

COMPREHENSIVE REGIONAL PLANNING FOR

ALASKA'S LANDS AND RESOURCES

Phase I Report to the Commissioner
of Alaska Department of Natural Resources

by

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SUMMARY

Regional planning is a process that can help the Department of Natural Resources in creating the necessary statewide and regional framework for land and resource management and decision making. Toward this end, the report reviews pertinent types of planning, examines ongoing planning and needs within DNR, and looks at other state agencies in terms of their relationship to fulfillment of DNR's planning requirements.

Resultant conclusions are:

1. Recent legislation has put a heavy emphasis on planning as a foundation for land and resource management. DNR now has a well established commitment to statewide and regional planning.
2. The DNR regional planning program, now only in an embryonic state, should be consolidated at the department level and should encompass the full scope of the Department and its programs.
3. A two to three year planning effort is recommended to cover the state's six macroregions. Built on a comprehensive planning basis, it will focus on state lands and resources. The results are termed "regional resources action plans" or "RRAPs" to emphasize the intensive, decision-oriented effort.
4. RRAP's will provide an overview of each region, and thus of the entire state; identification of goals, determinants, constraints,

and other decision factors; inventory of state lands and resources; evaluation of carrying capability and productivity; assessment of development potentials; and analysis of alternatives.

5. RRAP output will lead to DNR program decisions and implementation, such as land classification, disposal and retention determinations, establishment of management categories and reserves, resource disposal programs, preparation of functional plans, and cooperative management arrangements.
6. As necessary, "area resources action plans" will apply the same type of regional planning process to areas targeted for special attention. Regional and area resources action plans can be pursued concurrently.
7. Cooperative arrangements with other state agencies will enhance DNR's land and resource planning program.
8. Close liaison should be established with the regional transportation planning program of the Department of Transportation and Public Facilities. DOT/PF and DNR planning are highly complementary in concept and method. Together, they are responsible for the principal components of regional development.

The next study report will cover Phase II, which deals with how planning should be structured within DNR and with the roles that DNR planning,

program, and district staffs should have in the various planning activities of the Department.

Phase III will deal with specific procedures and planning methods for following through on the recommendations of this report, including such elements as citizen participation and interagency cooperation.

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INTRODUCTION

Planning is widely accepted under the American system as a process for policy development, action programming, and decision making. It is standard practice in the private sector, especially on the part of large and complex enterprises. It has been used for many decades at the local government level to help set development goals, map land uses, lay out transportation and other facilities, and program capital improvements and other actions.

States have been in and out of planning for close to fifty years. However, attempts at development planning seldom proved successful, in large part because of the archaic governmental structure that has for long characterized most states. It has been only over the past decade that planning at the state level has been coming into its own, mostly as an evolving vehicle for gubernatorial control of the executive branch.

Alaska has followed this pattern since the 1930's. Federal, territorial, state, and federal-state instrumentalities have played the planning game in earnest attempts toward rational resources and economic development, but to little avail. And now state planning in Alaska is also going in the direction of serving as an aid to the governor in policy development, agency coordination, and relating budgeting and program management to state policy.

The absence of effective state planning in no way establishes that statewide planning, particularly development planning, is not needed. If anything, Alaska needs planning more than other states due to the scale of the state's resources endowment and resultant management requirements, its need for economic sustenance and diversification, and the necessity to conserve limited fiscal and other resources. This need has certainly been recognized by the state government, evidenced best by recent legislation requiring a planning base for land use and disposal decisions, for oil and gas leasing, for transportation and public works, and for many other elements of managing the conservation and development of the state and its resources.

The past also does not demonstrate that planning cannot be effectively carried out. For if one looks carefully at previous attempts, it becomes clear that they were improperly organized and structured, or lacked specific purposes, or were too abstract in conception (planning for planning's sake), or set their objectives too narrowly, or were faulty for a variety of reasons; they failed because they usually came in a combination of these factors so as to doom the planning effort in advance. But that certainly does not mean the state will not be able to plan for its future, to plan to meet its people's needs, or to resolve its critical problems.

As discussed further in this report, the Department of Natural Resources has recently started developing a capability for land use and resources planning, a major and key component of any planning program for Alaska.

