould, **n.d.**). **Seldovia** residents appear to firmly oppose onshore oil development that requires more permanent and large scale facilities. Over the issue of onshore supply bases, respondents were nearly equally divided. Seventy percent of those who supported any type of oil development (one-half of the sample), preferred the location of **oil** related facilities outside the city limits. Of those

who opposed any type of oil development, 73% favored the city and borough using their regulatory power to prevent the location of a supply base in **Seldovia**. In summary, the attitudes of **Seldovia** residents are basically opposed to onshore oil and gas development, except half the residents favor supply bases, if these minimal facilities were located outside the city (Heasley and Baring-Gould, n.d.).

The **Seldovia** survey also compared residents' attitudes toward a larger **Seldovia** population and support of onshore supply base with their age, race, and length of residency. The results generally indicated that those who were older in age and who had lived for a longer time in **Seldovia**, tended to be more supportive of both supply bases and population growth, while younger and shorter term residents favored the present status of the community, presumably the conditions which originally attracted them to **Seldovia** (Heasley and Baring-Gould, n.d., P. 14). The Natives tended to favor the supply bases (apparently for economic reasons), but they overwhelmingly opposed a larger population for **Seldovia**. Residents of average age and length of residence appeared evenly divided on the two issues. Thus, in **Seldovia**, attitudes toward growth are not unanimous as in the smaller predominantly Native villages. One resident claimed **Seldovia** is usually dead split down the middle on most any issue, and oil development would be no different (informal interview).

**Seldovia** residents considered increased job opportunities and a general economic boost as the best effects which could result from oil and gas development in the area, but only about one-third of those interviewed anticipated that they would seek oil related employment. High-paying year-round employment was not rated as very important to respondents.

Residents considered the negative economic and environmental effects on fishing, pollution of the environment, and a rapid increase in population as the worst potential effects of oil and gas development in the area.

**Seldovia** respondents desired improved city services, especially those that would provide them with improved **living** conditions (water, sewer, and roads), but not those that would add complexity and interference to their **lives** (police, tourist facilities, or expanded **city** administration). Apparently, **Seldovians** are gradually realizing that planning and zoning are necessary to achieve or maintain desirable qualities of the town and that zoning can be used to regulate industry (**Heasley** and Baring-Gould, n.d.).

**Heasley** and Baring-Gould (n.d., P. 27) concluded the **Seldovia** survey by saying,

**Finally**, the attitudes that are expressed show **Seldovians** to be a **people** strongly **committed to** both their individual lifestyles and traditional resource base, and **to the values** and importance of their community. It would be totally erroneous to interpret their negative attitudes toward industry and oil as being anti-development, because they appear to be strongly committed toward growth and change. However, the changes that are desired and should be aggressively pursued are those which selectively enhance the valued traditions and resources of the **community**; namely its fishing economy, small town qualities, informality and individualized pace of life, aesthetic beauty of both the land and town, and the rich recreational and subsistence use. **If** these important qualities are to be safeguarded for the future, **Seldovians** must ensure that the **developments** they undertake are consistent with these.

As in **Seldovia**, attitudes toward growth in **Ninilchik** vary depending upon to whom one is talking. Many old time residents and corporate minded Natives tend to favor development, while more environmentally oriented residents of the old village core and more traditional Natives seem to **dis-**



favor development, especially **oil** and gas development which potentially could devastate the Cook Inlet fisheries upon which they depend. **Ninilchik** residents, as those in the other communities, value the peaceful, rural, small town atmosphere of their **community**.

#### Summary of Small Town/Village Social Relationships

- The extended family and kinship network is the basic focus of both social and economic organization in the small, predominantly Native communities of English Bay, Port Graham, and **Tyonek**. Subsistence and commercial fishing activities, as well as visiting, recreation, and political relationships, are **primarily based** upon the complex web of kinship networks and family relationships in these villages.
- In all of the smaller coastal communities, face to face interaction is characteristic of the social relations.
- Residents feel a strong bond to their village; both to the physical surroundings and to their relatives and friends.
- Often, decisions made outside of the community (**ANCSA**, Kenai Peninsula Borough, governmental agencies) seem impersonal to villagers who are **familiar** with more neighborly, kin-oriented relationships. Sometimes, this leads to feelings of helplessness by residents.
- Many residents feel that prior to urban renewal, **Seldovia** was a more friendly and closer knit community. Apparently, a **family** atmosphere, a sense of community, and daily informal discussions were characteristic of the **pre-earthquake** "Boardwalk Culture" of **Seldovia**. Presently, the community seems more polarized into different social groups.
- Generally, the church plays a strong social role in all of the smaller coastal communities. Many social events revolve around the church, and these social events contribute to a sense of community in the settlements. In most of the communities, the social and family life centers around the church.
- **Seldovia** and **Ninilchik** are multi-ethnic communities which have a character similar to other rural, white frontier fishing towns. Considerable intermarriage between groups plus local discriminatory pressures led to a trend to de-emphasize Native heritage and ethnicity in these two communities. In **Seldovia**, most people acted white, while in **Ninilchik**, those with Native background stressed their Russian heritage. **ANCSA** revived the Native background in these communities when it became a means to receive land and money. Thus, in both communities, a new Native awareness has

surfaced since the passage of ANCSA, but any interethnic conflicts appear minor.

- In some communities, the Natives themselves could split over the issue of development. Consequently, Natives who favor more traditional, subsistence oriented lifestyles could become aligned with non-Native environmentalists.
- Port Graham, English Bay, and Tyonek residents do not appear to want to become integrated; they would rather retain the Native identity of their villages. Villagers are concerned about the growing number and power of non-Natives in their communities as they see the newcomers gaining in economic and political influence. Natives do not want to lose control of their villages, and as a result, they may tend to discourage non-Natives from settling in their communities.
- Generally, residents of these three villages want to maintain ethnic and village identity, and they may resist all efforts to integrate them into the larger society.
- Cannery crews with diverse backgrounds has led to more social diversification in Port Graham than in Tyonek or English Bay.
- The Natives of Lower Cook Inlet have felt the effects of prejudice and discrimination over the years. Though, in the past, this continual scorn from whites may have made many of the Natives timid and shameful, more recent Native attitudes reflect a new Native awareness and desire to retain a distinctive Native village life without white interference.
- Increasing recreational and sport expansion by non-Natives into traditional Native areas further strains interethnic relations. The villagers view the intruders as competing for resources which, based on tradition, belong to them.
- Residents of Port Graham, English Bay, and Tyonek value their relatively isolated, peaceful, family-oriented village life, and view with displeasure the unannounced intrusions by outsiders (i.e. sightseers, sport fishermen). They prefer to keep small, Native villages and do not favor the growth of non-Natives in their communities.
- Generally, residents of Port Graham, Tyonek, and English Bay are opposed to industrial development in their area if it would disrupt their valued village way of life.
- Residents moved to Sedovia primarily for its fishing economy and small town atmosphere (slow pace, friendly people, and aesthetic beauty of the area).
- Fishing and fish processing are the types of economic activity

which most **Seldovians** would like to see developed in the future. **Seldovia** residents appeared divided on the issue of future development of tourism and the lumber industry.

- Most **Seldovians** appear to favor the current population size, and those who favor more **people** in the community appear to still desire to keep **Seldovia** relatively **small**.
- **Seldovia** residents appear strongly opposed to heavy and petrochemical industries being developed near their community, but attitudes toward a limited onshore supply base seem more **evenly** divided, if these minimal facilities were located outside of the city.
- In both **Seldovia** and **Ninilchik**, attitudes toward growth are not as unanimous as in the smaller, predominantly Native villages.
- **Seldovians** considered the negative economic and environmental effects on fishing, pollution of the environment, and a rapid increase in population as the worst potential effects of oil and gas development.
- If oil and gas development were to occur near any of the smaller coastal communities, residents desire to control its size and location.

## SOCIAL HEALTH

### Social Services and the Health Care Delivery System

After ANCSA passed, many villagers expected the regional corporations would soon provide money and services to their communities. At the same time, Section 2(c) of **ANCSA** called for an examination of federal programs primarily designed to benefit Native peoples. Many **Natives** feared that **this** would lead to termination of governmental social service programs to their people. Thus, village expectations of services to be provided by the regional corporations grew. But, the regional corporations would **not** be in a position to provide much help to the villages for years to come, and, in addition, they were specifically mandated not to deal with social programs.

Under the terms of **ANCSA**, the profit oriented regional corporations were not allowed **to** concern themselves with health, education, welfare; social services, or political causes (Alaska Native Foundation, 1977a). Therefore, non-profit corporations were established to fill this gap and contract for health, housing, educational and social service programs for the benefit of local communities. Funded by state, federal, and **private** grants, these non-profit corporations help to establish local control of services and provide employment for villagers. **C.E.T.A.** money is administered through these non-profit corporations, and since they provide money and services to the villages, they are well received (much more so than the regional profit corporations which did not live up to villagers' expectations). Since the broad scope of the non-profit corporations was often unwieldy, specialized agencies (housing authorities, health corporations) evolved, which functioned independently.

The fears and expectations of Natives that governmental social service programs **would** be terminated, and that the regional profit corporations would provide money and services to the villages did not materialize. Instead, regional non-profit corporations emerged which became recognized as the official tribal entities eligible to receive governmental funds for village services. Also, funds for social service programs did not dwindle as feared by many Natives, but instead they increased after the passage of **ANCSA** (see **Gorsuch**, 1979, P. 136-140). Thus, the anticipated village benefits did not come through the profit corporations as envisioned, but through the non-profit arms. The federal money provided the non-profit corporations is not part of the land **claims** settlement, but in addition to it. Thus, the non-profit organizations provide employment

wages and services in the villages. In 1979, the per capita value of federal spending on service programs for Natives was approximately \$4,000 (Gorsuch, 1979, P. 148).

The non-profit regional corporations play a more active role in the villages than the regional profit corporations, seem **to** have better relations with them, and administer several important health and social service programs in the area. They **play** an important role in providing jobs, largely by government grants through the **C.E.T.A.** program, in the Native communities. Because they are service oriented and have closer ties to **the** villages, the non-profit corporations will play an important role in mitigating the effects of social change in the small communities. They are constrained however, by their dependence upon government grants, so funding levels will largely determine **how** effective they are in aiding the villages.

Alaska Natives receive medical services through four health care delivery systems (see North Pacific Rim Health Department, n. d. , Chapter 5):

- 1) Alaska Area Native Health Service (**AANHS**) is a statewide system for Alaska Natives with headquarters in Anchorage. At the village level, the community health aides are the cornerstone of the system and provide medical care where no physician is present. Inpatient services are available **at** the **Alaska** Native Medical Center in Anchorage.
- 2) Alaska Department of Health and Social Services provides Public Health Nurses who continue to supply health care in numerous **communities**.
- 3) Twelve Regional Health Care Organizations. The North Pacific Rim

Health Department, established in 1976 within the North Pacific Rim Native Corporation regional non-profit organization of the **Chugach** region, provides **health** care to English Bay and Port Graham. The Cook Inlet Native Association (**CINA**) is the non-profit organization associated with **Seldovia, Ninilchik,** and Tyonek. CINA provides services for all Natives in the Anchorage area, not just for enrollees of **CIRI**.

- 4) Private **Health** Care Providers. The AANHS contracts directly with private health care providers (hospitals or physicians) in areas where no Indian Health Service (**IHS**) facility is available. Examples are the contract physician in **Seldovia** and the South Peninsula Hospital in Homer,

Each community, except **Seldovia,** has a health clinic and health aide. In most cases, the non-profit arms of the regional corporations (CINA and North Pacific Rim Health Department) receive contract health care funds from IHS, and then they hire the health aides. The exception is Tyonek whose health aide is contracted directly to IHS and not through **CINA. Seldovia** has a contract physician in its health clinic.

The health aides in the villages do a large volume of primary **health** care and are regarded **as** the center of the health care delivery system by the North Pacific Rim Health Department. For example, the number of health aide encounters for a **12** month period during 1976-77 for Port Graham was 1,401 (North Pacific Rim Health Department, *n.d.*, P. 51).

The health care delivery system described above is primarily a Native

system. As only Natives are eligible to participate in it, it is not designed to meet non-Native health needs. Therefore, a large influx of non-Natives would strain the existing health care facilities in most of the smaller communities.

The North Pacific Rim Health Department (n.d.) recently completed a comprehensive health study for the communities in the Chugach Region (including Port Graham and English Bay). This report included an in depth assessment of the health status and health systems for the Chugach communities, plus an analysis of the unmet health needs and village requirements to bring the health care up to acceptable standards. The report deals with the region as a whole and also specifics for each community. It should help provide a basis for future health planning and improved health systems in the region.

#### Alcoholism and Mental Health

In the villages, family life is very strong, and anything that negatively affects the family is a concern to all. Many residents in the predominantly Native villages view with alarm the influence outsiders have on their youth. They claim increased contact with outsiders in the past few years has exacerbated alcohol and drug abuse in the villages. As one villager said,

Exposure to outsiders at the Port Graham and other canneries and the boarding schools often gives youths the wrong impressions of things. They are exposed to alcohol and drugs, and often the temptations are hard to overcome. In the past few years, we have seen an increase in drug abuse. We see a change in the mental attitude and values in the kids who use the drugs. A large personality change seems to occur, and they go from one extreme to another. This change affects the whole family, and since we are all related, it affects the whole village.

Another villager said,

We want to preserve the old way of living, but there is not much left now. What is left seems to always be destroyed by outsiders. We like to see out young marry local Natives, not outsiders.

Apparently, the drug problems are exacerbated in the summer when there is increased traffic in and out of the communities. As one villager said, "In winter there is booze only, no drugs." But alcohol is responsible for its share of the community problems. Though no statistics are available, alcohol contributes to many of the social problems in the smaller communities. Already a problem in the 1880's (Townsend, 1974, P. 10), alcohol does not appear to have loosened its grip on the Alaska Natives. For a discussion on drinking behavior in a typical Native community see Brelsford (1977). This article related alcohol to employee turn over, family discord, aggression, and deaths.

Many village social problems are rooted in the lack of employment in the communities. Lack of jobs, especially in the winter, often leads to boredom and depression. Alcohol only compounds the problem. Without economic employment growth, this condition is not expected to change.

Besides providing a poor influence on village youth, outsiders pose an additional threat in English Bay. An offshore oil platform is in view from the village, and it appears to be the source of constant rumor in the community. In the words of a village elder,

That rig reminds people constantly of a potential spill that would destroy our fish. In the evenings, it gets noisy, and we are scared it will break and spill oil. Sometimes, it seems to make the village shake. Some people tell us that if we try to move the oil rig there will be a big fight and those people down there will shoot us. We



also hear that the rig is going to move closer to our village. We are afraid if they find oil they will bring in more people and kick us out or kill us. One man told us they would booze up the Natives and take our land. They used to say that we will have money when the oil comes, but now they say there will be no money. Even the little kids ask, "Will we be chased away from here if they find oil?" "Will we be killed if those people come?" Some people pray hard so that rig will move away from here. Others drink.

Thus, for residents of English Bay, the presence of the oil industry in Lower Cook Inlet already causes a certain amount of stress in the community.

Along with the church, the school is one of the focal points in village life. Educational facilities and programs with which the villagers are satisfied are important for the mental health of the community. If residents are unhappy with the school in their village, stress often accumulates in the community. If villagers are forced to send their children away for high school, they not only miss the children but are also concerned about the impressionable youth being exposed to alcohol and drugs. In the past decade, two trends in village education have had a positive effect on the predominantly Native communities. First, bilingual programs at the schools are well received. Not only are the students instructed in their Native language, but they are also taught many of the traditional ways of their people, including traditional foods, medicines, and survival techniques. Secondly, the trend towards providing high school education in each village is well received by residents. As one man from English Bay said,

It is better now. The whole family stays together in the winter. No longer do we have to send our kids to boarding homes in Ninilchik or Seldovia. The other kids were mean there. It's better to have our children home for the winter.

## Crime

The Alaska State Troopers serve Port Graham, English Bay, Tyonek, and **Ninilchik**, while the City of **Seldovia** employs its own police chief. Troopers from Homer serve Port Graham and English Bay, and therefore, the police chief from **Seldovia** does not respond to calls from these two villages. A State Trooper is located in **Ninilchik**, and **Tyonek** has a resident constable who works for the troopers.

Generally, there is not much of a crime problem in the five smaller **coastal** communities (Personal communication, Sergeant Myers). Most of these communities have a small, indigenous population with a low yearly rate of transient movement, and therefore have few local law enforcement problems. The local communities probably do have many small problems that they either take care of themselves and do not bother to call the troopers, or they simply learn to live with them.

According to the Alaska State Troopers, larceny and burglary are the most reported crimes in these communities. **Also**, a few assaults probably occur which are not reported to the troopers, but generally speaking, the smaller coastal communities are pretty quiet. According to a survey in **Seldovia** (**Heasley** and Baring-Gould, **n.d.**, P. 20), the types of crimes most often mentioned as of greatest concern to residents include (in order of frequency) vandalism, thefts and break-ins against personal property, and various effects of drunkenness and alcohol. Many of the disturbances in these communities are alcohol related (Personal communication, Sergeant Myers).

In **Seldovia**, the police chief reported very little felony crime occurred in the community. Instead, most common were small burglaries, which were usually associated with alcohol. He reported that in the spring, crime (mostly misdemeanors) was up, but generally Seldovia was a peaceful town. Even when the small boat harbor is full with many visiting tourist boats, the **Seldovia** police chief reported that virtually no vandalism occurs. Available evidence indicates that the biggest problem in **Seldovia** is alcohol related. According to the police chief, there are many blue collar workers in **Seldovia** who are more physical and more outgoing drinkers than usual. As a result, the police chief considered the largest problem to maintain peace and quiet among the **Seldovia** drinkers. **Seldovia** also has a minor drug problem, as do many communities with a transient population of cannery workers combined with tourist traffic in the summer. According to the **police** chief, **Seldovia's** current population is marginal for a one-man police department.

Apparently, Tyonek residents used to **call** the Alaska Troopers quite often for minor disturbances. According to troopers, the crime problem was minor, but the calls were numerous. Consequently, the troopers placed a resident constable in Tyonek as they were tired of answering so many **calls**. The constable is not a trooper, but **he** works for them and wears a trooper's uniform. His presence in Tyonek has apparently served to reduce the frequency of complaints.

The majority of problems in Tyonek are either alcohol or vandalism related (**Tranter**, 1972). Evidently, most of the vandalism is committed by pre-teens, teens, or intoxicated adults. **When** a villager becomes intoxicated,

he usually becomes a nuisance to those around him, but he is often tolerated by the **community** until some more serious act is committed (assault, excessive noise, disturbing neighbors). The most often reason given for drinking is boredom.

In Port Graham and English Bay, if the villagers have a problem, they call a trooper from Homer. **If** the **local** villagers considered the problem serious enough **to** call a trooper, they usually have the offender apprehended by the time the troopers arrive. Some villagers feel that the time required for a trooper to respond from Homer is often too long and thus **their** law enforcement services are inadequate.

Troopers report no serious law enforcement problems regularly occur in these villages. According to troopers, it is often very difficult to investigate a crime in a smaller community because no one likes to **tell** on another person. But, **if** a particular individual continues to cause a problem and there is a continuing victim, the villagers are very helpful.

Apparently, there **is** little crime associated with the cannery at Port Graham. When the cannery workers are in the community, they are usually **too** busy working **to** get into trouble. By the time the season is over, they are gone so they do not really have much slack time in Port Graham. Similarly, according to troopers, outsiders visiting these communities **rarely** cause a problem. If anything, visitors will be the victim as they bring in new material that **is** desired.

## Summary of Social Health

- The fears and expectations of many Natives that governmental social service programs **would** be terminated after the passage of ANCSA, and the regional profit corporations **would** provide money and **ser-**vices to the villages did not materialize.
- Instead, regional non-profit corporations emerged to **adm**nister increased **public** funds for health, educational and **social** service **programs** for the benefit of the local communities. Thus, the **non-profit** corporations work close with and have good **relations** with the villages to which they provide jobs, money, and services.
- Because they are service oriented and have **closer** ties to the villages, the non-profit corporations will play an important role in mitigating the effects of social change in the smaller communities. They are constrained, however, by their dependence upon governmental grants, so funding levels will largely determine how effective they are in aiding the villages.
- The health care delivery system in the villages centers around the health aides and clinics. Federally funded, the health aides are generally employed through the non-profit corporations.
- The health care delivery system in the villages is based on Native eligibility and is not designed to meet non-Native health needs. Therefore, a large influx of non-Natives would strain the existing health care facilities in these communities.
- Increased contact with outsiders in the past few years "appears to have exacerbated alcohol and drug abuse in the villages.
- Many village social problems are rooted in the lack of employment in the community. Lack of jobs, especially in the winter, often leads to boredom and depression. Alcohol only compounds this problem.
- The presence of the oil industry in Lower Cook Inlet already causes stress in some of the predominantly Native communities.
- Bilingual programs in the **local** schools and the trend towards village high schools are well received in and have a positive effect on the villages.
- Generally, there is not much of a crime problem in the five smaller coastal **communities**, and few law enforcement problems regularly occur in these communities.
- Many of the disturbances in these communities are alcohol related.
- Larceny, burglary, vandalism, and various effects of drunkenness and alcohol are the most often reported crimes in the smaller coastal communities.

3 4



#### IV. BASE CASE

This chapter describes the changes which are projected to occur in the sociocultural systems of Lower Cook Inlet communities through the year 2000 in the absence of Lower Cook Inlet OCS Sale 60. The first section of this chapter describes the scenario assumed for the Base Case. The second section summarizes the major socioeconomic changes in the Base Case which Alaska Consultants (1979a) project to occur in the larger communities of the area. The third section of this chapter discusses how the sociocultural systems of the study communities will be affected by the Base Case scenario and these hypothetical socioeconomic changes.

#### DESCRIPTION OF BASE CASE SCENARIO

The projections of future conditions in Lower Cook Inlet communities are based upon hypothetical scenarios mandated by the BLM OCS Socioeconomic Studies Program and developed by Dames and Moore (1979) and Alaska Consultants (1979a). In Lower Cook Inlet, the Base Case scenario is composed of three major elements:

- A non-OCS scenario in which existing population and economic trends are assumed to continue without significant new oil exploration or discoveries
- A hypothetical find of oil in Lower Cook Inlet resulting from exploration currently being conducted on tracts leased in the 1977 OCS Lease Sale CI
- The construction of a LNG facility near Kenai between 1980 and 1984

Thus, the Base Case in Lower Cook Inlet is not a non-OCS case, as it includes employment and population forecasts resulting from both Sale CI and the LNG facility.

For purposes of the Base Case projection, Alaska Consultants (1979a, P. 271-294) assumed Sale CI to represent a medium find scenario. Two-thirds of the USGS estimates of oil and gas in Lower Cook Inlet were allocated to Sale CI. Alaska Consultants assumed this scenario to be representative of the Lower Cook Inlet Sale 60 high find scenario developed by Dames and Moore (1979).

Even if Lower Cook Inlet OCS Sale 60 is not held, the Base Case assumes that a large amount of oil activity occurs in Lower Cook Inlet during the years 1980 to 2000 as a result of Sale CI. Consequently, the Base Case does not explore what will happen to the communities of the study area without oil development. Instead, this scenario examines what will happen if significant finds are made on tracts already leased; an occurrence which might seem unlikely in view of the reported lack of success on these tracts to date.

Impacts projected to result from the proposed OCS Sale 60 will be cumulative, adding to previous impacts assumed to have occurred from Sale CI. As a result, impacts from Lease Sale 60 (the difference between Sale CI and Sale 60) will be relatively minor, since the Base Case already assumed high levels of oil activity. The main differences between the Base Case and OCS cases will be in timing, and in some additional oil and gas activity.



## SUMMARY OF SOCIOECONOMIC PROJECTIONS

Alaska Consultants (1979a) made Base Case population and employment **projections** for the Homer and Kenai-Soldotna areas in three stages. First, they assumed a **non-OCS** case in which existing trends in different economic sectors would continue. From this they calculated the growth in employment which would occur and how population would increase in response to employment growth. Then the employment and population growth expected to result from OCS Sale CI was calculated, as was the growth expected from construction of a Liquefied Natural Gas facility near Kenai. This additional employment and population growth was added to the **non-OCS** forecast to give the Base Case forecast of employment and population growth in the region. The following paragraphs briefly follow this same format to summarize Alaska Consultant's assumptions and projections.

### Economy in the non-OCS Case

The **non-OCS** portion of the Base Case reflects continued development of existing industries in Kenai-Cook Inlet communities. Increases in basic employment during the period of the forecast are assumed to result from the same natural resource-based industries now supporting basic employment in the area. However, these industries are forecast to range further from the Kenai-Cook Inlet area in providing the products supporting basic employment.

The petroleum industry is assumed to continue to be central to the economy of the Kenai-Soldotna area, although in the absence of significant discoveries

on OCS Sale CI tracts the rapid rates of growth seen in the past are forecast to decline to more modest levels. Tertiary recovery of petroleum resources from existing fields is envisioned and new petroleum production from state leases is assumed (Alaska Consultants, 1979a, P. 249).

Existing refineries in the Nikiski area are assumed to operate at or above current levels throughout the forecast period in the absence of Sale CI discoveries, and substantial additions to processing capacity are not forecast. Increases in oil service, industry employment resulting from oil development in other parts of the state are assumed to more than compensate for declines in oil service employment in the Kenai-Soldotna area caused by the assumed cessation of production by Upper Cook Inlet platforms.

Fishing and seafood processing is assumed to continue to grow in significance in Lower Cook Inlet communities. Increased yields from traditional fisheries and successful development of bottomfishing will ensure growth in the fisheries sector.

Continuing improvements in the state's ability to manage the traditional fisheries, and the reduction in foreign high-seas catches are expected to result in more dependable and larger harvests of salmon, crab, shrimp, and other traditionally used species.

The Homer area is assumed to develop as a center for harvesting and processing deep sea fishery resources. Boats based in Homer are assumed to participate in more distant bottom fisheries as well.

Continuing diversification by fishermen and processors in the Homer area will result in year-round operations. This will encourage a more stable resident labor force in the fishing and fish processing sector. **Seldovia**, which is close enough to Homer to participate in these developments, is also likely to be home base for some boats taking part in bottom-fishing.

The importance of tourism and recreation in the economic growth of the **Kenai-Cook Inlet** area is expected to increase. Population growth in the Anchorage area and **Southcentral** Alaska will result in increasing numbers of tourists and **recreationists** visiting the **Kenai** Peninsula. This area is expected to attract a more than proportionate share of the total visitor traffic venturing beyond the Anchorage area. The recreation sector is expected to respond to this increased potential by providing more facilities and services, particularly along the Sterling Highway. The Homer area will play an especially important role in attracting and accommodating visitors, but all areas within the **Kenai-Cook Inlet** area will realize increases in visitations.

Logging and wood processing currently occupy a small position in the economy of the **Kenai-Cook Inlet** area. This sector's role in the **Kenai-Soldotna** and Homer areas **is** not expected to change over the forecast period.

Government employment and expenditures in the region are expected to grow at a modest rate during the forecast period. Population and economic growth will result in increasing demands for a wide range of government services and facilities, including resource management, police and fire protection, air traffic control, highway maintenance, and other local, state, and federal services. State and Federal assistance to local governments, primarily in

the form of grant funds, is assumed to continue at rates proportionate to population growth in the area.

In general, the non-OCS portion of the Base Case scenario can be characterized as conservative; growth is assumed to be based on existing industries. No dramatic changes, shifts or economic events, with the exception of bottomfish development in the Homer area assumed in the non-OCS portion.

#### OCS Sale CI

The Ease Case projections of future conditions in Lower Cook Inlet socio-cultural systems without Sale 60 are based on the assumption that significant OCS development occurs as a result of Sale CI, which was held in 1977. The scenario is based on the assumption that economic finds will finally be discovered in tracts presently being explored in Lower Cook Inlet.

Alaska Consultants (1979a, P. 271-294) based their employment and population projections upon medium find scenario for Sale CI which is equivalent to the Sale 60 high find scenario provided by Dames and Moore (1979). Two thirds of the USGS estimates of oil and gas in Lower Cook Inlet were allocated to Sale CI, while one-third were allocated to Sale 60. In essence the socioeconomic and sociocultural Base Cases for Lower Cook Inlet are premised upon greater oil and gas activity than will occur during any of the OCS scenarios. This means that the impacts of Sale 60, or the difference between the Base Case and Sale 60, examined later in this report, are likely to be relatively minor. Table 15 summarizes the activities assumed to occur during the different phases of Sale CI OCS development in Lower Cook Inlet Base Case.

TABLE 15

Base Case Scenario of OCS Activity  
in Lower Cook Inlet  
OCS Lease Sale CI (1977)

1979-1983 Exploration Phase

Service bases at Homer and Nikiski provide materials to offshore rigs; Kenai-Nikiski base is assumed to support two-thirds of the rig activity.

Homer base is assumed to accommodate all survey vessel activity and one-third of the rig support activities.

1984-1987 Development Phase

Kenai-Nikiski base will support two-thirds of all offshore activities. A construction camp in the Kenai area will complete one half of all onshore pipeline construction.

The Homer base will provide one-third of the support for platform construction, subsea pipelaying and burying, and development drilling. A construction camp for one half of all onshore pipeline construction will be located in the Homer area.

1988-1998 Production Phase

The permanent Kenai-Nikiski base will support all offshore activities during the production phase. This will provide stable employment in the area until platforms are taken off line beginning in 1997.

The Homer base is phased out by the beginning of the production phase. Only helicopter service operating from the Homer Airport continues throughout the scenario.

Source: Alaska Consultants, 1979a.

## North Kenai LNG Facility

The Base Case also assumes construction of a **liquified** natural gas facility in the North **Kenai** area. The scenario for the construction of this facility is summarized from Alaska Consultants (1979a, P. 301-308). Table 16 illustrates employment and construction activities over the forecast period for this hypothetical facility.

Construction of the LNG facility is assumed to follow the pattern of previous major oil and gas related construction projects in the **Kenai-Soldotna** area, employing a large number of construction workers for a short period of time, and then a **small** number of employees permanently. The direct impacts of this scenario are assumed to fall only upon the **Kenai-Soldotna** area. The construction work force is assumed to be composed almost exclusively of transient workers who are rotated through the **Kenai-Cook Inlet** area to permanent residences outside the region. These employees are assumed to live in onsite construction camps. During the operations phase, on the other hand, the **small** number of permanent employees are assumed to be permanent residents of the **Kenai-Soldotna** area.

### Summary of Base Case Employment and Population Projections

The Base Case population forecast equals the sum of the non-OCS population forecast and the forecasts for OCS Sale CI and the North **Kenai** LNG facility (Alaska Consultants 1979a, P. 308). Tables 17 and 18, and Figure 3, summarized from Alaska Consultants more detailed tables, present the projections of employment and population growth in the Homer and **Kenai-Soldotna**

TABLE 16

Estimated Direct Onsite Employment  
 North Kenai LNG Plant Construction and Operations  
 Kenai-Soldotna Area  
 1980-2000

	Employment LNG Plant Construction
1980 Site preparation and foundation	146
1981 Trains placed upon foundations	844
1982 Major plumbing	1,323
1984 Construction complete and plant tested	420
	Employment in Plant Operations
1985-2000	60

Source: Alaska Consultants, 1979a.

TABLE 17

Forecast of Employment<sup>1</sup> and Population  
Base Case  
Kenai-Cook Inlet Census Division  
1980-2000

	1980	1985	1990	1995	2000
<u>NON OCS</u>					
Kenai-Soldotna Area	(5,180)	(5,798)	(6,508)	(7,318)	(8,246)
Homer Area	(1,697)	(2,108)	(2,621)	(3,076)	(3,619)
	<u>5,091</u>	<u>6,324</u>	<u>7,863</u>	<u>9,228</u>	<u>10,857</u>
Total Kenai-Cook Inlet	(8,004)	(9,194)	(10,593)	(12,075)	(13,794)
	24,012	27,582	31,779	36,225	41,382
<u>OCS SALE CI</u>					
Kenai-Soldotna Area	(45)	(212)	(308)	(308)	(284)
Homer Area	(49)	(200)	(278)	(224)	
	92	376	695	610	
<u>NORTH KENAI LNG</u>					
		*1982 (peak of construction)			
		(1,455)			
		1,653			
Kenai-Soldotna Area	(161)	(90)	(90)	(90)	(90)
	184	225	225	225	225
<u>BASE CASE population</u>					
Kenai-Soldotna Area	14,800	16,864	19,217	21,425	23,313
Homer Area	5,183	6,700	8,558	9,838	10,857
Kenai-Cook Inlet Total	24,430	28,588	33,469	37,770	41,607

<sup>1</sup>Employment given in parentheses includes direct and indirect employment (both onshore and offshore in the case of Sale CI).

Source: Alaska Consultants, 1979a, various tables.



TABLE 18  
 Allocation of Forecasted Population  
 Base Case  
 Kenai-Soldotna and Homer Areas  
 1980-2000

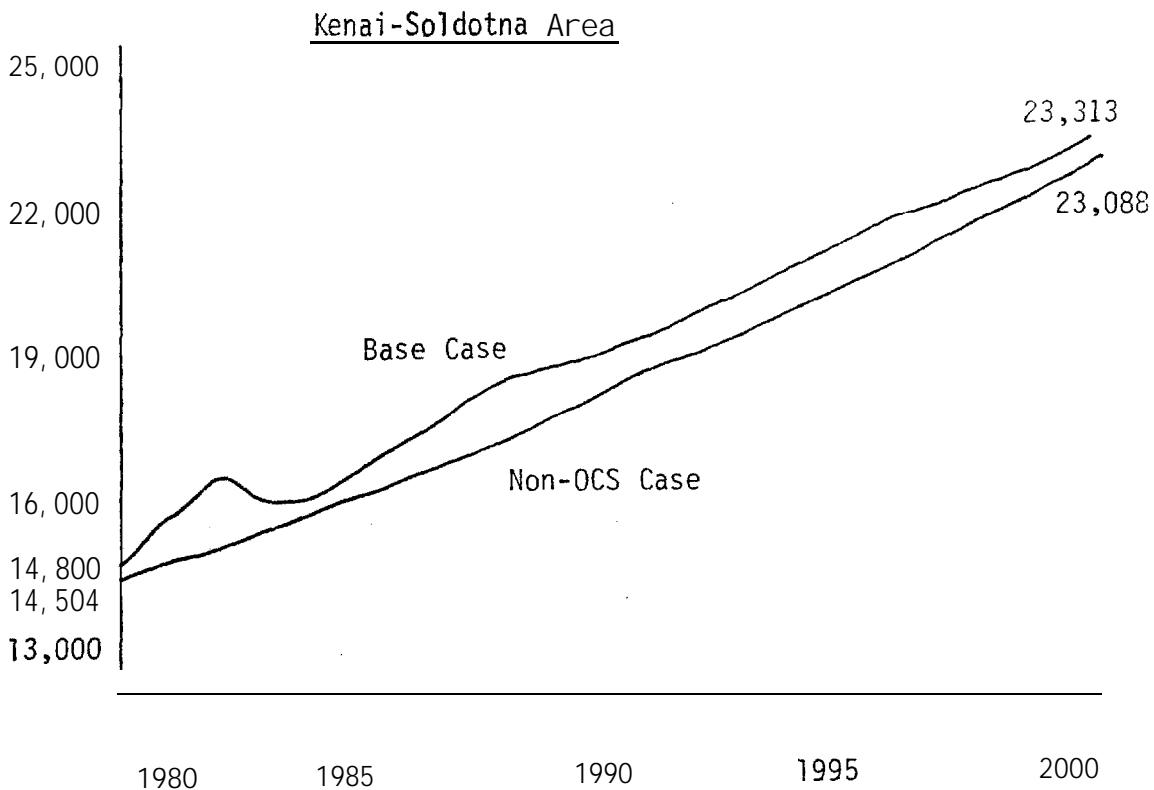
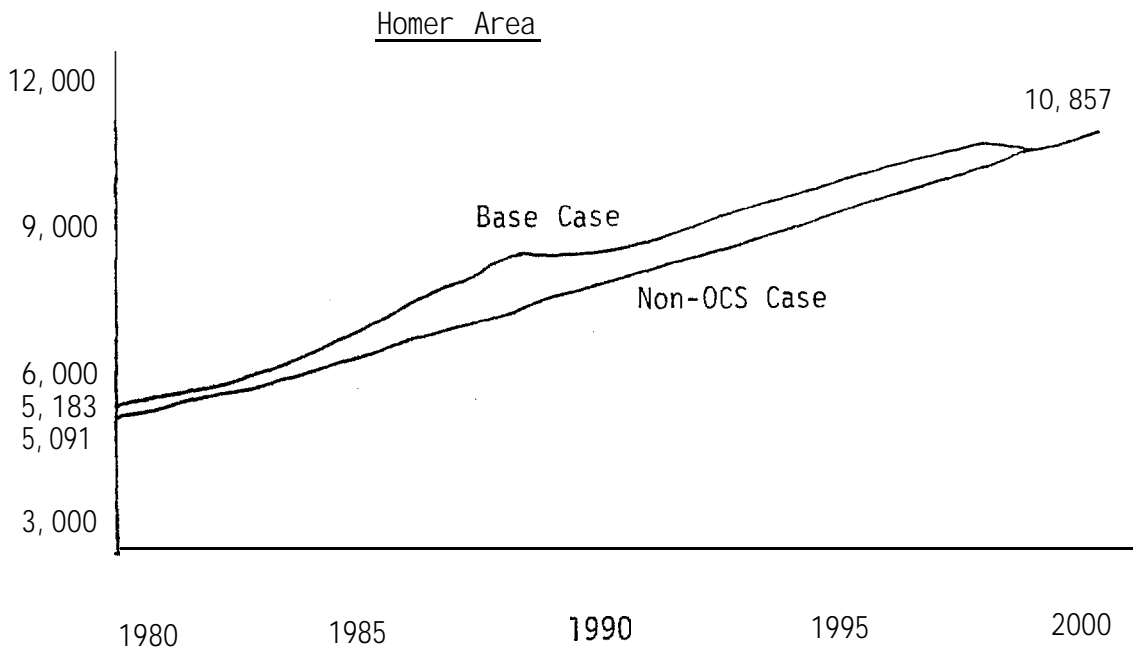
	1980	1985	1990	1995	2000
<b>Kenai-Soldotna Area</b>	14,800	16,864	19,217	21,425	23,313
Kenai	4,755	5,268	5,734	6,401	7,000
Soldotna	2,572	3,123	3,875	4,313	4,667
Remai nder	7,473	8,473	9,608	10,711	11,646
<b>Homer Area</b>	5,183	6,700	8,558	9,838	10,857
Homer	2,148	3,055	4,280	4,920	5,429
Remai nder	3,035	3,645	4,278	4,918	5,428

\*

Source: Alaska Consultants, 1979a.

FIGURE 3

Population Projection 1980-2000  
Non OCS and Base Case



areas in the non-OCS, Sale CI, North Kenai LNG, and Base Cases. The following points briefly outline the highlights of the employment forecasts which are relevant to the sociocultural projections:

#### Kenai-Soldotna Area

- Employment growth is expected to occur primarily in the distributive and support sectors, which supply goods and services to basic industries, visitors, fishing vessels, and offshore petroleum operations throughout the state. Growth in these sectors is projected to occur at about 3% per year (Alaska Consultants, 1979a, P. 260-261).
- Basic employment in the mining sector, which is almost totally related to the petroleum industry, is forecast to increase by only 1% per year.
- Basic employment in manufacturing is forecast to increase at 2% per year, largely in fish processing.
- Fisheries employment, related mainly to salmon fishing, is projected to increase at 1.5% per year in the Kenai-Soldotna area.

#### Homer Area

- Basic employment in the distributive and service sectors is assumed to increase more rapidly in the Homer area, where these sectors are less developed, than in the Kenai-Soldotna area.
- Basic employment in the manufacturing sector, primarily related to sea food processing, is forecast to increase at 5% per year from 1979 to 1990, and 3% per year from 1991 to 2000.
- Fisheries employment is assumed to follow this same pattern of growth.
- Basic non-OCS employment in the Homer area is projected to grow more rapidly (about 3.8% per year) than in the Kenai-Soldotna area, where the overall growth rate is projected to be roughly 2.4% per year (Alaska Consultants, 1979a, P. 266-267).