At this point, the critical need is to chart a course for DNR planning that can help create the necessary statewide and regional framework for resources management and decision making. Such a course needs to be specifically designed to deal with the special problems and opportunities created by Alaska's great size and diversity, by the magnitude and multiplicity of land and resources decisions yet to be made, and by the economic and political urgency to act on these decisions.

Beginning to chart this course is the basic purpose of this project. It has evolved from an initial assignment to review the regional land planning program of the Alaska Division of Lands and to examine pertinent aspects of state land and resource policy, planning, and management pertaining to implementation of the 1978 land policy legislation. As the work proceeded, its scope and scale necessarily expanded to the Department of Natural Resources (DNR) and its various resource management elements, to planning activities of other departments, and to statewide planning for Alaska in general. Also, in view of the Department's interest in the use of planning as a policy, coordination, and management tool, and due to the issues raised as part of the current reorganization study, this project has been shifted to the Commissioner's Office.

Emphasis throughout this report is on planning that is oriented toward state program management and policy implementation. This need not mean that a planning process will not be adequate. Many land and resources decisions will result directly from the planning approach here proposed; others may require additional follow-up study. How this can be made to work is suggested here.

The current report is designated Phase I because it covers those portions of the study and conclusions that are designed to establish the foundation and directions for the suggested approach to state land and resources planning. Phase II deals with organizational issues and arrangements, and Phase III covers the specific methods for following through on the recommendations of this report.

A very helpful and constructive aspect of this project has been the continuing interaction with program managers and planners within DNR, other departments, and the Office of the Governor. The value of the discussions lay not only in the information and ideas I was able to obtain from others, but in the opportunity to test the various hypotheses and approaches reflected in this report. Most exciting, of course, was the extent this interaction has led to positive responses to the planning concepts and ideas set out in the report. I am deeply grateful to all those who helped with this truly collaborative task.

PLANNING CONCEPTS

Planning is one of those concepts, terms, and functions that has an endless number of meanings and applications. Some see planning as an effective and democratic means toward chosen ends; others see red. It is important, therefore, to define planning terminology and to discuss planning concepts pertinent to this analysis.

Purposes of Planning

To start, it might be well to take a look at the value, significance, and objectives of public planning, particularly as pursued in this report. Here are a few such purposes:

- Planning provides a policy-based process to guide management and project decisions. It can establish a continuum from general goals to specific decisions and actions.
- Planning creates a common basis and framework for decentralized government and management decision making.
- The planning process permits programming and decisions for specific areas or functions to be made in a comprehensive, statewide or regional context.

- It facilitates utilization of a common policy and data base by all agencies.
- Planning permits current decision making to be made with an understanding of both near-term and long-range considerations and implications.
- Planning provides predictability as to public policies and actions.
- Planning provides a means to interrelate varying, and often conflicting, values and objectives and helps resolve problems and accommodate different viewpoints.
- Through use of alternatives, planning permits full consideration of different possible courses of action and of their respective effects.

The overall purpose of planning, thus, is to provide a means for policy analysis, for establishing a framework for decision making, and to assure interrelationship of all parts with each other and the whole. Accordingly, planning is conceived not as some esoteric exercise, but as a management and decision tool.

Definitions

In its most general terms, "planning" is a process or method for preparing to take action or reaching a goal. Regardless of context, it simply

deals with how one can meet a defined need, solve a problem, achieve a desired objective, or attain a future state. It also deals with how one identifies needs, problems, objectives and future states.

"Comprehensive planning" is a term generally used to describe a process that takes into account a broad range of the pertinent factors that should be considered in analyzing alternative courses and programming actions to deal with a given issue, subject matter, or geographic area. At the urban, regional, or state level, comprehensiveness involves considerations of social and economic factors, lands and resources, transportation and other infrastructure elements, environment and quality of life factors, and other aspects of community or regional development.

"Functional planning" defines the approach that concentrates on a given subject or element. Thus, planning that deals specifically with water, parks, highways, housing, health, or agriculture is deemed "functional."

Functional planning can also be termed "comprehensive" when it broadly takes into account the factors that impinge upon the particular function and the interrelationship between that function and the universe within which it is provided. An example is "comprehensive transportation planning" which deals with all modes of transportation and their relationship with each other and with the land use, environmental, social, economic, and other pertinent factors.