The following points briefly summarize the population forecasts which are relevant to the **sociocultural** projections:

- o The City of **Kenai** is forecast to experience the slowest growth of the three major cities in the study region; from 4,604 in 1979 to 7,000 by the year 2000. This would be a slow growth rate of approximately 2% per year.
- The City of **Soldotna's** population is expected to grow more rapidly, at about 3% per year. It would grow from 2,479 in 1979 to 4,667 in 2000.
- The City of Homer is expected to experience the greatest rate of growth as forecast in the Base Case. Homer is expected to increase from 2,087 in 1979 to 5,429 in 2000, for a growth rate of about 4.8% per year.
- The combined **Kenai-Soldotna** area, which includes the unincorporated areas around those cities, will continue to be the population center of the Kenai Peninsula. This combined area is projected to grow from about 14,167 in 1979 to 23,313 in 2000.
- The Homer area, which includes Homer and the unincorporated areas around the city, is projected to increase at a more "rapid" rate than the **Kenai-Soldotna** area in the Base Case, largely because of growth in fishing and Sale CI oil development. It is forecast to increase from about 5,373 in 1979 to 10,857 in 2000.
- The most significant increases in rates of population growth in the Homer area in the Base Case are projected to occur between 1984 and 1988 as a result of OCS activity associated with Sale CI.
- The **Kenai-Soldotna** area is projected to undergo a major population boom in the early 1980's in the Base Case, as a result of construction of an LNG facility. A minor increase in the rate of population growth is expected to occur between 1984 and 1988 as a result of Sale CI.

The sections which follow analyze how the **sociocultural** systems of Lower Cook Inlet are likely to change over the Base Case forecast period. The effects of the Base Case scenarios and projected socioeconomic changes upon the communities of Lower Cook Inlet are examined in terms of the impact categories described in the **sociocultural** baseline.

## PROJECTIONS OF SOCIOCULTURAL CHANGE

### Kenai-Soldotna Area

#### SOCIOCULTURAL IMPACT CATEGORIES

##### Economic Adaptations

Kenai-Soldotna area residents' economic adaptations in the Base Case are projected to continue to be shaped largely by the requirements of the oil and gas sector. "...Kenai's economic and population dynamics will remain tightly coupled to the fortunes of the oil and gas industry" (Alaska Consultants, 1979a, P. 77). Although the fishing, tourism, and government sectors of the regional economy will continue to grow, economic opportunities for residents of the Kenai-Soldotna area are expected to continue to be dependent, to a large extent, upon oil and gas development.

The socioeconomic changes projected to occur during the forecast period in the absence of OCS Sale 60 are assumed to continue to impose on the Kenai-Soldotna area the "... cycle of boom growth and faltering readjustment that it has repeatedly undergone in the past fifteen years" (Alaska Consultants, 1979a, P. 43). It is assumed that construction of a LNG plant near Kenai in the early 1980's will be accompanied by a boom construction period similar to previous booms in the area. As in the past, the high labor requirements of this brief intensive construction period will attract people to the region. High employment rates during construction of the LNG facility, large expenditures in the local area, as well as the anticipation of economic benefits to the area from OCS activity resulting from Sale CI will stimulate the local economy, particularly the trade, service, and real estate sectors.

Alaska Consultants (1979a, P. 304) assume that most LNG construction workers will live in camps on the site of the construction project and therefore would not be expected to contribute heavily to demands upon housing and local services. This assumption may not be extremely realistic however, in view of the history of recent construction projects in the Kenai-Soldotna area. As the baseline notes, past major construction projects have always attracted large numbers of workers and job-seekers to the Kenai-Soldotna area. Many of the workers who come into the area during the period when the LNG plant is assumed to be constructed may make homes, bring families, and remain in the area after construction ceases. The attraction of the Kenai-Soldotna area would be particularly great if the economy in the rest of Southcentral Alaska were to continue to stagnate.

This rapid population growth in the early 1980's could create high demands for housing, and contribute to real estate speculation and inflation. It could also fuel another period of overbuilding as people anticipate continuing boom conditions from OCS development in Lower Cook Inlet during the mid-1980's.

As construction on the LNG plant is completed, and phases into the production phase, there will be a loss of some 1,200 jobs between 1982 and 1984 (Alaska Consultants, 1979a, Table 109). Since the overall economy and population of the region will have increased by that time, the effects of this downswing in the local economy should not be as great as the loss of approximately this many jobs in the Kenai-Soldotna area in 1977-78 (see Baseline). Nevertheless, construction payrolls are likely to shrink, unemployment rates are likely to rise, and demands for local goods and services are likely to decrease, shrinking the profits of businesses which expanded during boom conditions.

The development stage of OCS activity in Lower Cook Inlet resulting from Sale CI is assumed to help take up some of this economic slack in the Kenai-Soldotna area beginning about 1985, as platforms and pipelines are constructed. Most of this activity would occur quite far from the Kenai-Soldotna area however, and would be unlikely to impact the area as much as OCS activity in Upper Cook Inlet did, largely because existing terminals and other facilities are expected to accommodate oil and gas production from this scenario (Alaska Consultants, 1979a, P. 275). OCS development in Lower Cook Inlet in the Ease Case is projected to promote steady, longer term growth in existing petroleum related services and industries in the Kenai-Soldotna area.

The boom conditions and growth promoted by LNG plant construction and OCS development are expected to be welcomed by a wide spectrum of the Kenai-Soldotna area population. Many residents of the region who have had to leave to find employment may be able to find work closer to home during this projected expansionary period. Residents who have been getting by on reduced incomes since the last local boom are likely to find higher paying jobs again. Local merchants and other businesses supplying goods and services both to industry and local residents will benefit from increased construction activity. Construction and oil workers and their families are likely to comprise a large proportion of the population of the Kenai-Soldotna area in the Base Case scenario.

The continuing growth of local government and businesses to support economic and population growth is also likely to continue to draw professionals and technical people to the area. Since these people will not be so directly tied to the oil and gas industry, they are less likely to be favorably inclined toward development and population growth in the area.

Overall, economic change and growth in the Kenai-Soldotna area over the next twenty years in the Base Case are expected to reinforce the dominance and importance of the oil and gas industry. The sociocultural systems of the area are expected to continue to adapt to cycles of intensive short-term construction projects followed by periods of gradual readjustment. The major adaptations to these economic cycles include an open loosely-knit society into which newcomers can easily fit; and adjustments to lower incomes and reduced economic opportunities during economic downswings which include "belt-tightening", out-migration to areas where jobs are available, or exploitation of unemployment compensation and" jobs created by state and local governments. The continual expectation and anticipation of better times just ahead,' which help keep people's hopes (and real estate prices) high, are also important aspects of these adaptations.

Quite different sociocultural changes can be expected in the Kenai-Soldotna area if the LNG plant is not constructed or if discoveries are not made on Sale CI tracts. Some of the businesses which overbuilt in anticipation of continuing high rates of economic growth are likely to fail if no major oil and gas related projects occur during the early 1980's. Population growth is likely to be much slower. General population growth in South-central Alaska, and the continuing involvement of local businesses with oil and gas development in other parts of the state could help to gradually reestablish an economic balance in the area.

The boom-bust syndrome in the Kenai-Soldotna area would be magnified if an LNG plant were constructed in the early 1980's but no discoveries were made on Sale CI tracts. In such a case employment in the exploration and devel -



opment phases of OCS activity would not be available to help smooth out the loss of 1,200 jobs as the LNG plant was completed.

If there are no major construction projects in the area during the 1980's, economic adaptations in the Kenai-Soldotna area are likely to become more diversified, with the oil and gas sector losing some of its dominance, and fishing, tourism, and government becoming relatively more significant. The redistributive functions of government employment and investment would become particularly important.

The Kenai Peninsula's environmental quality, and opportunities for semi-rural lifestyles would become relatively more important in attracting people to the region in the absence of major construction projects. This could tend to create a local society with more concern for environmental and natural values, particularly since larger proportions would be directly dependent upon these qualities for livelihoods in fishing and tourism.

#### Land and Environment

Demands for land will increase throughout the forecast period in the Kenai-Soldotna area, particularly in the cities. These areas are assumed to have sufficient land to meet the need for residential, commercial, and industrial expansion. Development over the next twenty years is likely to fill the large unused areas between the present scattered developed areas. Although there are natural and ownership constraints upon the development of land in the city of Kenai (Alaska Consultants, 1979a, P. 98-99) much land is available in Soldotna and outside the boundaries of either city.

The Kenai Peninsula is assumed to continue to play a major role as a playground for Anchorage residents throughout the forecast period. Recreational demands upon the lands and resources of the Peninsula are assumed to grow as the population of Southcentral Alaska grows.

Economic development in the Kenai-Soldotna area is also expected to increase pressure upon natural systems. Increasing development of private lands along rivers and wetlands is assumed to cause increased rates of pollution and siltation.

Heavy recreational use of the Kenai Peninsula is assumed to continue to focus on relatively small areas, including inaccessible clam beaches, the relatively few salmon streams, and the small number of state and local campgrounds. Unless major efforts are made to increase the number of access points and campgrounds, these places are likely to become increasingly crowded.

Increasing population in the Southcentral region will increase competition between recreational users, and is likely to lead to lowered quality of recreation on the Kenai Peninsula.

Sport fishing is projected to be particularly impacted by growing recreational demands and environmental deterioration. Accessible streams are likely to receive increasing fishing pressure. Heavy use of streams near the Kenai-Soldotna area by sport fishermen is likely to continue to result in destruction of salmon spawning areas, as will construction activities which cause erosion near streams. The Kenai Peninsula Borough could zone

such areas and control destructive uses, but it has so far shown few signs of doing so. As the effects of such uncontrolled development become apparent to people in the region political pressure to provide such protection may grow.

Increasing demands upon salmon resources from sport and commercial users, as well as the probability of habitat destruction resulting from population and economic growth are likely to result in continuing and growing disputes over the allocation of salmon. This will increase political pressures upon the Alaska Department of Fish and Game.

#### Small Town Social Relationships

Kenai and Soldotna will probably continue to shift from small-town to urban forms in the Base Case. Rapid growth induced by the LNG construction project will contribute to a fluctuating and transient population, lacking firm ties either within itself or between itself and the area. Continuing growth will make it unlikely that residents of the Kenai-Soldotna area will know many of their neighbors or develop a sense of community ties. The sprawling form of development will also contribute to reducing opportunities for communities to develop.

Since Kenai and Soldotna, and the areas around them will remain fairly small by American standards, and because so many people are likely to continue to live in semi-rural areas, many residents will continue to view these cities as small towns. Many people are likely to continue to be attracted to the area partly because of these small-town characteristics. Other residents, however, are likely to feel that the social quality of the community has

declined because of the impacts of boom type economic and population growth, such as traffic congestion along the major routes through Soldotna and Kenai during LNG facility construction. As the population of the area grows, more people are likely to become concerned about environmental and social issues.

As the Kenai-Soldotna area grows, more and more businesses owned by large outside investors are likely to replace locally owned businesses. A wider range of urban public services will be demanded and become economically feasible as the population and tax base of the area grows. Government will probably continue to grow and to become more professional, drawing more and more from people outside the local community. These changes are likely to contribute to the shift from personal, small-town contacts to more impersonal urban contacts, but more urban services and facilities will be available to residents of the area.

#### Politics and Response Capacity

Construction of an LNG facility, OCS development, and projected population growth in the Base Case will probably reinforce existing trends in the political systems of the Kenai-Soldotna area. Local political systems are assumed to continue to reflect predominant community attitudes and values by supporting industrial and oil development. The cities of Kenai and Soldotna, and the Kenai Peninsula Borough are therefore expected to actively promote the industrial potential of the region, and to lobby for legislation and regulations which favor oil and gas development.

The population growth and economic growth forecast for the Base Case will tend to reinforce these trends, since residents and new businesses, who are likely to come to the area primarily because of economic growth, are expected to support further economic development.

The industrial and population growth forecast for the Base Case will also probably continue to add to local government's difficulties in supplying public services and facilities. The cities of Kenai and Soldotna are likely to continue to be most hard pressed, since more services are demanded in the cities and much of the population growth will occur there.

The Kenai Peninsula Borough may not be under such immediate pressures, since it supplies more limited services and benefits from growth in the industrial tax base more than the cities do (see below). However, it is likely to continue to be the focus of oftentimes contradictory demands to promote and control development.

Borough planning and zoning functions will probably continue to be critical issues in the Kenai-Soldotna area. As noted in the section "Land and Environment", it is projected that pressures upon land and wildlife habitat, particularly waterways, will greatly increase. The borough, as the local planning authority and as a major land owner will be forced into dealing with problems of controlling land-use in these areas. As population and industrial growth occurs over the next twenty years in the Kenai-Soldotna area residents will desire more control over the future of their communities. They will probably continue to push the cities and borough into planning for and controlling further growth. As noted in the baseline,

this trend will also be encouraged by state and federal programs, such as Coastal Zone Management.

Construction of the projected LNG plant, construction activity resulting from OCS development, and accompanying commercial and residential development are likely to increase the tax base of the borough and the cities. Most of this increase is assumed to occur outside city boundaries, however, and therefore will accrue to the borough, rather than to the cities.

Alaska Consultants (1979a, Tables 89, 90) assume that the population of the Kenai-Soldotna area will be distributed evenly between the incorporated and unincorporated areas. While this was true in 1970, the population of the unincorporated areas of the borough have been increasing more rapidly than the cities of Kenai and Soldotna in the last decade. As described earlier in the baseline, this has brought about increasing demands for reapportionment of the Kenai Peninsula Borough assembly. For purposes of the Base Case, this study assumes that reapportionment occurs during the 1980's, and that representatives of areas outside the cities will probably be able to outvote city representatives.

As previously described in the baseline, trends in residential, commercial and industrial location are making it more difficult for the cities of Soldotna and Kenai to supply the services their residents demand. Kenai and Soldotna will probably continue to function in part as bedroom communities for employees of industrial plants in the Nikiski area. The cities are therefore likely to continue to receive many of the costs of industrial development, such as increasing demands for residential services, but few of the benefits, since most of the tax base will be located outside city boundaries.

Although cities have sought to share the burdens and benefits of industrial development and population growth more equally with the residents of areas outside their boundaries, the assumed allocation of political power in the 1980's make it unlikely that easy solutions to urban problems will be found. Therefore the cities are projected to have difficulty supplying the public services and facilities demanded by urban population growth.

The Kenai Peninsula Borough and the cities are assumed to continue existing policies of preparing for population growth. Planning for schools which can be added to as needed illustrates the borough's policy of contingency planning.

These policies are expected to help alleviate many of the problems associated with rapid, unanticipated growth. They may also contribute, however, to unrealistic expectations of an imminent economic boom, expectations which have contributed to overbuilding and inflation of land values in the area since the 1960's.

The rapid pace of subdivision activity and real estate speculation throughout the Kenai Peninsula will continue, and it will impose increasing burdens on the Kenai Borough planning department. This burden will probably continue to constrain other planning efforts by the borough.

Increasing demands for both community services, facilities, and regulations will continue to result from population and industrial growth in Kenai, Soldotna, Homer and Seldovia. But these demands are also likely to result in growing government costs and interference, which conflict with strongly held values of many residents.

The borough and the municipal governments of Kenai and Soldotna are, and will probably continue to be, constrained in their attempts to monitor and plan for change and supply services by the fiscal conservatism and strong distrust of government of a vocal segment of their constituents.

#### Social Health

The population increases forecast for the Kenai-Soldotna area may result in greater numbers of alcohol, mental health, and crime problems. These will place greater demands on perennially underfunded and understaffed counseling centers.

Some of these problems are related to economic conditions, and for these it is possible to make some projections of future conditions. Depression and anxiety frequently appear linked with unemployment, and are also associated with alcohol abuse. It is assumed that the incidence of these problems will decrease during construction of the assumed LNG plant near Kenai in the early 1,980's. Construction workers away from their homes and families are frequently heavy alcohol users, and therefore boom conditions may be accompanied by many alcohol related problems. The downswing in the economy which is assumed to occur after completion of the facility will be associated with an increase in the incidence of depression, anxiety, and alcoholism.

Similarly the incidence and types of crime will change during the different phases of the construction period. During construction of the LNG plant, and again when employment begins to stabilize during OCS development and production phases, there will be lower incidence of property crimes. Major



construction projects, such as the LNG facility, will be accompanied by an increased incidence of assaults and crimes against persons.

During the economic slump assumed to occur after construction of the LNG plant, property crimes will probably increase again.

### Homer Area

#### SOCIOCULTURAL IMPACT CATEGORIES

##### Economic Adaptations

The economic adaptations of Homer area residents are assumed to be affected by three major forces over the next twenty years in the Base Case. These include the continuation and intensification of the existing fisheries and tourist industry; the development of a **bottomfishing** industry; and the expansion of Homer's role as a service base for OCS exploration in Lower Cook Inlet.

The fishing adaptation is expected to grow in importance in Homer. The assumed increases in harvests in the traditional fisheries (Alaska Consultants, 1979a, P. 255), and the development of more support facilities, including a larger harbor and more processing plants, are expected to continue to make fishing an increasingly attractive living and way of life for Homer area residents.

In the Base Case scenario, the harvesting and processing of deep seas fisheries resources is assumed to take place over the next decade. Some

supply of bottomfish to offshore processing vessels by fishing boats based in the Homer area is also assumed to occur (Alaska Consultants, 1979a, P. 255). This is anticipated to create new fishing opportunities in the Homer area. The development of the proposed fisheries industrial park (see baseline) will make the area increasingly attractive to fishermen and processors.

Much of the increase in the number of fishermen in the Homer area in the recent past has been in small, individual ventures with little capital. The lack of experience and knowledge about bottomfishing among Alaskan fishermen as well as the need to travel longer distances make it likely that larger, more highly capitalized boats will be involved in developing the new fishery. There are a number of fishermen in the Homer area who could convert existing equipment and take part in bottomfishing, but development of the fishery is assumed to take place slowly.

An increase in the number of species harvested and processed in the Homer area and the assumed improvements in fisheries management will result in more economic stability in the Homer area. The seasonality of fishing employment will be reduced somewhat, and the predictability of harvests and returns increased. This will reinforce the importance of fishing in the economic adaptations of Homer.

The Homer area is also forecast to play an important role in attracting and accommodating visitor traffic. As the southcentral region's population grows and additional public and private recreational and visitor facilities are developed, it is assumed that the value of recreational and tourism

related commerce in the Homer area will greatly expand (Alaska Consultants, 1979a, P. 172). This industry will probably remain fairly seasonal, but will continue to provide niches for small, family owned businesses.

Recreation and tourism, as well as the seasonal economy and natural beauty of the area, will continue to support the development of arts and crafts in the Homer area.

The Base Case scenario for the Homer area includes the use of the area as a service base for oil and gas activity in Lower Cook Inlet resulting from OCS Sale CI. Homer is already undergoing some of the initial stages of OCS exploration. In the Base Case, this activity slowly intensifies during the 1980's.

The major involvement of Homer in OCS oil and gas development assumed in the Base Case scenario (see Table 15) is reflected in major increases in employment and population in the Homer area (Table 17). OCS activity resulting from Sale CI is projected to cause particularly rapid growth in Homer's population during the second half of the 1980's.

OCS related employment in the Homer area will support the expansion of existing businesses presently limited by the seasonal economy and lightly populated service area. It will also encourage new businesses. This will provide a wider range of goods and services, as well as additional employment opportunities for local residents. OCS activity and anticipation of further fishery and tourism related growth are likely to lead to some overbuilding of businesses.

The owners of some of the existing businesses in the Homer area, particularly small ones oriented primarily toward recreationists such as gift shops, fishing charters, and others dependent upon the scenery and natural beauty of the Homer area are likely to feel threatened by industrial growth or change which decreases recreational quality. Heavy highway or boat traffic resulting from construction demands, for example could affect their businesses. Oil spills or disruption of fishing streams would be particularly threatening to these people.

It is assumed for purposes of this scenario that the use of Homer as a service base, and the increasing rates of marine traffic and demands upon the limited land area of the Homer Spit which this implies will increase competition for fishing space and port facilities. This is expected to lead to greater costs for fishermen and fish processors in the Homer area through gear losses, loss of time in docking and offloading fish, and increasing land prices and taxes. Oil development is expected to continue to be viewed as a threat to the livelihoods of commercial fishermen by many residents of the Homer area.

The growing range of economic opportunities assumed to result from fishing, tourism and oil exploration in the Base Case are projected to continue to help maintain the **sociocultural** diversity of the Homer area.

#### Land and Environment

Population growth and economic development in the Homer area are projected to create significant impacts upon residents' relationships to the land and natural environment in the Base Case. Although there is considerable

Land available for residential and commercial expansion in the Homer area there are significant soil and drainage limitations which will increase the costs of development.

It is assumed that the city of Homer will be able to arrive at technical and administrative solutions to soil and drainage problems within its boundaries. Although these will raise the costs of development, there will be plenty of land available. An exception to this general availability of developable land in the Homer area is the obvious lack of usable waterfront land. The Homer Spit will continue to increase in value for recreation and industrial uses.

The greatest impacts of change in the Base Case are likely to focus on the Homer Spit. Fisheries and tourism development are likely to result in major changes to the physical qualities of the Spit, particularly where large areas are excavated or filled. Many residents are likely to view these changes as reducing environmental quality.

Most residents, however, are likely to continue to prefer to see the Spit used for supporting fisheries and tourism than OCS activities. The increasing levels of OCS activity in the Homer area assumed in the Base Case will probably continue to lead to social and political conflict in the Homer area over industrial uses of the Spit. Residents of the Homer area are likely to continue to regard OCS activity as a threat to the marine resources and environmental quality which they value so highly.

Increasing numbers of residents and recreational visitors will probably continue to create increasing competition for moose, salmon, and other

resources valued by residents of the Homer area. Not only will residents' opportunities to harvest these resources for sport or subsistence be reduced, but residential and commercial expansion are likely to gradually result in the loss of wildlife habitat.

### Small Town Social Relationships

Homer and the Homer area are forecast to have more than two and a half times as many people in twenty years than they do now (Alaska Consultants, 1979a, Tables 87, 114). This growth is projected to occur at rates near, or less than recent rates of growth over most of the forecast period, and will be based largely upon economic activities which are valued by residents of the region. Therefore population growth in itself should not be extremely disruptive to the community, since it is assumed that steady rates of population growth based upon traditional resources will not conflict with present residents' values.

During the late exploration and early development phases of OCS development in Lower Cook Inlet, however, the population of Homer is projected to increase more rapidly. In the mid-1980's population growth of 9-12% per year associated with construction of offshore platforms and an onshore pipeline north from the Anchor Point area is likely to strain the small-town character of Homer. As the pace of development in this area picks up it will become less likely that people will know any of their neighbors.

The population of the Homer area is expected to stay much smaller than that of the Kenai-Soldotna area, however, and should retain the diversity and distinctive small businesses that give it much of the small town flavor

valued by present residents and visitors. Nevertheless, impersonal market relationships are likely to continue to replace personal relationships and reciprocity.

Population and economic growth in Homer and its hinterland will increasingly reach the thresholds at which it will become profitable for larger businesses, including chain stores and services, to establish in the area. Stores like Kentucky Fried Chicken, Taco Hut, and Carrs are likely to compete with locally owned businesses. They will provide more selection of goods, but may reduce local color and local distinctiveness. They could also contribute to the decrease in personal service and business relationships.

The rapid rates of growth, particularly when they are coupled with major physical changes such as reconstruction of roads, construction of the projected onshore pipeline, or other evidence of major changes caused by OCS activity, will be perceived as drastically lowering the quality of life in Homer by long term residents and more recent residents alike.

#### Politics and Response Capacity

Fisheries development and OCS activity projected to occur in the Base Case are likely to continue to confront the City of Homer with increasing problems of growth management. City government will probably continue to expand to meet the demands of a growing population.

It is assumed that the City of Homer and the Kenai Peninsula Borough will continue to gain management experience over the forecast period, and that

they will also continue to be successful in obtaining grants from the state and federal governments. This should enable them to successfully cope with the moderate rates of growth projected in the Base Case. Only during the short period of rapid growth (9-12% increases in population per year) projected for the mid-1980's by Alaska Consultants (1979a) is this capacity to provide services and facilities likely to be strained.

The political systems of the Homer area are assumed to continue to reflect predominant community values by supporting fisheries development. Increasing demands for the limited land area of the Homer Spit arising from OCS related development, are likely to continue to set off periodic conflict over environmental and social quality in the Homer area, however. The City Council and administration of Homer are assumed to continue their ambivalent attitudes toward the industrial use of the Spit. They are assumed to favor fisheries development most of the time, but to encourage other uses. For example, boats servicing offshore rigs are likely to be encouraged to use the new city dock which will probably be constructed in the early 1980's.

Although several hundred people associated with OCS activity are projected to move into the Homer area over the forecast period, it is assumed that population movement into Homer will continue to be based largely upon the attractions of the beauty of the area and the small town character of Homer. It is unlikely that the high value placed on the quality of the natural environment and small town atmosphere will shift toward interest in development at any cost.

There is likely to be conflict within the community of Homer over the



increasing use of the Spit for OCS support which is projected to occur in the Ease Case. As noted above, use of the area as a service base is assumed to result in major increases in traffic onto the already crowded Spit, and in increases in marine traffic around the congested dock and harbor. These changes are likely to be viewed as threats to commercial fishing by many Homer residents, and are likely to be opposed wherever possible.

Murphy's law makes it likely that at least one highly visible petroleum related pollution incident will occur near Homer during the height of the assumed OCS development in Lower Cook Inlet. This will provide a focal point for environmentalists' and fishermen's protests against oil activity in the area.

The high value placed on commercial fishing by residents of the area, as well as the history of opposition to industrial uses of the Spit make it likely that the city will restrict the use of the Spit by oil-related industries. The city dock will probably continue to be available for use by supply boats, which will be able to get water and other light supplies loaded, but it is unlikely that storage facilities will be developed on the Spit. This may constrain the use of the Homer area as a supply base in the Base Case.

#### Social Health

Fisheries developments in the Homer area, the general prosperity of the area, and its beauty and diversity are assumed to continue to attract transients looking for work and congenial surroundings. They may continue to contribute to a high incidence of social problems, particularly in the summer.

The increasing stability of Homer's economy is likely to reduce some of the **economic** stresses which contribute to alcohol and mental health **problems**. For many longer term residents these problems should decrease in importance.

The incidence of juvenile problems is likely to increase through the forecast period in the Homer area as the community remains generally tolerant of alcohol and drug use and permissive with children. The transition from a small town to a more urban form may also contribute to this trend.

#### Smaller Coastal Fishing Communities

Several factors contribute to the uncertainty of the Base Case for the smaller coastal communities. First, as explained earlier, the Base Case in Lower Cook Inlet, instead of representing a non-OCS case, includes both a major LNG facility near Kenai and an oil scenario (Same CI) equivalent to a high find for Lease Sale 60. Neither of these activities have met with much success to date. Therefore, the reader will not be presented with a non-OCS case for Lower Cook Inlet. Second, the analysis prepared by Alaska Consultants (1979a, b, and c) deals only with the Kenai-Soldotna area and the City of Homer. Neither the baseline nor the Base Case and OCS forecasts from Alaska Consultants contain any information about the smaller coastal communities. Consequently, no employment or population projections are available for these communities.

Because of these limitations, the Base Case for the smaller coastal com-

communities cannot deal quantitatively with population and employment figures. Instead, the Base Case is developed by using the general trends forecast for the **non-OCS** economic sectors in the **Kenai-Cook Inlet** area as a whole developed by Alaska Consultants (summarized on P. 305-08 in this report) and the sum of the **non-OCS** population forecast and the forecasts for **OCS** Sale CI and the North **Kenai** LNG facility (see Table 17). Since the population figures provided by Alaska Consultants are not broken down by community, the Base Case for the smaller coastal communities will make forecasts in terms of general growth in the Cook Inlet region. Because of the lack of socioeconomic projections for the smaller coastal communities, the following forecasts are very tenuous.

Before analyzing how the **sociocultural** systems of the smaller coastal communities are likely to change over the Base Case forecast period, some general observations regarding the population in these communities may prove helpful. Based on Alaska Consultant's forecasts in the economic sector (growth in fisheries, tourism, recreation, and government expenditures), the populations of the smaller coastal communities seem likely to steadily increase. There is nothing to indicate that the five communities will cease to grow. In fact, the economic forecasts for the region will tend to enhance growth in these communities.

Increased tourism and recreation will tend to add population growth in **Ninilchik** and **Seldovia**. A desire for a rural life, a recreational cabin, and a real estate investment will continue to keep the demand for land, especially in **Seldovia**, high. Once people acquire the recreation or speculation property, and if the employment situation improves as fore-

tasted, the tendency may be to move to the communities on a permanent basis. Growth in fishing and seafood processing will serve to encourage population growth in all of **the** smaller coastal communities. Both in-migration and natural increases will contribute to this growth.

In the predominantly Native communities of English Bay, Port Graham, and **Tyonek**, youth will probably continue to have a problem finding employment locally after they complete their schooling. Though some may tend to move away from the village to seek employment, many stabilizing factors **will** serve to make the villages' population viable. These include recent decisions to add high school **education** in the villages and to extend other public **ser-**vices to them. For many Native youth, the village represents the link to their family and cultural heritage and a place to return to if urban **pres-**ures become too great. The village is also the permanent home for many Natives who are too old, unable, or simply **will not** adapt to more urban ways. Villagers also have an interest in surrounding **lands** based both on traditional use and occupancy and new, legal ownership through the village corporations, both of which add incentive to remain in the village. Finally, the villages represent a lifestyle which many Natives prefer.

#### SOCIOCULTURAL IMPACT CATEGORIES

##### Economic Adaptations

The economic forecasts **prov**ided by Alaska Consultants (1979a) **include** growth in the petroleum industry, fishing and seafood processing, tourism, recreation and government expenditures. Logging and wood products are assumed to

remain at current levels throughout the forecast period. Except for the expansion of Homer's role as a service base for OCS activities in Lower Cook Inlet, onshore growth associated with the petroleum industry is assumed to remain predominantly in the **Kenai-Soldotna** area. The existing infrastructure is located there, and as **the** Upper Cook Inlet fields decline, people should become **available** for jobs related to OCS Sale CI.

Fishing and sea food processing will probably continue as the main industry in the study communities. Increased yields in the traditional fisheries and the successful development of **bottomfishing** as forecasted by Alaska Consultants may result in more employment in some of the smaller coastal communities. Successful entry into **bottomfishing** is also forecast to **result** in more year-round operation with a more stable, resident labor force in the fishing and fish processing sector (Alaska Consultants, 1979a). Though this may be true in Homer, it seems that port and harbor development is a very important element in the bottomfish industry. **Without** adequate ports and harbors, there is no place to land the product and stage vessels. As discussed in the baseline (P. 273-4), many of the **smaller** coastal communities have inadequate port and harbor facilities. Possibly **Seldovia** could expand into the bottomfishery, but it seems unlikely that the other communities would do so. Thus, with the possible exception of **Seldovia**, employment in these communities will probably remain highly seasonal. Based on increased yields in the traditional fisheries, the employment opportunities in the smaller coastal communities, through seasonal, could increase. **Winter** unemployment is likely to continue to be a problem in most of these communities.

With the possible exception of Ninilchik, residents of the smaller coastal communities are likely to see little, if any, employment benefits from oil development in Lower Cook Inlet. As explained above, as the Upper Cook Inlet fields decline, trained personnel in the Kenai area will become available for jobs associated with OCS Sale CI. Also, many Natives lack the training and skills to successfully compete in the white job market, and, as explained in the baseline, full-time permanent employment often conflicts with both fishing and the casual, day to day subsistence lifestyle. Even after one has acquired the necessary training, it is not easy to secure employment. As one villager commented,

Mostly when people apply for jobs elsewhere, they want skilled workers. That is the reason for the C.E.T.A. money in the villages for training. Then, when people get training, the employers want a couple of years of experience. We cannot win.

If the logging industry remains at current levels and does not grow as forecasted, it may have negative effects on the smaller coastal communities. At five of the Native village corporations are involved in the timber industry, either in negotiations or timber operations. The failure of this sector to grow would reduce potential income and employment opportunities to village corporation stockholders.

Growth of government employment and expenditures in the forecast period will tend to enforce the existing trend toward government dependency in many of the communities. Increased costs of food, fuel, and power will serve to heighten villagers' need for cash, which may tend to increase the dependence on outside funding in the smaller villages. As the villages continue to become increasingly dependent on money, government programs seem likely to continue to provide some economic stability in the communities. This will

be especially true if anything happens to the salmon fishery.

The increase in offshore petroleum activities, deep sea fishing, recreational boating, and fixed wing and helicopter traffic resulting from offshore development and general economic and population growth is forecasted to result in increased basic federal and state employment in the area. With more governmental employees, additional rules and regulations are likely to occur. These restrictions may affect local access to subsistence resources, and consequently will be viewed with disfavor by many villagers.

The increases forecasted in general population and tourism and recreation on the Kenai Peninsula are likely to conflict with villagers' subsistence practices. As discussed in the baseline, subsistence has both economic and cultural significance throughout the region. Potential degradation of the natural environment by oil and gas activities or more rigid regulations caused by population increases due to growing competition among user groups will not only reduce economic opportunity, but also disrupt traditional behavior and values based on years of salmon and other resource use. As subsistence activities are economic and cultural in nature and not recreational, villagers are likely to argue that they have a preferential right to food resources over outside sport hunters and fishermen.

Subsistence is and will continue to be an essential part of the sociocultural systems of English Bay, Port Graham, and Tyonek, and to a lesser extent to Seldovia and Ninilchik. This is based on a long tradition of nutritional, cultural, and economic dependence on local, natural food resources. The suc-

cess of subsistence pursuits depends on the availability of resources, which can be retarded by competition for the resources and increased governmental regulations and restrictions on access to these resources. Both of these conditions are forecasted. Population increases in the Anchorage area and on the **Kenai** Peninsula **will** be reflected in additional **recreationists** around the smaller coastal communities. Thus, competition **will** result between the local villagers and outsider user groups. Additional people seem **to** result in increased governmental regulations, which will probably restrict local access to food resources. This could have negative effects on some of the communities, for as the villages grow, increased subsistence use may occur. Therefore, at a time when villagers may be using additional subsistence foods, increased competition and governmental regulations may restrict local use. Increased costs of processed foods (both **in** food prices and transportation costs) may make their purchase less desirable. Therefore, subsistence use of **local** resources **will** grow as **villagers** attempt to overcome cash shortages.

The use of Homer as a service base for **oil** and gas activity in Lower Cook Inlet resulting from OCS Sale **CI** **will** result in increased boat traffic in the area. Many fishermen (both commercial and subsistence) on the southern **Kenai** Peninsula **will** view this oil development as a threat to their livelihood. In addition, the growth of oil related activities in Homer may be viewed as a slow encroachment toward their communities by some residents of Port Graham, English Bay, and **Seldovia**. Increased **oil** activity around Homer is expected to result in additional inflation in the area, which will affect residents in the smaller communities who shop in Homer.



## Politics and Response Capacity

Population growth in the Kenai-Soldotna area and the Homer area is expected to allow the Kenai Peninsula Borough to continue to represent the cities and not the smaller coastal communities. In addition, oil and gas development in Lower Cook Inlet associated with Sale CI will tend to widen the gap between the villages and the borough. The borough will benefit from the enlarged tax base provided by oil and gas development, and generally, the villages will continue to view the oil industry as a threat to their livelihood and way of life.

The Native regional corporations, CIRI and CNI, are assumed to continue to desire to participate in the economic opportunity oil development brings to the Cook Inlet region. Since the regional corporations do not want a direct conflict with the villages in their area, they might possibly first seek oil and gas exploration on region lands located away from the villages. Thus, they would not be involved with the oil industry in developments near villages which may choose to remain unaffected by oil and gas development. Also, the regional corporations would not be associated with OCS development and the potential effects on the marine environment upon which many of their stockholders depend. It is assumed that any negotiations between the oil industry and the regional corporations will include Native hire clauses. If Native residents receive such direct benefits, possibly negative attitudes toward oil and gas development may soften; as long as the development takes place away from their communities.

English Bay, Port Graham, Ninilchik, and Tyonek will probably remain unincorporated. If they incorporate, there is a fear in some of these communities

that non-Natives will gradually take control of the village and begin to run it like a city. Since they do not incorporate, these communities will have to give their 1,280 acres municipal expansion lands to the state in trust. This is not viewed as a poor decision because the state manages these lands for the benefit of the villages.

The traditional village councils in Port Graham, English Bay, and Tyonek will probably continue to persist. Port Graham and English Bay may decide to incorporate as IRA communities in order to maintain Native control of their communities (see baseline). Faced with the population growth on the **Kenai** Peninsula and the increased tourism and recreation as forecasted by Alaska Consultants, the local governments in some of the communities (English Bay and **Tyonek** in particular) will probably try to keep outside visitors to their village to a **minimum**.

The political systems of the smaller coastal communities are assumed to continue to reflect predominant community values by supporting fisheries development and local subsistence use of resources.

The predominantly Native villages are expected to desire to maintain their independence from the regional profit corporations and the **Kenai** Peninsula Borough. **Unless** these regional organizations provide some additional services in the future, villagers will probably continue to feel they have little concern for the smaller communities. A desire for autonomy over local affairs will probably continue. Possibly, we may **even** see a shift towards individual villages seeking funds for services **directly** from the government and not going through the regional non-profit corporations.

## Land and Environment

As the population in the Anchorage area and on the Kenai Peninsula grows, recreational demands on land and resources of the Kenai Peninsula will increase. Present use levels at public facilities on the Kenai Peninsula are already high, and **recreationists** may tend to go further from the customary spots in search of wilderness experiences. As they do so, the chance that they will encroach on Native lands increases. Disputes between user groups **will** continue, especially over salmon.

Both the regional and village corporations are expected, where possible, to engage in commercial ventures on their lands. Because of stockholders' apprehension regarding the effects of industrial development on village life, these corporations may tend to locate any development away from the communities. But, it seems that since village corporations' hopes of success depend on their land base, development on these lands may prove essential. This may become increasingly true as Native lands begin to become subject to borough taxes.

Most of the smaller coastal communities **will** probably **place** their 1,280 acre 14(c)(3) **lands** in trust to the state, which can in turn lease or sell them for the benefit of residents. Disposal and management of these lands are subject to local councils' approval. Therefore, local residents will maintain control of municipal expansion lands. In addition, it is expected that D-2 legislation will finally pass, and it will then be possible for the municipal expansion lands to come from within the Native townsites. Therefore, residents **will** be in control of lands within their

community, and they are expected to administer these lands within the framework of local values.

In the predominantly Native villages, local values will probably include a desire to keep non-Native in-migration to a minimum. Land control could be one means to accomplish this goal. Possibly, IRA communities may gain control of village lands and therefore expedite this end. English Bay, Port Graham, and Tyonek are expected to consider this possibility. Tax exempt status of IRA lands will add incentive for this possibility.

As land use in all of the smaller coastal communities is oriented towards the water, residents are expected to view OCS development with apprehension and concern for the natural environment. The dependence on marine resources (both commercial and subsistence) puts all of the communities in a vulnerable position with regards to potential industrial accidents which could harm the marine environment. A "spill" or "blowout" in Cook Inlet would probably be disastrous, economically, culturally, and socially, to residents of the smaller coastal communities. Though general growth may account for many of the Base Case forecasts, this is one variable that is peculiar to oil development. When many villagers weigh this risk against the minimum benefits they foresee from oil development, they oppose oil and gas development off of their coasts.

#### Small Town/Village Social Relationships

The extended family and kinship network described in the baseline is a major integrating force that binds village residents together and provides

meaning to village life. Throughout the forecast period, residents' strong bond to their village, friends, relatives, and commercial and subsistence fishing activities **will** probably persist in the predominantly Native communities, and among the Native populations in the other communities. **Anything** that serves to weaken family relations will tend to disrupt valued village life.

Among the Native population, subsistence activities and sharing is one of the components that **links** the extended family together. **Population** growth, caused by both OCS activities and general **non-OCS** increases, will probably result in interference with local subsistence activities. In Lower Cook **Inlet**, population growth will likely result in increased competition for resources and additional governmental regulations which constrict access to those resources. These conditions will more than likely hinder local subsistence practices. As a result, family relations may be weakened.