"Land use planning" has been used virtually synonymously with "comprehensive planning" when applied to urban areas. At the state level, it would fall closer to the functional or comprehensive functional categories, depending on how broad the scope of a particular planning enterprise may be. (It might be noted that under AS 38.04.065, the legislature has taken a rather comprehensive approach by specifying that land use planning consider, among other requirements, the physical, economic, and social factors affecting a region or area, and also calling for application of an interdisciplinary approach.)

"Regional planning" is a term that creates many difficulties, mainly because "region" can mean so many different types of spatial units. Thus, metropolitan areas, clusters of counties, and groups of states have all been described as regions. And so have groups of nations, parts of the earth's surface, and even vast expanses of the universe.

To help overcome this morass, at least for our purposes, the term "macroregion" will be applied to the Alaska state planning regions as proposed by the Division of Policy Development and Planning in December, 1976 and January, 1979. In other words, we will be referring to Arctic, Western or Northwestern, Southwestern, Central, Southcentral, and Southeastern Alaska as macroregions. When the term "region" is used to modify the concept "resources action plan" it, too, refers to macroregions. Otherwise, "region" will be deemed to be geographically non-specific.

A further complication: "area" as used in this report refers to a geographic unit of the state smaller than a macroregion, unless such use of the word is obviously inapplicable. "Area" will usually mean a locale that has been targeted for special planning attention, such as in the case of the Haines-Skagway planning project or as proposed for the Susitna Basin.

Returning now to "regional planning," we define this term as applying to a particular planning process (described below) and not to any specific type of areal unit. Thus, the regional planning process might be applied to the whole state, to its macroregions, its "areas," or any other unit or level where the process is relevant.

"Area planning" refers to utilization of the regional planning process for an "area."

"Management planning" and "implementation planning" are terms that are used here to cover the followup to regional or area planning so as to provide specific plans and programs for defined geographic areas and specific uses or resources. They will generally apply to instruments or activities such as oil and gas leasing plans, park master plans, subdivision layouts, disposal programs, detailed programs for managing a multiple use unit, and the like.

"Regional resources action plan" and "area resources action plan" are terms, for macroregions and areas respectively, invented for the purposes

of this report to apply to the planning process proposed later in this report. We are, in essence, talking about comprehensive land use and resources planning that does not stop with general plan preparation but emphasizes the continuum from goals and policies to application and implementation. Thus, while we may be talking about developing plans for the entire Southwestern macroregion to serve the people of this region and of the entire state, we are focusing this planning to result in specific decisions on land disposal, classification, mineral development, creation of park and forest reserves, or whatever may be pertinent.

All these definitions are, of course, rather brief and superficial, and some may still be a bit confusing. However, their purpose is only to establish an initial framework of common terminology. As we go on, individual terms or specific and pertinent meanings should become clearer.

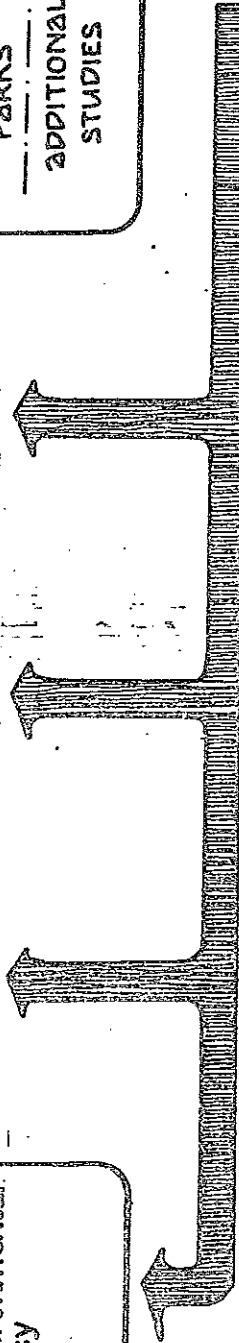
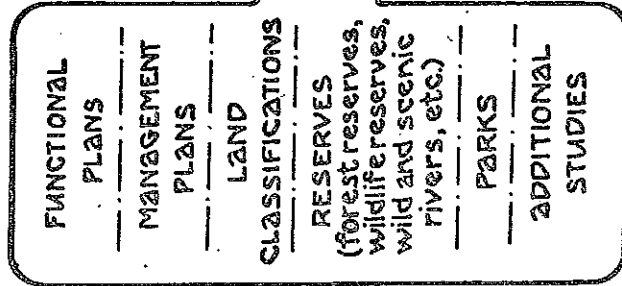
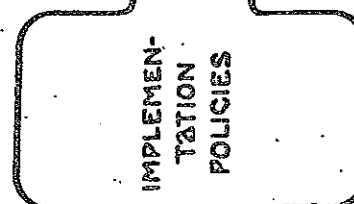
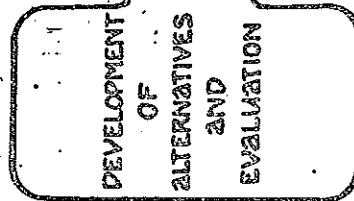
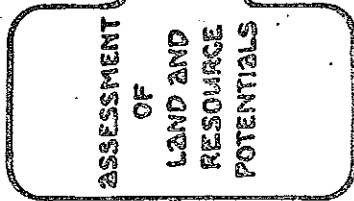
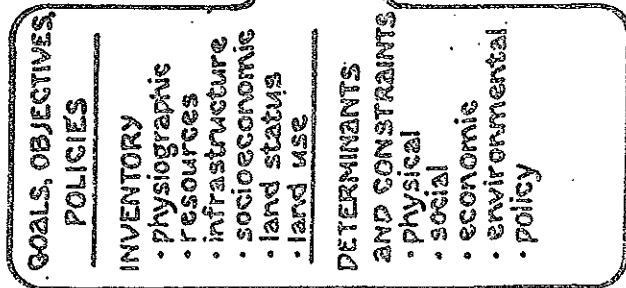
The Regional Planning Process

The purpose of this study is to lay a basis for state land and resources planning in Alaska. Phase III of the study will be devoted to detailing the planning procedures and methods that should be applied to give reality to the concepts espoused in this report. At this point, however, a quick review of our approach to regional planning for lands and resources will aid better understanding of subsequent discussions.

REGIONAL PLANNING PROCESS

(note: public involvement, interagency involvement and plan products are not shown.)

REGIONAL PLANNING ANALYSIS



FEEDBACK LOOP FOR REFINEMENT AND REVISION DUE TO CHANGING CONDITIONS, REVISED GOALS AND POLICIES, NEW INFORMATION, EXPERIENCE AND REQUIREMENTS OF SPECIFIC MANAGEMENT PROGRAMS AND NEED FOR PERIODIC REVIEW.

As with definitions of regional planning, there are endless descriptions of how one goes about it. Generally, however, some basic elements will be found in most varieties: definition of purposes or problems toward which planning is to be addressed; delineation of goals, objectives, and constraints by which possible solutions should be guided and results evaluated; collection and analysis of data, development of alternative plans or courses of action; evaluation of alternatives and selection of a preferred one; programming of implementation; etc. There can be endless iterations and feedback loops in this type of process, and, depending on the characteristics of the planning being pursued, all sorts of decision makers, professionals, and publics may be involved.

The attached diagram sets out the regional planning process that is being proposed for application to Alaska's lands and resources. It has evolved from a number of regional planning projects in Alaska. The following underlying premises are basic to the regional planning approach proposed for DNR including those of the Alaska Division of Lands:

1. **Comprehensiveness:** Plans and decisions for individual land and resource functions of the Department need to be considered on an interactive basis, taking into account probable and desirable future events, policies, and consequences of alternative courses of action.
2. **Geographically, areal interaction must be similarly considered.** Thus, insofar as relevant, planning for specific sites and areas needs to be appropriately related to adjacent areas and to the larger region within which it is located.

3. State lands and resources do not exist in isolation. Policies, planning, and management for their use must take into account ownership, jurisdictions, responsibilities, and decisions of others, such as federal agencies, local governments, Native corporations, and other private owners.

4. Similarly, interaction among state programs has to be considered as part of DNR planning and decision making. There is no such thing as complete or perfect knowledge. At any time, necessary planning must proceed utilizing what data are available and lay the basis for any necessary planning interrelation.

5. To be of any value to policy and management, planning must be accomplished in a timely manner. Insofar as at all possible, planning should be completed prior to the time decisions are made that are most appropriately based on that planning.

6. Planning must be a continuing process. Initial planning, especially when accomplished on a rapid and possibly preliminary basis may need to be followed by more deliberate and intensive efforts. Periodic review of plans--taking into account changing conditions, policies, additional information, and the like--is necessary to provide a continuing basis and framework for management and decision making.