As noted in the baseline, the extended family and kinship network is the basic focus of the social and economic organization in the Native communities. Family bonds are strengthened by patterns of sharing and cooperative hunting and fishing. Interference with subsistence activities may result in a disruption of family relations because decreased subsistence activities reduces the need for cooperative action. With **less** subsistence foods available, sharing among family members declines. This **could** lead to a weakening of family bonds. Thus, one of the main components which provided identity and meaning to village life would be disrupted.

Villagers' needs for increasing amounts of cash related to general inflationary conditions and economic impacts related to OCS development may cause the disintegration of the traditional extended family structure. For example, in a growing cash economy, it becomes more and more expensive to care for elders, who are traditionally treated with great respect and honor. Whereas in a subsistence economy, more people to provide for generally means more fish or game are required, in a cash economy, additional money is necessary. The money is not always readily available. As the extended family network is paramount to traditional village life, disruptions to it could have significant impacts. Thus, even though villagers require increasing amounts of cash for heat, power, and some foods, easy access to plentiful subsistence resources appears essential for the maintenance of the extended family village lifestyle. Also, it is usually the elders in a village who are most fond of traditional foods. The disappearance of these foods from the family diet would certainly be viewed as a tragic occurrence by villagers.

The increasing population forecast for the Cook Inlet area, including that associated with OCS development, will seemingly result in additional competition over resources between local residents in the smaller coastal communities and outside sport hunters and fishermen. As most of the newcomers are likely to be non-Natives, disputes between user groups may be manifested as interethnic conflicts. In communities where residents desire to retain the Native identity of their village, and their peaceful, family-oriented way of life, intrusions by outsiders may further strain interethnic relations. Population growth on the Kenai Peninsula increases the probability of these occurrences.

In addition to family relations, the church is **expected** to continue to play a strong social role in the smaller coastal communities. The Russian Orthodox Church will more than likely remain strong in many of these communities and help maintain a valuable continuity with the past for many residents.

In **Seldovia** and **Ninilchik**, **interethnic** relationships may be strained in a different manner than those in the predominantly Native villages. In these two communities, the village Native corporations may be more development oriented than more environmentally concerned non-Natives. In some cases, Natives who favor more traditional, subsistence oriented lifestyles could align themselves with the non-Native environmentalists.

In **Seldovia**, projected growth associated with both traditional fisheries and **bottomfishing** and recreational activities will attract many new people. Both land speculation and shortages will probably combine to encourage real estate prices to rise. Also, OCS activities and growth in the Homer area will probably tend to add to **Seldovia's** population. As land values rise, many long time local businesses may sell out to outside investors. As this occurs, the community may slowly lose much of its small town qualities. This potential shift from a small town to a more urban form will presumably be well received by some residents and **disliked** by others, as **Seldovia** will **likely** continue to be comprised of different social groups.

As Homer assumes its projected role as a support base for OCS activities, the residents of the communities on the southern **Kenai** Peninsula may tend to associate these events with a general lowering of the quality of life

in the Lower Cook Inlet area. Potential negative effects on fishing, pollution of the environment, and rapid population increases will be constant reminders of the presence of the oil industry in the region.

### Social Health

Since Homer is forecasted to receive the greatest growth in the area (Alaska Consultants, 1979a), pressures associated with population growth will probably be greatest on the southern communities. As oil activities increase in the Homer area, many residents of Port Graham, English Bay, and Seldovia are likely to become increasingly concerned about environmental and social issues. Apprehension about oil development and the potential erosion of customary community life may lead to increased stress within the communities. In addition, population increases and the influx of non-Natives in the area may tend to increase personal anxiety among Native residents if they fear that they may become a minority in their communities.

Since increased contact with outsiders in the past few years apparently exacerbated alcohol and drug abuse in the villages, population increases forecasted in the Base Case are expected to intensify this condition. Often, migrant workers may be a source of drugs and alcohol. Because of the seriousness of the alcohol and drug problems, it is anticipated that the communities will cooperate and take measures to combat them. Alcoholism programs will probably increase in the communities.

Increasing numbers of visitors and new residents in the area associated



with both general population growth and oil and gas activities, will more than likely create stress in the smaller coastal communities. As most of the residents value the small town qualities of these communities, they will probably view with apprehension the population increases projected for the forecast period.

Generally, it is not anticipated that crime problems will greatly increase in the smaller communities. The attitude in the Native communities of keeping the villages predominantly Native may tend to discourage non-Natives from settling, so **interethnic** crimes may remain minimal. Maybe **Seldovia** will experience an increase in burglaries and vandalism as its population increases and more tourists visit the community.

The non-profit corporations are expected to continue to administer programs that funnel money, services, and jobs into the smaller coastal communities. Depending on funding levels, the health and social service programs could play an important role in mitigating the effects of social change in these communities. But, social service programs may be constrained by reduced funding levels in the 1980's in relation to the high program expenditures of the 1970's. Also, **the success** of service programs may decline if the villages attempt to circumvent the regional non-profit corporations and deal directly with the government on a community by community basis. Subdividing services into smaller and smaller units decreases management efficiencies and increases the risks of failure (**Gorsuch**, 1979, P. 145).

The continuation of Native language and culture programs **should** help to

strengthen traditional Native identities consistent with community values.

Negative attitudes toward **transient**, non-Native **employees** and oil and gas development activities will probably heighten if 1) **local** Natives do not feel they are benefiting from the development, and 2) if they perceive the development as interfering with marine commercial and subsistence activities.

## v. EXPLORATION ONLY SCENARIO

### DESCRIPTION OF THE SCENARIO

The Exploration Only Scenario is distinguished by very low levels of OCS activity or impact. This scenario assumes that no commercial oil or gas resources are discovered as a result of Sale 60. Industry interest in the Sale is high and activity is principally centered on Shelikof Strait. A number of promising "shows" attracts considerable exploration activity, but only small non-commercial deposits are found. Exploration ends three years after the lease sale is held. A total of 19 wells are assumed to have been drilled during these three years (Dames and Moore, 1979, P. 63).

The principal exploration support base for Sale 60 is assumed to be Nikiški, which will be used for the storage and transshipment of tubular goods, bulk materials, drilling tools and fuel. Homer is also assumed to play a significant role as a support base, supplying rigs and boats in Lower Cook Inlet and Shelikof Strait with fuel, water, mud, cement, food, and other cargo. Helicopters are expected to continue to operate from the Homer airport, transporting personnel and light freight to offshore rigs (Dames and Moore, 1979, P. 65; Alaska Consultants, 1979c, P. 12-13).

### SUMMARY OF SOCIOECONOMIC PROJECTIONS

The Exploration Only Scenario is projected to result in insignificant increases in employment and population in the communities of the Lower Cook Inlet study area (see Figure 4 and Tables 19 and 20). Exploration activity commences in 1982, peaks in 1983, and then declines in 1984.

FIGURE 4

Population Projections 1980-2000  
Base Case and Exploration Only Scenario

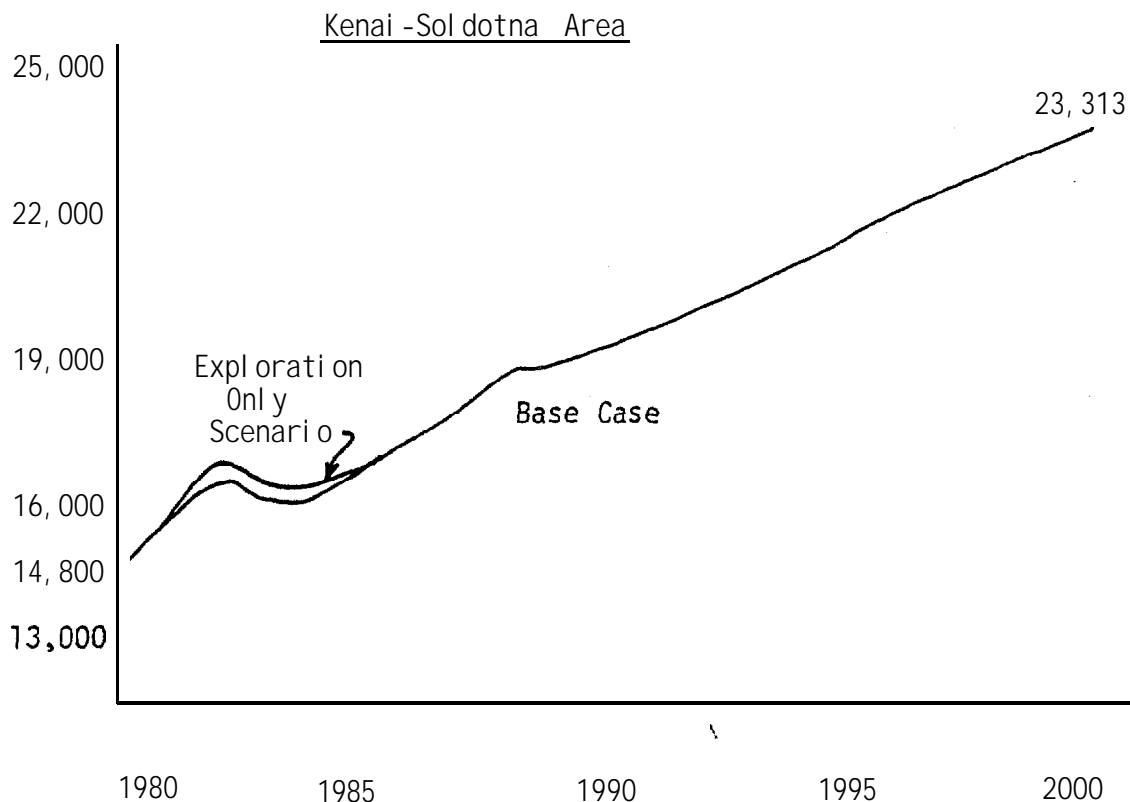
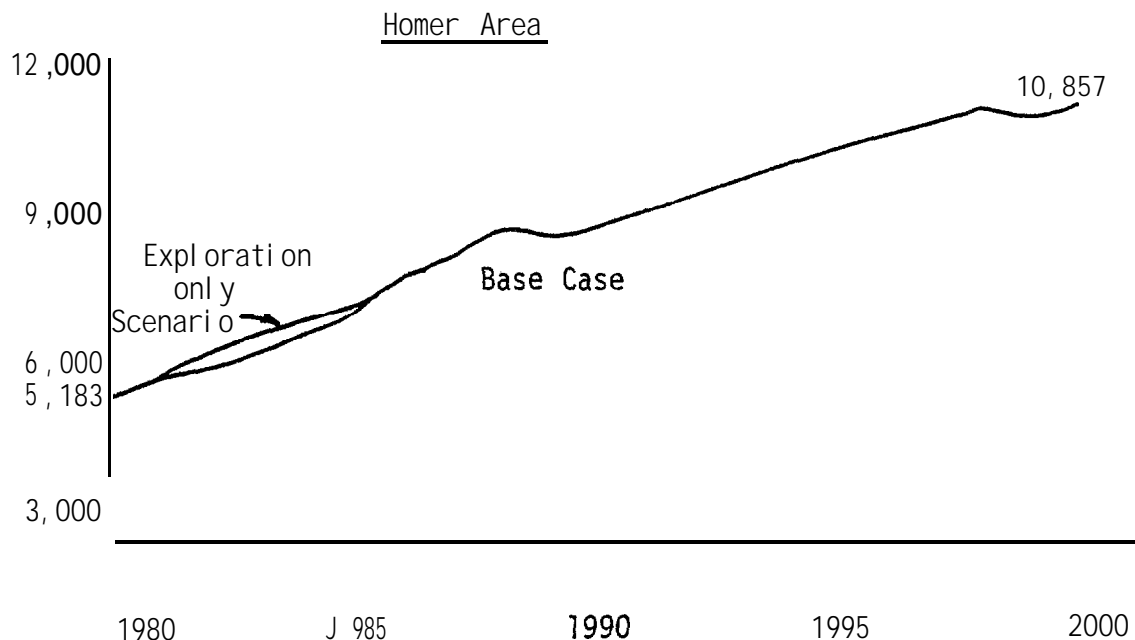


TABLE 19

Forecast of Employment<sup>1</sup> and Population  
 Added by Exploration Only Scenario  
 Lower Cook Inlet

1982 - 2000

	1982	1983	1984	1985-2000
<b>Kenai-Soldotna Area</b>	(68)	(89 )	(20)	0
	170	222	50	0
<b>Homer Area</b>	(72)	(99)	(19)	0
	180	247	48	0

1. Employment in parentheses

Source: Alaska Consultants, 1979c.

TABLE 20

Allocation of Forecasted Population  
Exploration Only Scenario  
**Kenai-Soldotna** and Homer Areas

	1982-2000			
	1982	1983	1984	1985-2000
<b>Kenai-Soldotna Area</b>	17,100	16,372	16,322	
City of Kenai	5,028	5,086	5,130	Same as
City of <b>Soldotna</b>	2,861	2,890	3,033	Base Case
Remai nder	<b>9,211</b>	8,396	8,159	
<b>Homer Area</b>	5,858	6,163	6,239	Same as
City of Homer	2,541	2,734	2,817	Base Case
Remai nder	3,317	3,429	3,422	
<b>Kenai-Cook Inlet Census Di vi si on</b>	27,620	27,320	27,466	Same as Base Case

Source: Alaska Consultants 1979a, 1979c.

Offshore employment resulting from Sale 60 rises to a peak of 349 in 1983, but because most of these employees are assumed to be transient workers who do not live in the study area (Alaska Consultants, 1979c, P. 6-7) they have little impact upon population growth. Onshore employment rises to a peak of 54 in 1983 and is largely associated with transportation services. Most of these people are assumed to live in the Kenai and Homer areas.

Tables 19 and 20 summarize the projected increases in employment and population for the Kenai-Soldotna and Homer areas, and the allocation of population between the communities of these areas.

At the same time that exploration activity is underway on Sale 60 tracts, exploration and development activity is assumed to be proceeding on Sale CI tracts in Lower Cook Inlet as described in the Base Case. Only minor increases in employment and population result from Sale 60 in comparison with Sale CI in the Exploration Only Scenario. After 1984, when exploration on Sale 60 tracts ends, Sale CI Activity continues to increase. Employment and population figures return to Base Case levels.

#### ASSESSMENT OF SOCIOCULTURAL IMPACTS

OCS related growth is projected to add only a fraction of a percent to either the Kenai-Soldotna or Homer areas' employment and population during the three years in which oil exploration is conducted. Therefore the Exploration Only Scenario is anticipated to have insignificant impacts upon the sociocultural systems of the study area compared to the activity assumed for the Base Case.

## Kenai-Soldotna Area

### ECONOMIC ADAPTATIONS

The small amount of OCS activity forecast for the Exploration Only Scenario will contribute to reinforcing the dominance of the oil and gas industry in the **Kenai-Soldotna** area. In comparison with construction of the assumed LNG facility in the North **Kenai** area and the exploration and development work underway on **Sale CI** tracts, however, **Sale 60** activities will be hardly noticeable in the economy of the area. In combination with **Sale CI** and LNG construction, these activities could play an important role psychologically however, in building expectations of major economic growth. Conversely, failure to make any significant discoveries by 1984, together with layoffs upon completion of the LNG facility in 1983, could reinforce the "bust" side of the cycle of economic growth in the **Kenai-Soldotna** area.

### LAND AND ENVIRONMENT

The small amount of population growth anticipated to result from **Sale 60** is unlikely to add substantially to the pressures upon natural systems discussed in the Base Case.

### SMALL TOWN SOCIAL RELATIONSHIPS

**Sale 60** will result in only 120 new residents in the City of **Kenai**, and 103 in **Soldotna** over the forecast period according to Alaska Consultants' projections (see Table 20 ).



Although this **will** contribute to the growth of population projected to alter the small town characteristics of these communities in the Base Case, it is a very minor addition compared to the thousands of people added to the **Kenai-Soldotna** area in one or two years of LNG facility construction in the Base Case.

#### POLITICS AND RESPONSE CAPACITY

The failure to discover oil and gas in the Exploration Only Scenario is likely to have greater impacts upon politics and the response capacity of political systems than the small amount of employment and population growth projected to result from **Sale 60**. Local governments **will** already be under pressure to provide services to a growing population, and they are likely to be expecting and counting on the growth of local economies and tax-bases. The failure to make discoveries on **Sale 60** tracts, as noted above, could discourage business expansion and contribute to a **local** economic "slowdown".

Periods of faltering economic readjustment after major projects such as the LNG facility construction posited in the Base Case, could continue to make it difficult for local governments to plan for wise growth, since their constituents are likely to continue to demand "any growth".

#### SOCIAL HEALTH

Again, the small employment and population additions projected to result from Sale 60 in this scenario should cause little variation from the Base Case projections.

## Homer Area

### ECONOMIC ADAPTATIONS

The increase in OCS activity associated with use of Homer as a supply base in the Exploration Only Scenario, in addition to that assumed to be already occurring as a result of Sale CI, is likely to cause increased competition between fishermen and OCS-related industry. In general, however, the impacts are not likely to be much greater than those forecast in the Base Case.

### LAND AND ENVIRONMENT

The minor increases in population projected to result from this scenario in the Homer area will add to the impacts upon land and natural systems. These impacts are not likely to differ drastically from those projected in the Base Case however.

### SMALL TOWN SOCIAL RELATIONSHIPS

Similarly, the small additions to the population of Homer and the Homer area forecast for the period 1982-1984 will add impetus to the alterations of the small town qualities projected in the Base Case, but will not significantly differ from the Base Case. The population added to the Homer Area by Sale 60 in the peak exploration year of 1983 is only about 3% of the population projected for that year in the Base Case. After 1984 no population is added by this scenario.

## POLITICS AND RESPONSE CAPACITY

Again, the impacts of the small population increase are unlikely to differ significantly from those described in the Base Case. The increased use of Homer as a supply base for OCS activity in the Sale 60 Exploration Only Scenario is likely to add to political conflict over land-use on the Homer Spit. It is likely to add to people's concern about the effects of OCS development upon the social and environmental quality of the area. Cessation of exploration of Sale 60 tracts in 1984 and the resulting cutbacks in OCS supply traffic, leaving only Sale CI traffic, could defuse some of this concern.

## SOCIAL HEALTH

The limited activity and population projected in this scenario should have little impact in this category. Conditions are likely to be similar to those described in the Base Case.

### Smaller Coastal Fishing Communities

Since the minimal increases in population and employment are projected for only the **Kenai-Soldotna** and Homer areas, the effect of the Exploration Only Scenario on the smaller coastal communities is expected to be insignificant when compared to the Base Case. The exploration period only lasts three years, and when measured against exploration and development associated with Sale CI, Sale 60 exploration activity will probably be hardly noticeable.



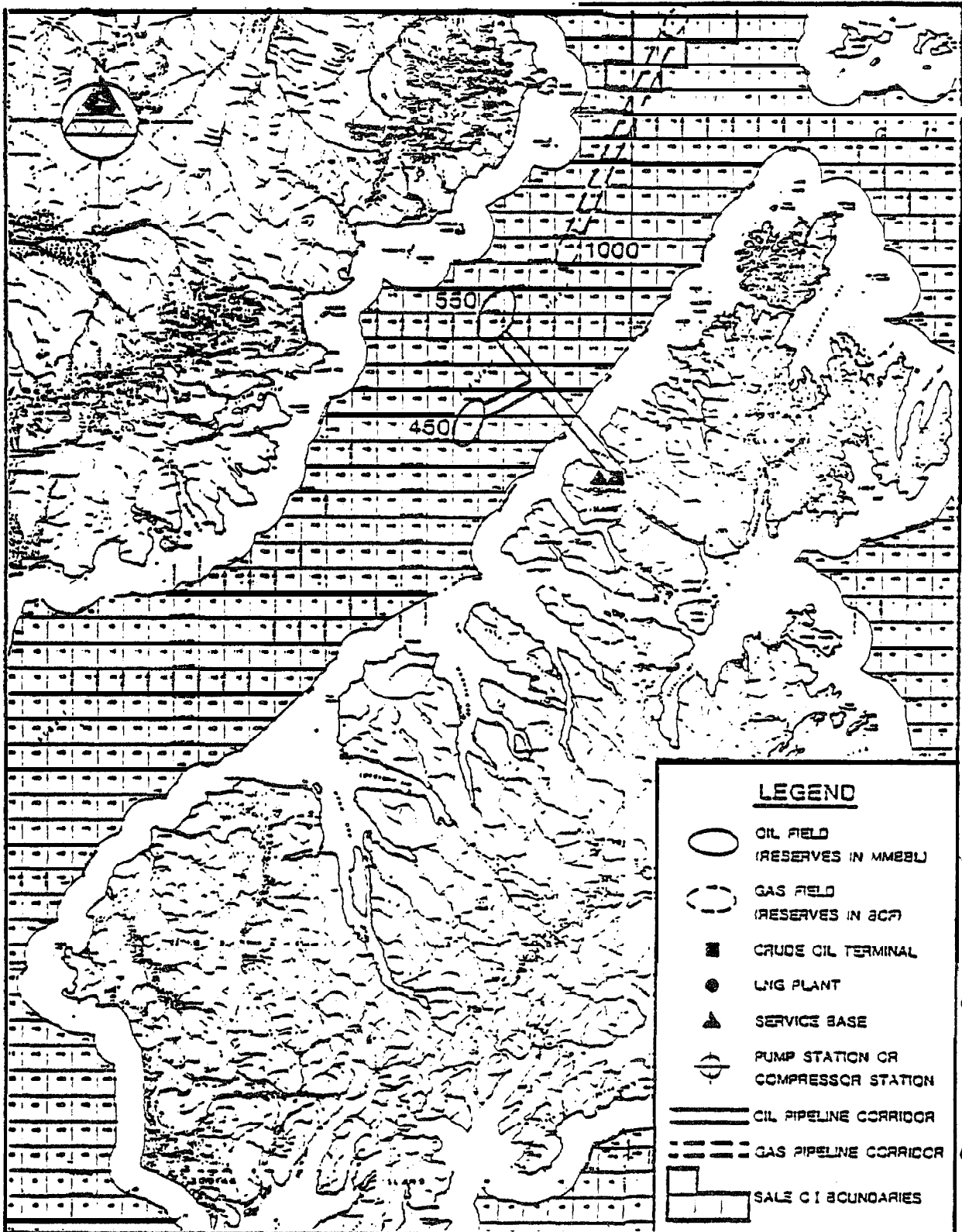
## VI. HIGH FIND SCENARIO

### DESCRIPTION OF HIGH FIND SCENARIO

Where the Exploration Only Scenario assumed no commercial finds, the High Find Scenario assumes significant commercial discoveries of oil and gas. About 1,400 million barrels and 1,363 billion cubic feet of non-associated gas are assumed to be discovered (Dames and Moore, 1979, P. 73). The major portion of these reserves are assumed to be located in the Shelikof Strait area west of Afognak Island. About one-fourth of these reserves are discovered in Lower Cook Inlet, just north of Sale CI. The locations of these fields, and of the facilities assumed to be constructed to exploit them, are shown in Figures 5 and 6.

In the High Find, OCS exploration in Shelikof Straits and Lower Cook Inlet begins in 1982, peaks in 1984 and 1986, with 14 wells drilled in each of those years, and terminates in 1989 with a total of 57 wells drilled (Dames and Moore, 1979, P. 82). Field development is assumed to begin in 1986, with two production platforms being installed in 1988, two more in 1989, and the last two in 1990.

As in the other scenarios for Lower Cook Inlet, the Kenai-Nikiski area is assumed to provide two-thirds of the support for both onshore and offshore activities. Homer is also assumed to be an important supply base, supporting one-third of the supply effort. Homer is assumed to play an important role in construction of the oil pipeline to Drift River and the subsea trunk line which is assumed to come ashore near Anchor Point (Alaska Consultants, 1979c, Table 48).



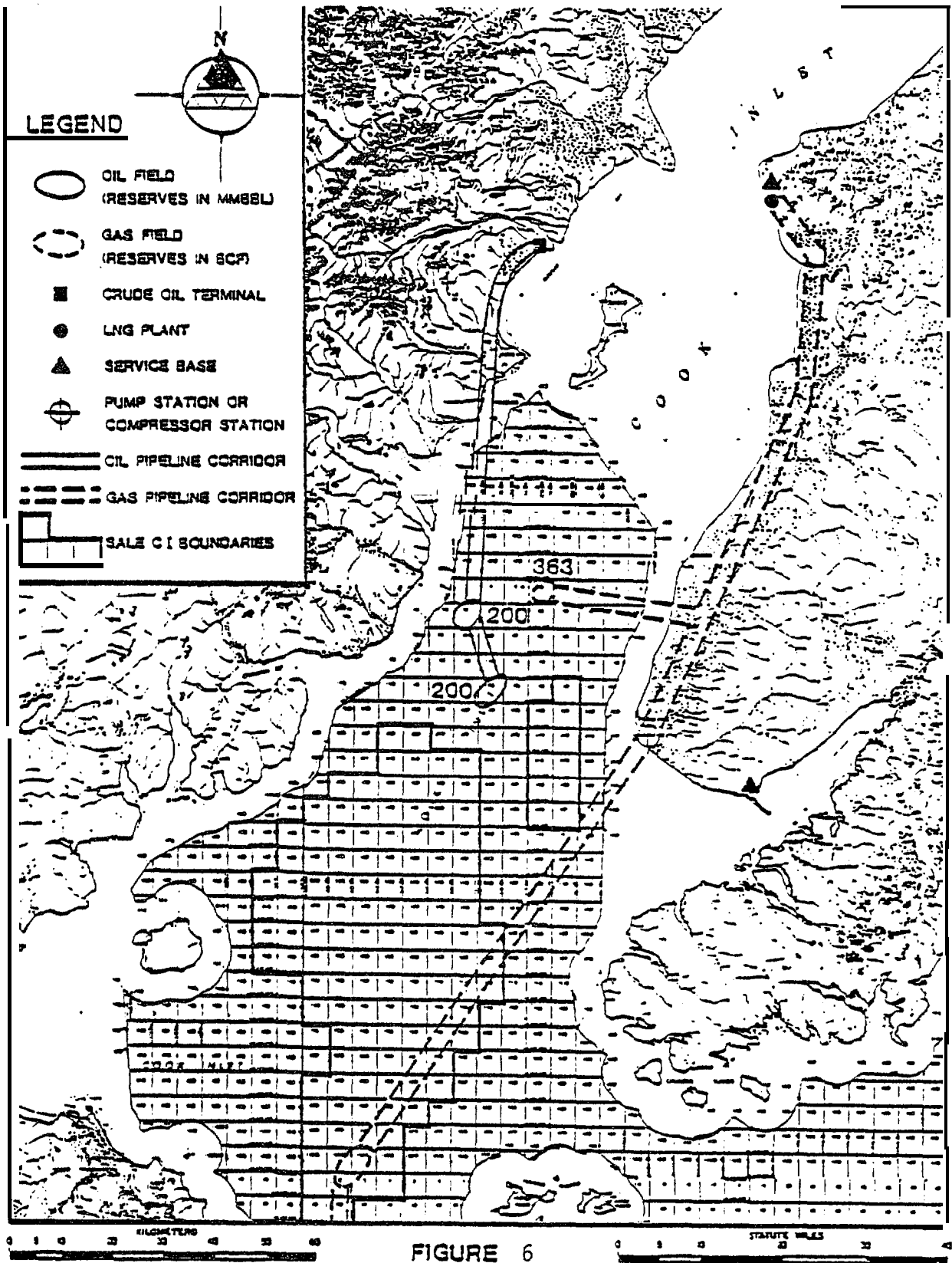
0 5 10 20 30 40 50  
KILOMETERS

FIGURE 5

0 5 10 20 30  
STATUTE MILES

SOURCE: GAMES & MOORE

SHELIKOF STRAIT  
HIGH FIND SCENARIO  
FIELD AND SHORE FACILITY LOCATIONS



SOURCE: GAMES & MOORE

LOWER COOK INLET  
 HIGH FIND SCENARIO  
 HELD AND SHORE FACILITY LOCATIONS

The major facility constructed in the High Find Scenario is a crude oil terminal on the west coast of Afognak Island. Due to the distance from existing support facilities on Upper Cook Inlet, a forward service base supporting construction and operation of the **Shelikof** fields is assumed to be constructed adjacent to the **Afognak** terminal.

Since the Lower Cook Inlet portion of the fields discovered in this scenario are located in shallow water approximately fifty miles south of Drift River, they are well situated to use the existing Drift River Terminal to handle their crude production. Therefore no new terminals are assumed in this area.

The High Find assumes that Sale 60 oil fields in Lower Cook Inlet do not share pipelines with Sale **CI** fields, but rather require the construction of their own pipeline. Oil pipelines are assumed to be constructed from the Lower Cook Inlet Sale 60 discoveries to Drift River (see Figure 6), and from the **Shelikof** Straits field to a terminal site on Afognak. These lines are assumed to be constructed in 1990.

Non-associated gas from the **Shelikof** Field is postulated to be piped north to Lower Cook Inlet where it feeds into an existing pipeline from Sale **CI gas field** in Lower Cook Inlet. Short lines from the **Shelikof** and Sale 60 Lower Cook Inlet gas fields are assumed to be constructed in 1991 (Dames and Moore, 1979, P. 80, 92).

#### SUMMARY OF SOCIOECONOMIC PROJECTIONS

The High Find Scenario for Sale 60 is projected to result in major impacts upon the economy and population of the **Kenai** Peninsula. Employment is projected



to grow slowly during the exploration stage, but as the development stage begins in 1986 rates of employment and population growth increase rapidly (see Figure 7 ). During the early 1990s, when oil and gas production begins, growth rates in the **Kenai-Soldotna** and Homer areas decline, and population growth returns to rates comparable to those projected in the Base Case. Populations in both places grow to considerably higher levels in the High Find, however. Figure 7 compares the projected growth of population in the Base Case and High Find Scenario in the **Kenai-Soldotna** and Homer areas.

As Table 21 indicates, in the year 2000 the **Kenai-Soldotna** area and the **Homer** area are each projected to have over 1,300 more people than were forecast for the Base Case. In the **Kenai-Soldotna** areas this High Find population is almost 6% greater than the Base Case forecast. The Homer area experiences a much greater proportionate increase, with a 12% increase over the Base Case projection.

The assumed allocation of this projected population growth between the cities of **Kenai, Soldotna,** and Homer is shown in Table 22 . This should be compared with the Base Case allocations presented previously in Table 18.

#### ASSESSMENT OF SOCIOCULTURAL IMPACTS

The employment and population figures presented in the preceding section indicate that only minor **sociocultural** impacts are to be expected in the **Kenai-Soldotna** area in the High Find, as compared with Base Case, while greater impacts are to be expected in the Homer area. For the most part

FIGURE 7

Population Projections 1980-2000  
Base Case and High Find Scenarios

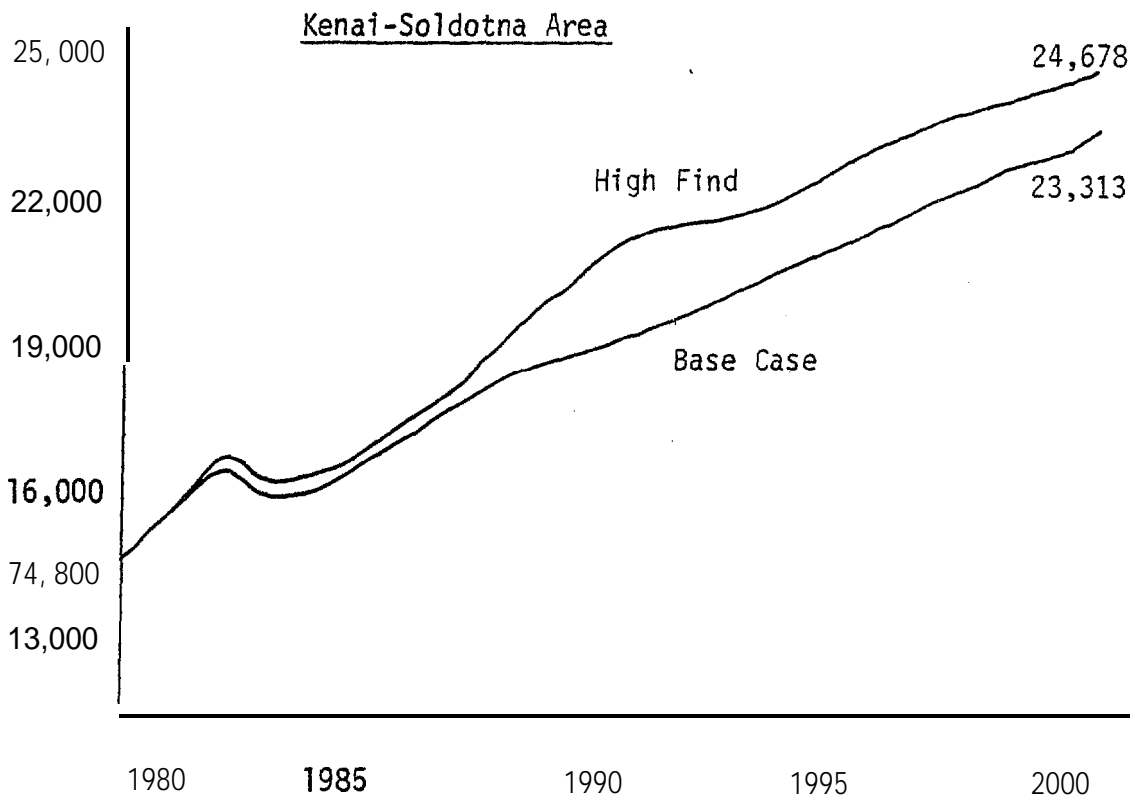
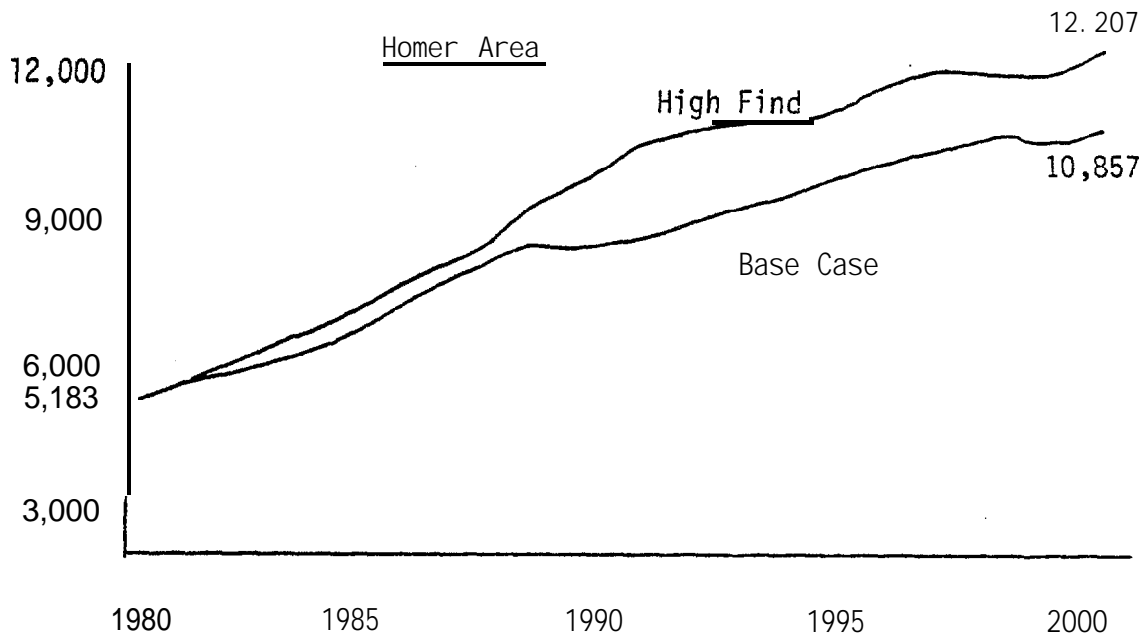


TABLE 21

Forecast of **Employment**<sup>1</sup> and population  
 Added by High Find Scenario  
 Lower Cook Inlet  
 1982-2000

	1982	1985	1990	1995	2000
<b>Kenai-Soldotna</b> Area	(66)	(112)	(774)	<b>(632)</b>	(546)
	165	280	1,893	1,580	1,365
<b>Homer Area</b>	(73)	(120)	(744)	(613)	<b>(540)</b>
	183	300	1,860	1,532	1,350

<sup>1</sup>Employment given in parentheses

Source: Alaska Consultants, 1979c.

TABLE 22

Allocation of Projected Population  
High Find Scenario  
Lower Cook Inlet  
1982-2000

	1982	1985	1990	1995	2000
<b>Kenai-Soldotna Area</b>	17,095	<b>17,144</b>	21,110	23,005	24,678
City of <b>Kenai</b>	5,027	5,343	6,206	6,804	7,334
City of <b>Soldotna</b>	<b>2,860</b>	3,188	4,335	4,700	4,995
Remai nder	9,208	8,613	10,569	11,501	12,349
<b>Homer Area</b>	5,861	7,000	10,418	11,370	12,207
City of Homer	2,542	3,206	5,210	5,686	6,104
Remai nder	3,319	3,794	5,208	5,684	6,103
<b>Kenai-Cook Inlet</b>					
Census Di vi sion	27,618	29,168	37,222	40,882	44,322

Source: Alaska Consultants 1979a, 1979c.

the High Find results in "more of the same, but even more so", or an intensification of the **sociocultural** trends projected in the Base Case.

The events of Sale 60 parallel those of Sale CI and add to their impact, lagging 2-3 years behind those of Sale CI.

### Kenai-Soldotna Area

#### ECONOMIC ADAPTATIONS

OCS Sale 60, in the **High** Find Scenario, is projected to continue to tighten the closely coupled relationship between the oil and gas industry and the economic adaptations of **Kenai-Soldotna** residents. The existing dominance of the oil and gas industry is likely to continue to increase in the High Find Scenario.

Although most of the OCS activity resulting from Sale 60 takes place far from the **Kenai-Soldotna** area, in Lower Cook Inlet and Shelikof Straits, the area's existing support facilities, oil service industries, and experienced labor pool, which are projected to have increased as a result of Sale CI and construction of the LNG plant assumed in the Base Case, will ensure that the **Kenai-Soldotna** area plays an important role in Sale 60. Sale 60 is likely to reinforce the importance of the **Kenai-Soldotna** area as a service and transportation center.

Employment and population growth in the **Kenai-Soldotna** area during the exploration stage of the early and mid-1980's is projected to be fairly modest. In a typical year of the exploration period, 112 jobs and 280

residents are expected to be added in the Kenai-Soldotna area. The impacts of Sale 60 are therefore expected to be relatively minor until the late 1980's, then the development stage is underway (see Figure 7).

Because employment requirements will be small until the late 1980's in the High Find Scenario, it is not expected that Sale 60 will help smooth out the boom and subsequent bust associated with construction of the North Kenai LNG facility (see Base Case projections). However, early oil discoveries in the High Find Scenario could lead to expectations of future boom conditions, and to high rates of investment and construction in anticipation of further major oil discoveries. This, in addition to the jobs added by oil exploration, could reduce the impact of termination of LNG facility construction and the loss of some 1,000 jobs in 1983.

Since jobs and new residents are projected to be added fairly steadily over several years during the exploration stage (1982-1987), and since there is likely to be a high degree of expectation about the economic benefits of Sale 60, it is likely that residents of the Kenai-Soldotna area will have time to prepare for the population growth projected to occur in the late 1980's and early 1990's. There should be little problem in supplying housing and services to accommodate the projected population increases.

During the development stage in the late 1980's and early 1990's, an average of about 500 jobs and 1,400 new residents are projected to be added each year in the Kenai-Soldotna area. Economic opportunities in a wide variety of services can be expected to open up during this period to support industrial and population growth.

Although other basic sectors, including **commerical** fishing, tourism, and government, will continue to grow in the **Kenai-Soldotna** area, their relative importance is expected to decrease greatly as the oil and gas and construction industries come to dominate the economy as a result of Sale 60 OCS development.

Since the High Find Scenario does not include the development of terminals or petroleum processing facilities in the **Kenai-Soldotna** area, it appears unlikely that significant increases in long-term, production related employment can be expected. The much larger population of the High Find Scenario will therefore be supported by basically the same industries as the smaller population of the Base Case once development of the Sale 60 fields is completed in the 1990's. This indicates that dominance of the oil and gas industry in the **Kenai-Soldotna** area will continue to lead to economic instability. Under these conditions an economic slump seems likely in the mid or late 1990's as the development stage phases into a production stage.

#### LAND AND ENVIRONMENT

Land and environmental quality are likely to become increasingly important **sociocultural** issues in the **Kenai-Soldotna** area under the High Find Scenario. As discussed in the Base Case population and economic growth in the area will impose increasing pressures upon land and wild resources.

Although there is plenty of suitable land available for industrial and residential needs in the **Kenai-Soldotna** area, demands upon areas with poor drainage, upon wetlands, and upon lands with other resource values will con-

tinue to increase. The additional population growth projected in the High Find will add to these pressures.

Due to patterns of private land ownership, and the demand that public lands controlled by the state and local governments be made available for private profit, it is likely that water quality and wildlife habitat in the Kenai-Soldotna area will continue to deteriorate.

Many people will probably continue to be attracted by the region's reputation for open wild country and fish and wildlife. These new arrivals are likely to notice the impact of further new arrivals upon recreational opportunities, and to protest against continued disruption of wildlife and recreational values. This should continue to provide an important force in the politics of land and environment in the Kenai-Soldotna area.

As the population of the area increases there is likely to be more and more sociopolitical conflict over environmental issues. As noted in the Base Case, salmon, trout, and moose are likely to be major foci of this conflict.

#### SMALL TOWN SOCIAL RELATIONSHIPS

Scenario 60 is likely to result in a continuation of the trends noted in the Baseline and Base Case. The small town nature and character of residential areas are likely to be replaced by urban characteristics at even greater rates.



The economic fluctuations assumed to occur because of the LNG facility construction and because of the termination of OCS development activity will probably continue to contribute to a mobile and transient work force and population in the Kenai-Soldotna area. Cyclic growth will continue to make it unlikely that a stable or homogeneous community will develop.

As described in the Base Case, the population growth projected in the High Find Scenario is likely to continue to create more demands for urban services and facilities. Government and businesses will become larger, and more impersonal.

#### POLITICS AND RESPONSE CAPACITY

In this scenario the political systems of the Kenai-Soldotna area are projected to be affected by the same trends described in the Base Case. The economic and population growth forecast in the High Find Scenario are likely to reinforce predominant community values. The political systems of the area, including the cities and the Kenai Peninsula Borough, are expected to continue to reflect these values by supporting economic development in general and petroleum development in particular.

As in the Base Case, residents who come to the area because of economic opportunities provided by oil and gas development, and businesses dependent upon industrial and residential growth, are very likely to politically support further economic growth and petroleum development.

The larger population expected in the High Find Scenario will probably lead

to somewhat greater demands for **local** governments to provide services and facilities. The ability of local government to supply these services, and the constraints upon them, which were discussed in the Base Case are expected to hold true in the High Find. The greatest stress upon **local** governments is likely to occur in the late 1980's, when the population of the area is projected to increase at about 10% per year. This rate of growth would be comparable to what **the Kenai** Peninsula Borough experienced in the period 1975-1978. The experience gained in the intervening years, together with assistance from federal and state impact monies should enable them to adequately provide public services during these periods of more rapid growth.

#### SOCIAL HEALTH

The only significant differences expected between the Base Case and the High Find in this category are slight increases in the rates of alcohol, mental health and crime problems associated with greater population. The patterns of crime and **other** problems projected for **the** Base Case are likely to be broadly the same in the High Find.

The demands for counseling and social health services are likely to increase most rapidly both during the economic slump projected to occur upon completion of the **LNG** facility, and again during the period of rapid employment and population growth forecast for the late 1980's. As noted in the preceding section, the political systems of the area are expected to be able to meet these increased demands.

## Homer Area

● Sale 60, in the High Find Scenario, is projected to intensify the effects of Sale C1 upon the **sociocultural** systems of the Homer area. Employment and population growth in the Homer area during the 1980's will be greater than in the Base Case. This growth will be greatly extended during the late 1980's and early 1990's, rather than declining as projected in the Base Case.

### ECONOMIC ADAPTATIONS

● While the economic adaptations of **Kenai-Soldotna** residents are projected to be reinforced by Sale 60 events in the High Find, those of Homer area residents are likely to be threatened. The Homer area is expected to continue to be affected by the same economic forces assumed for the Base Case, fishing, tourism, and OCS activity, but activity resulting from Sale 60 is likely to have a much greater impact in the High Find than in the Base Case.

● The commercial fishing adaptation, as a livelihood and lifestyle, is projected to increase in importance in the Homer area over the forecast period.  
\* This is likely both for economic and social reasons. The development of new fisheries, such as **bottomfishing**, and the assumed increasing value of the existing fisheries will continue to make fishing a major industry in the Homer area. People are also likely to continue to attempt to get involved in these fisheries for the independent and self-sufficient lifestyles as well. Similarly, tourism and recreation are likely to continue to be major industries in the Homer area.

As noted in the Base Case, **the** use of **Homer** as a service base and OCS development in Lower Cook Inlet could have major impacts upon the fishing adaptation. The High Find Scenario greatly increases the potential problems discussed in the baseline and Base Case.

Considerably more traffic (by land, sea, and air) is assumed to pass through and near Homer in the High Find. This increases the chances of conflicts between fishermen and the oil and gas industry, particularly in the Homer Spit area. Use of Homer as an OCS supply base **will** require large storage areas and good access **by** sea and land to dock and port facilities. Fish processors and fishermen are likely to have to increasingly compete with OCS related businesses for these facilities in the High Find. This could make fishing less profitable. It would also add to **residents'** negative feelings about oil-related activity in Homer and **Kachemak** Bay.

The **Shelikof** oil discoveries assumed in this scenario, and the construction of pipelines and an oil terminal there will be viewed by Homer fishermen as a direct threat to the highly **valued** fishing grounds of **Shelikof** Strait. Activity in this area, as in Lower Cook Inlet, **will** greatly increase residents' concern about the effects of exploration activity, oil spills, blowouts, and the loss of fishing space and fishing gear. This will heighten the concerns noted in the baseline and Base Case.

Increasing levels of **OCS** related highway and marine traffic could also conflict with the continuing development of the Homer area as a tourist and recreation destination. Businesses dependent upon tourists and **recreationists**, particularly **along** the Sterling Highway and in Homer, could lose some of their

attraction due to heavy industrial traffic. Other impacts upon recreation are noted in the land and environment section.

In the Base Case, with lower levels of OCS activity, the Homer area is projected to the use of Homer as a service base is not projected to be entirely disruptive, since a balance is more likely to be maintained between fishing, tourism, and OCS support activities. In the High Find, however, there seems to be much greater potential for disruption, since levels of OCS activity will be much higher with the addition of Sale 60.

#### LAND AND ENVIRONMENT

The impacts of the High Find upon this category are expected to be similar to, but greater than those projected in the Base Case. Natural systems in the Homer area will be stressed by the greater industrial activity and population growth projected in this scenario. Competition for land and wildlife will be proportionately greater.

The Homer Spit will continue to be the major focus for conflict over environmental quality in the High Find. Tourism, commercial fishing, residents' recreation, and marine transportation all depend heavily upon the Homer Spit. OCS related demands upon the Spit will intensify the conflict over the best use of this limited and unique natural feature.

Construction of a gas pipeline ashore near Anchor Point or Ninilchik is likely to be viewed as a threat to the streams and fish resources of the area, an impact which would also be significant in the Base Case. Heavily

used **sport-f**ishing water such as Anchor River, Deep Creek, and the Ninilchik River **could** be threatened. Increased activity in the southern Sterling Highway corridor associated with construction of pipelines and supply traffic is likely to stimulate residential development throughout this area. This **could** increase the potential for erosion and septic pollution problems.

Many residents are likely to regret the residential filling in of the open undeveloped country along the southern Sterling Highway, both because of access to this land will become increasingly restricted, and because some of the scenic quality of the highway will be **lost**.

#### SMALL TOWN SOCIAL RELATIONSHIPS

The population of Homer and the Homer area are projected to triple over the twenty year forecast **period** in the High Find Scenario. This scenario would result **in** a population about 12% larger than the Base Case forecast.

Although much of this growth is projected to take place at steady rates which are less than, or near, recent rates of growth, the increased emphasis upon the role of Homer as service base for Lower Cook Inlet OCS activity is likely **to** lead to significant qualitative changes in the community. Homer is likely **to** exchange its **small** town character for urban qualities faster in the High Find than in the other scenarios.

If oil companies continue their present policies of largely isolating temporary workers from the community, and continue to emphasize the importance of good relationships, it is likely that relations between townspeople and

oil workers will remain cordial. Construction and oil workers who bring families and make homes in the Homer area are likely to try to blend into the community rather than emphasizing their connections with the oil industry. Community values revolving around **small** town social relationships and relationships to the natural environment are unlikely to shift drastically simply because more oil-related workers move into the communities.

The assumed increases in highway and marine traffic associated with the use of Homer as a supply base are likely to cause traffic problems in and near Homer. Residents are likely to find it increasingly difficult to drive in the area, and the Spit will have particularly heavy traffic problems. This is likely to continue to necessitate major new highway projects, which are likely to increasingly detract from Homer's **small** town character.

Similarly, the development of new businesses, as noted *in* the Base Case, and the increasing government services required by population growth, will be hastened in the High Find.

#### POLITICS AND RESPONSE CAPACITY

Local government and other political bodies are projected to attempt to avoid or mitigate the negative impacts of **OCS** activity upon the **valued** economic adaptations and social and environmental qualities of the Homer area in this scenario. As in the Base Case, there is the potential for considerable conflict, **both** within the community, and between the community and outside entities in the High Find.

At the height of the development phase of OCS activity in Lower Cook Inlet, about 1990, the population of the Homer area is projected to be about 22% greater than projected for the Base Case. This is likely to create significantly greater demands upon local government for services and facilities. Many of these are noted in other impact categories. Public utilities, road maintenance, police and fire protection, and school systems are areas where these demands are likely to be felt

The steady form of growth projected over the decade of the 1980's, and the experience gained over this time by the City of Homer and the Kenai Peninsula Borough, should enable them to cope with these increasing demands. Any sudden increases in the growth rate would present greater problems, however.

The need for the city to collect revenues to pay for these greater levels of services may create demands for more industrial activity within the city to provide a greater tax base. OCS activity is one obvious source of such revenues. This could lead to continuing and growing conflict between various socioeconomic groups within the community. The Homer Spit, as noted in preceding sections, is likely to be the focus of such conflict.

Population growth, per se, is unlikely to set off conflict over social and environmental quality in the community, as long as it continues at fairly steady rates rather than as a sudden influx. Any crisis associated with OCS development, however, such as a spill or blowout, the discovery of some unanticipated effect of oil upon a marine species, is certain to bring about demands that the Homer area not be used as a supply base.



As in the Base Case, community attitudes and politics may make the use of the Homer area **as** a major supply base unfeasible and oil companies may look elsewhere. Some use of Homer for helicopter ferrying and light supplies might continue, but much of the support assumed to occur from Homer could be shifted elsewhere. This would remove most of the potential for conflict, and development of **commercial** fishing and tourism would continue to receive political support in the Homer area.

#### SOCIAL HEALTH

The social health problems noted as likely in the Base Case are projected to continue to be characteristic of **the** High Find. Rapid population growth, particularly during the late 1980's and early 1990's is likely to exacerbate problems such as crime and drug abuse resulting from large numbers of transients looking for work. Juvenile problems are also **likely** to be exacerbated by these increases.

Since the population of the Homer area is projected to be about 20% greater during the 1990's in the High Find than in the Base Case, the caseloads of counseling centers and the Homer hospital are likely to be considerably greater in the High Find than in the Base Case. As noted in the section on **politics**, *local* government **will** be faced with greater demands for **police** protection and social services.

## Smaller Coastal Fishing Communities

As explained in the introduction, this report discusses the effects of OCS development on the **sociocultural** systems of selected Cook Inlet communities. The small coastal communities in a lease sale area are generally expected to receive the direct, physical effects of **OCS development**. Onshore oil industry activities are often attracted to coastal communities that might have some **of** the needed infrastructure services. Thus, it is at this **local** level that oil and gas development activities are felt to most likely have a physical presence and therefore a more direct effect on human activities. The indirect, non-physical effects **of** oil and gas development are then expected to filter out to the larger economic or social regions and to the state as a **whole** (Scope of Work).

In Lower Cook Inlet, the **sociocultural** Scope of Work was evidently written **prior** to the unfolding of the petroleum development scenarios for that area. Included in the **sociocultural** study were apparently **all** of the communities that could potentially be affected by **OCS** development in Lower Cook Inlet. **Kenai-Soldotna** and Homer were the most obvious candidates for direct impacts as they had the majority of infrastructure facilities on the **Kenai** Peninsula. The smaller coastal fishing communities (**Tyonek**, **Port Graham**, **English Bay**, **Seldovia**, and **Niniłchik**) were apparently included as it was not known where the scenarios would call for onshore facilities to be placed, and possibly some might be located near one of these communities.

When the petroleum development scenarios emerged, they indicated that the

only direct impacts would be at **Kenai-Nikiski** and Homer (Dames and Moore, 1979) . Thus, the smaller coastal communities in this study were not projected, according to the scenarios, to receive any of the direct, physical effects of OCS development related to Lease Sale 60. But, the **socio-cultural** Scope of Work mandated an analysis of these smaller communities, and in fact, the **sociocultural** work plan had already been developed and implemented. Thus, the baseline and Base Case were developed.

Although the scenarios do not call for any direct impacts on the smaller coastal communities, many indirect impacts associated with oil and gas development could potentially affect them. As these were already discussed in the Base Case which included considerable oil and gas **activities** associated with Sale **CI**, they will not be dealt with further here. The High Find Scenario simply intensifies the potential problems discussed in the baseline and Base Case. Additional traffic (land, sea, and air) associated with the High Find Scenario will magnify the issues discussed previously and increase the chance for conflicts between fishermen (commercial and subsistence) and the oil and gas industry. Anxiety over potential spills or blowouts will be heightened in the High Find Scenario. In sum, greater activity and population growth related to the High Find Scenario will place a greater stress on the natural and man-made systems discussed in the baseline and Base Case.

## VII. MEDIUM FIND SCENARIO)

### DESCRIPTION OF SCENARIO

The Medium Find Scenario for Sale 60 assumes modest commercial discoveries of oil in Lower Cook Inlet and Shelikof Straits. A small field, of 198 million barrels of oil, is assumed for Lower Cook Inlet, while a larger field, of 500 million barrels, is assumed for Shelikof Straits (Dames and Moore, 1979, P. 101). The Medium Find Scenario assumes that gas is not discovered in commercially recoverable quantities.

The Lower Cook Inlet oil field assumed in this scenario is located in approximately 250 feet of water ten miles northwest of English Bay (see Figure 8 ). The field is assumed to produce through a short spur pipeline which connects with an existing pipeline carrying oil from a field discovered previously in Sale CI.

The Shelikof Strait field is located in the northern part of the Strait in about 600 feet of water, and, as in the High Find Scenario, produces through a short pipeline to a new terminal constructed on the west coast of Afognak Island (Dames and Moore, 1979, P. 101).

Exploration commences on Sale 60 tracts in 1982, peaks in 1984, and terminates in 1985 with a total of 40 wells drilled (Dames and Moore, 1979, P. 106). Field development begins in 1985, and production platforms for both fields are installed in 1987. Oil production begins in 1989.

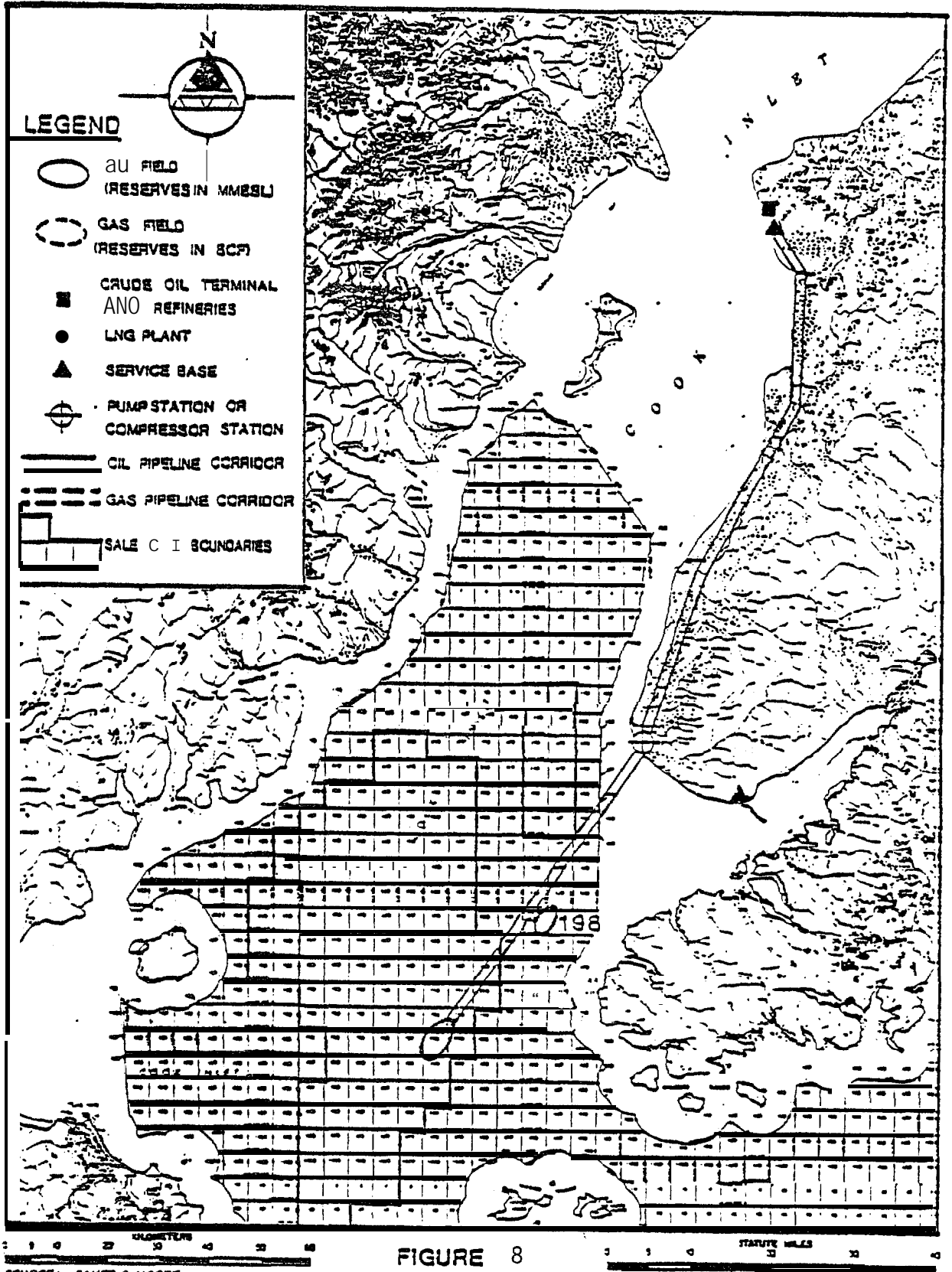


FIGURE 8

LOWER COOK INLET  
 MEDIUM FIND SCENARIO  
 FIELD AND SHORE FACILITY LOCATIONS

SOURCE: GAMES & MOORE

Exploration activities in both **Shelikof** and Lower Cook Inlet are supported by a main base at **Nikiski** and a forward base at Homer. Construction support for the Lower Cook Inlet field is also provided by these bases.

The major facility constructed as a result of the oil discoveries in the Medium Find Scenario is a crude oil terminal located on the west coast of **Afognak** Island. Due to the distance of the area from Cook Inlet support facilities, a construction base and permanent operation base are constructed adjacent to the terminal site. Some additional construction support is provided by **Nikiski** and Seward (Dames and Moore, 1979, P. 206).

#### SUMMARY OF SOCIOECONOMIC PROJECTIONS

The small oil discoveries assumed in the Medium Find result in correspondingly minor additions to employment and population in the study area (see Figure 9 and Tables 23 and 24). The peak of OCS related activity in the Medium Find, which occurs in 1988, is projected to result in 700 more jobs than the peak year in the Base Case. This is significantly fewer than the 1,700 jobs projected for the peak year (1989) of the High Find Scenario.

As in the other Lower Cook Inlet OCS scenarios, the **Kenai-Nikiski** area provides much of the support for OCS activities in this scenario. Homer also plays an important role. Afognak Island, which is outside the area of concern for this study, appears to experience the greatest impacts in this scenario, since the largest fields are discovered just offshore, and new pipelines and a terminal are assumed to be constructed here.

FIGURE 9

Population Projections 1980-2000  
Base Case and Medium Find Scenarios

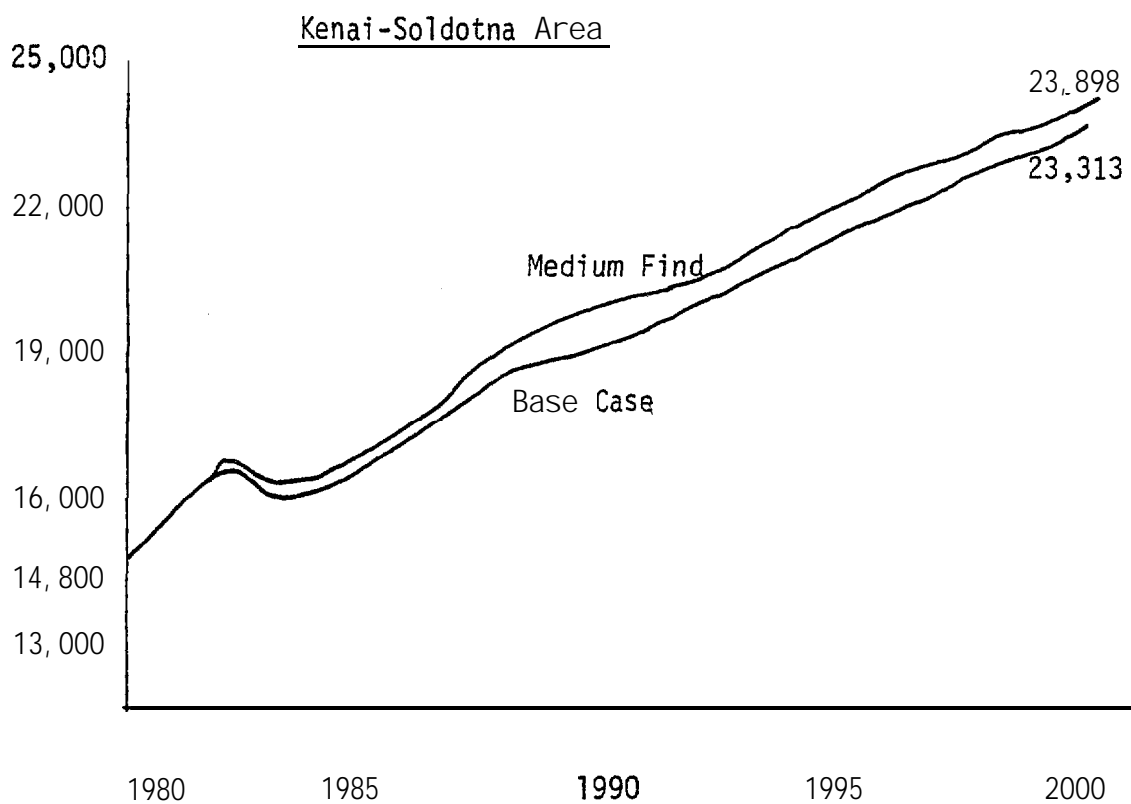
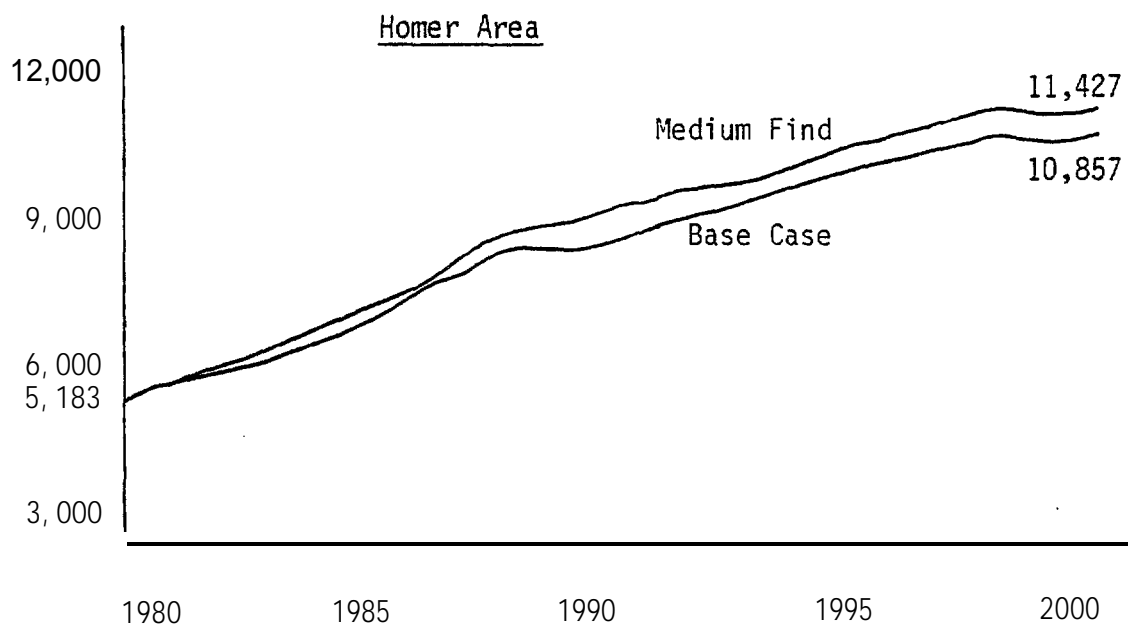


TABLE 23

Forecast of Employment and Population  
 Added by Medium Find Scenario  
 Lower Cook Inlet  
 1982-2000

	1982	1985	1990	1995	2000
Kenai-Soldotna Area	(68)	(60)	(314)	(234)	(234)
	170	<b>150</b>	785	585	585
Homer Area	(72)	(64)	(303)	(228)	(228)
	<b>180</b>	160	758	570	570

<sup>1</sup>Employment in parentheses

Source: Alaska Consultants, 1979c.



TABLE 24

Allocation of Projected Population  
Medium Find Scenario  
Lower Cook Inlet  
1982-2000

	1982	1985	1990	1995	2000
Kenai -Soldotna Area	17,100	17,014	20,002	22,010	23,898
City of Kenai	5,028	5,308	5,934	6,550	7,149
City of <b>Soldotna</b>	2,861	3,159	4,068	4,457	4,811
Remai nder	9,211	8,547	10,000	11,003	11,938
Homer Area	5,858	6,860	9,316	10,408	11,427
City of Homer	2,541	3,135	4,659	5,205	5,714
Remai nder	3,317	3,725	4,657	5,203	5,713
<b>Kenai-Cook Inlet</b> Census Di vi si on	27,620	28,898	35,012	38,925	42,762

Source: Alaska Consul tants 1979a, **1979c**, vari ous tabl es.

The impacts of population and employment growth in the study area are assumed to be divided fairly equally between the Kenai-Soldotna area and the Homer area, as in the other OCS scenarios (Alaska Consultants, 1979b). This results in proportionately greater impacts in the less heavily populated Homer area.

Table 23 summarizes the employment and population projections for the Medium Find Scenario, while Table 24 summarizes the allocation of population between the major communities of the study area at five year intervals.

#### ASSESSMENT OF SOCIOCULTURAL IMPACTS

A moderate amount of OCS activity, employment, and population growth is projected to occur as a result of Sale 60 in the, Medium Find Scenario. This growth is approximately halfway between that projected for the Base Case and that forecast for the High Find Scenario.

Since all of these scenarios deal with OCS activity, the nature of sociocultural impacts in all of them are similar, varying primarily in degree, rather than kind. The Medium Find case is likely to result in sociocultural impacts which are much like those projected in the High Find, but which are not as intense.

#### Kenai-Soldotna Area

##### ECONOMIC ADAPTATIONS

Most of the trends projected for the Base Case will also hold true for the

Medium Find. As in the other OCS cases, the combination of Sale CI and Sale 60 is **likely** to increase the dominance of the oil and gas industry in the **Kenai-Soldotna** area.

Sale 60 is likely to extend the period of fairly rapid employment and **popu-  
lation** growth into the 1990's in the Medium Find (see Figure 9 ). As in the High Find Scenario, **OCS** activity is projected to reinforce the importance of the **Kenai-Soldotna** area as a service and transportation center.

The early years of the exploration phase in this case are similar to those projected in the High Find, and therefore the impact of Sale 60 in helping to mitigate the effects of layoffs when the assumed LNG facility is completed are likely to be similar to the High Find case.

#### LAND AND ENVIRONMENT

The demand for land for industrial and residential uses will increase under this scenario, but **not as** rapidly as in the High Find. The increasing **popu-  
lation** of the region, and increased industrial and residential development are likely to increase pressures upon recreational areas and resources. As in the High Find, salmon, trout and moose habitat and populations are likely to be adversely affected by these development pressures, although not quite as quickly.

#### SMALL TOWN SOCIAL RELATIONSHIPS

The population of the **Kenai-Soldotna** area is projected to be 2.5% greater in the Medium Find than in the Base Case by the end of the forecast period.

Like the High Find, the Medium Find is likely to result in a continuation and intensification of the trends noted in the Base Case. The cyclic character of the economy, reinforced by LNG plant construction as well as by OCS activity, together with general population growth, and the increased facilities and services which such growth implies, are the factors likely to contribute to the loss of small town character.

#### POLITICS AND RESPONSE CAPACITY

The political trends described in the Base Case and High Find are also likely to be significant in the Medium Find. Average annual rates of population growth during the period of most rapid growth, between 1985 and 1990, are only 1% greater per year than in the Base Case. In comparison the rates projected in the High Find average 4.6% per year for this period. Demands for government services and facilities are therefore likely to be slightly greater than in the Base Case, but considerably less than in the High Find.

Other impacts of population and economic growth upon politics and response capacity in the Medium Find are likely to be similar to those expected in the Base Case. There is likely to be slightly more pressure upon city and borough governments to exert more control upon development.

#### SOCIAL HEALTH

As in the High Find, rates of alcohol, mental health, and crime problems are assumed to increase at rates which are approximately proportional to rates of population growth.

Patterns of social health problems are expected to be broadly the same as described in the Base Case, with slightly greater incidence, due to greater population and slightly more rapid rates of growth.

### Homer Area

#### ECONOMIC ADAPTATIONS

Q The impacts of Sale 60 upon Homer area fishing and tourism adaptations in the Medium Find are projected to be essentially the same as those forecast for the High Find. Fewer people and less OCS activity in the Medium Find makes it likely that there will be fewer conflicts with these adaptations in this scenario, however.

#### LAND AND ENVIRONMENT

The population and economic growth projected in this scenario are likely to have impacts upon natural systems and environmental quality similar to those projected for the High Find, although somewhat less severe, since population growth is less in this scenario. As in the Base Case projections, the Homer Spit is likely to continue to be the center for **conflict** over land use and environmental quality in the Homer area.

#### SMALL TOWN SOCIAL RELATIONSHIPS

The population of Homer and Homer area are projected to more than double by the year 2000 in the Medium Find Scenario. This scenario would result

in a population about 5.3% greater than the Base Case by the end of the forecast period. The loss of Homer's **small** town qualities is projected to continue as in the Base Case, but slightly more rapidly. The slower, steadier rates of population growth projected for this scenario, as well as the continued importance of the fishing and tourism adaptations make it likely that these social changes will not occur nearly as rapidly as they **would** in the High Find scenario.

#### POLITICS AND RESPONSE CAPACITY

As in the **High** Find, the political systems of the Homer area are likely to be faced with **considerable** conflicting the Medium Find Scenario. Local government and other **political** bodies are likely to be divided over the issue of support for OCS activities and support for commercial fishing. It is **possible** that a slow **buildup** of Homer OCS support activities, first for Sale C1, and then for **Sale** 60 in this Scenario, **could** gradually defuse much of the **local** concern over conflict between these two sectors. In view of the high probability of more oil-related crises occurring in the Kachemak Bay area during the course of exploration and development, however, it seems likely that political conflict over the use of the Spit for OCS support activities will be similar to, and slightly more intense than, **that** projected for the Base Case.

#### SOCIAL HEALTH

Social health conditions in the Medium Find are **likely** to be similar to those projected in the Base Case. The slower, steadier growth of this scenario indicates that there are likely to be fewer problems than in the High Find.

Appendix A

LIST OF PERSONS CONTACTED

Bob Anderson - President, **Chugach** Natives, Inc.

Sally Ash - Resident, English Bay

Barbara **Banta** - Homesteader, Chamber of Commerce member, **Ninilchik**

Dr. Michael Baring-Gould - Dept. of Sociology, University of Alaska, Anchorage

Floyd Beach - Saw **Mill** Manager, South-Central Timber Development, Inc.

Lynn Bennett - FisherWoman, environmentalist, Homer

Alan **Boraas** - Chairman, Department of Social and Cultural Studies, **Kenai** Community College

Mick Brogan - Economist, **Kenai** Peninsula Borough

Agnes Brown - President, **Tyonek** Native Corporation

William Brown - Arctic Environmental Information Center

Chip **Browne** - Managing Editor, Homer News

Charles Bunch - Bureau of Indian Affairs, Anchorage

Ed Bush - Division of **Community Planning**, Department of Community & Regional Affairs

Don **Caswell** - City Manager, **Seldovia**

Robert Constantine, Frank Standifer, Stanley **Standifer** - council members, Tyonek

Darlene Crawford - Mayor, **Seldovia**

Ken **Cusak** - Lawyer, Kenai

John Davis - Assemblyman, Kenai Peninsula Borough & Manager of **KSRM** Radio

Mike Daugherty - Chief of Police, Homer

Dee Derr - Field Training Officer - Div. Of Community & Rural Development, Dept. of **Community and** Regional Affairs

Sal **Dimaria** - Planning Dept., North Pacific Rim

Marilyn **Dimmick** - **Ninilchik** resident, **Kenai** Peninsula Borough Assembly

Larry **Eckels** - Executive Director of Cook Inlet Housing Authority

Fred **Elvsaa**s - President, **Seldovia Native** Association, Inc.

Greg **Enceleski** - Manager, **Ninilchik** Native Association

**Dr.** Richard L. Ender - Urban Observatory, University of Alaska, Anchorage

Jack & Susan English - Business persons, long-time residents, **Seldovia**

Lue Rae Erickson - Health Planner - North Pacific Rim

Art and Mossy Davidson - Homesteaders, Homer

Larry **Farnen** - City Manager, Homer

Dolly Farnsworth - original **Soldotna** homesteader, member of OEDP committee

**Loren Flagg** - Habitat biologist, Alaska Dept. of Fish and Game, Homer

G. **Flygenring** - Consultant to Tyonek Native Corporation

Paul Fritz - Land Planner, National Park Service

Bruce **Garberding** - Social Services, **CINA**

**Tony Garroutte - Sea-Nik Foods, Ninilchik**

Tom **Gibboney** - Editor, Homer News

Don **Gilman** - Mayor, **Kenai** Peninsula Borough

Dennis Greene - Counselor, Community Mental Health Center, Homer

Gary **Gunkel** - Police Chief, **Seldovia**

George **Gustafson** - Townsite Trustee, BLM

Dr. Hall - Education, **Kenai** Peninsula Borough

Betty **Hamlin** - Superintendent, Pacific Pearl, **Seldovia**

Robert **Heasley** - North Pacific Rim

Hazel Heath - former Mayor and businesswoman, Homer

Susan **Heikalla** - Planner, **Alaska** Division of Lands, Anchorage

Floyd **Heimbuch** - Executive Director, Cook Inlet Aquaculture Association

Mike **Heimbuch** - fisherman, Homer

Roy M. Huhndorf - President, Cook **Inlet** Region, Inc.

Bob **Jenks** - Municipal Lands Trust Officer, Division of Planning, Alaska Department of **Community** and Regional Affairs



Ann Johnson - Section Chief, Cook Inlet Section, **BLM** Div. of ANCSA

Dick Jones - Manager, Seward Fisheries Cannery, **Ninilchik**

Mary Jones - Administrative Assistant, City of Homer

Janette Kaiser - U.S. Public Health **Service**

Peter Kalifonsky - Old-timer, **Tanaina, Kenai**

Tom **Kizzia** - Writer, environmentalist, Homer

Robert **Kvasnikoff** - President, English Bay Corporation

Serges **Kvasnikoff** - Resident, English Bay

Vincent Kvasnikoff - Village Council President, English Bay

Jim LaBelle - former President of Port **Graham** Corporation

Ms. Lare - **Community** Development Coordinator, Div. of **Comm. & Rural**  
Development, Dept. of Community & Regional Affairs

Bob Lee - Pastor, **Seldovia**

Carolyn Lee - Real Estate, **Seldovia**

Mike Lee - District Superintendent, **Alaska** Div. of Parks, **Soldotna**

**Loren** Leman - **Ninilchik** fisherman

Barbara Lewis - Health Director - Cook **Inlet** Native Association (**CINA**)

Annabel Lund - Staff writer, Homer News, child psychologist, Homer

Don **Lyon** - Alaska Division of Energy & Power Development

Tim **Malchoff** - Fisherman, Port Graham

Mary **Malchoff** - Acting President, Port Graham Corporation

Harry Martin - Kenai Peninsula Borough assemblyman, editor of Cook Inlet  
Chronicles, **Soldotna**, Alaska

Bonnie **McCord** - President, Tyonek Village

Kurt McGee - Land Planner - Cook Inlet Region, Inc. (**CIRI**)

**Elenore McMullin** - Board member, Port Graham Corporation, Health Aid

Walter **Meganack** - President, Port Graham Village Council

Arnold **Melsheimer** - Councilman, English Bay

Juani ta **Melsheimer** - **Resident**, English Bay

Bonnie Manta - Employment & Training CINA

Ken **Middleton** - Regional Supervisor, Division of Commercial Fisheries  
Alaska Dept. of Fish and Game

Frank **Mielke** - Legal Assistant, Alaska Division of Lands (former City  
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Bill Monday - Planning consultant, developing **Kenai** Comprehensive Plan

John **Monfer** - Kenai **Native** Association, **Wildwood**

Ken Moore - Fisherman, President of United Fishermen of Alaska, Homer

Snooks Moore - FisherWoman, former **Kenai** resident, Homer

**Marge Mullen** - early **Soldotna** homesteader, restaurant owner, **Soldotna**

Sergeant John Myers - Detachment **D**, Alaska State Troopers, **Soldotna**

Fred Newmeyer - Businessman, **Seldovia**

Pat Norman - Board member, Port Graham Corporation

Jeff **Ottesen** - Planner, **Kenai** Peninsula Borough

Sharon Overman - Chairperson, Planning & Zoning, **Seldovia**

Charlie Parker - Surveyor, Land Developer, former **Soldotna** City Councilman

Katherine Parker - Editor, **Cheechako News**, **Soldotna**

Jim Patterson - U.S. Public Health Service

Suzanne Perry-Piper - Div. of Local Government, Dept. of Community &  
Regional Affairs

Alan Price - Counselor, Cook Inlet Count" 1 on **Alcoholism**, **Soldotna**

Carl **Propes**, Jr. - Land Manager, **Chugach Natives, Inc**

Doug **Reger** - former **Soldotna** resident

Penny Rich - Harbormaster, **Seldovia**

Steve Rinehart - Reporter, Peninsula Clarion

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Port Graham

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Alex & Elizabeth **Shadura** - Fisherman, Cook Inlet Regional Corporation  
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John **Skelton** - Planning & Classification, Div. of Lands

**Tom & Gillian** Smythe - Alaska Consultants, Anchorage

**Durenty Tabios** - Executive Director, North Pacific Rim

Don Thomas - Assessor, **Kenai** Peninsula Borough

Ron Thomas - **Fisherman**, Homer

Frank Tupper - **Ninilchik** Village Council

Ike Waitts - Planner, **Kenai** Peninsula Borough

Werner **Weisinger** - Manager, Tyonek Timber, Inc.

Bailey **Williams** - Fisherman, Homer

Gary Williams - Fisherman, former Mayor and newspaper editor, Homer

Richard G. Wilson - Wilson & Associates, Anchorage

John Wise - City Manager, **Kenai**

Dr. William Workman - University of Alaska, Anchorage, Archeologist

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