7. In general, planning is required at all levels and within all units, covering the full spectrum from policy planning to management programming

to action decisions. Within this spectrum, the scope, character, and intensity of planning will, of course, vary.

PLANNING IN DEPARTMENT OF NATURAL RESOURCES

The Department of Natural Resources has direct management responsibilities for all natural resources owned or managed by the State of Alaska, except fish and game. DNR has both statutory and proprietary jurisdiction and planning responsibility covering lands, waters, forests, agriculture, parks and recreation, soil conservation, and minerals, including petroleum and natural gas. The Department also is required to prepare plans for pipeline transportation development and for the conservation and maximum use of the scenic, historic, archeologic, scientific, biological, and recreational resources of the state.

Last year brought particularly strong legislative mandates for planning. New state land policy legislation mandated a strong and comprehensive land use planning program. Legislation covering municipal selection has a component of cooperative planning with municipalities. Forest management planning is now required. And, a five-year plan for oil and gas leasing must now be prepared annually.

This impressive array of planning responsibilities is new; the past has been characterized by limited comprehensive or required planning. Significant strides into planning have been taken only during the past several years. In 1975, the Planning and Research Section was established in the Commissioner's Office to pursue land selections and other planning-related activities. Although the Planning and Classification Section had existed for a number of years, it was only in 1978

that the importance of planning was formally emphasized as a major function of the Division of Lands through significant increases in funding and manpower. New department activities dealing with resources inventory, data systems, coastal management, and others all have strong ties to planning.

The relatively slow pace of regional planning over these years actually has some positive aspects. This pace was due largely to the planning units being assigned to deal with legislative mandates and critical problems, such as (d)(2), land selections, exchanges, delineation of lands for disposal, etc. In dealing with these assignments, planning staffs were able to apply their professional perspectives, while at the same time accepting action and program implementation as an element of their basic responsibilities.

As of this time (1978-79), regional and area planning capability has been established, and the Department is obviously dedicated to planning. It is in furtherance of an active planning program that this report has been commissioned. In pursuit of that end, the following sections examine the planning of the Division of Lands and other parts of the Department and review some of the limitations and problems that have been encountered so far.

Planning and Classification Section

From the time DNR was established in 1959, the Division of Lands has had a nominal planning authority and implied planning requirement. Now planning is mandated. With the recent enactment of AS 38.04, regional and area land use planning is required as a basis for the use of state-owned land. The statutes not only require a comprehensive approach to land planning, but also provide for formal adoption of plans by the DNR commissioner after public and local government participation.

The beginnings of land use planning are well described in Janet McCabe's study of the practices of the Alaska Division of Lands during the period 1959-1975.¹ Although ADL tried to develop a planning program during the early years, most classification decisions resulted from public pressure and the desire to dispose of lands for revenue purposes. After several highly generalized and not particularly useful plans were prepared during the early 1960's, the Division turned to preparing meaningless "planning reports" that simply served to justify desired classifications.

1. Janet McCabe, "The State's Domain" in Agenda 4 State Lands.

Anchorage: Joint Federal-State Land Use Planning Commissioner for Alaska, 1975.

The Planning and Classification Section (P&C) was established in 1973, but it was not until just recently that real planning commitments have been implemented. Two sporadic efforts were started in the mid-1970's to provide at least some basis for land use and resource management classifications in a couple of problem areas. An area planning program for the Haines-Skagway district was initiated by a P&C classification officer/appraiser, while land managers of the Fairbanks District Office developed a planning program for the Big Delta area. Both undertakings were limited in conception and had only limited resources to work with. In both, local involvement was emphasized and other agencies were used to provide planning support. And both encountered problems and delays due to lack of planning staff and support. In response, professional planning help was brought in to put the projects in shape and move them toward completion. As of the beginning of 1979, the Delta project is nearing its end, and Haines-Skagway planning is in its final stages. A Kenai land management plan has been started, and a cooperative project is underway to provide the basis for land planning within the Susitna Basin. ADL's Planning and Classification Section is also conducting planning activities associated with municipal land selections, exploring methods for cooperative land planning, implementing terms of the land exchange with Cook Inlet Region, Inc., identifying areas for land disposal, locating lands for agricultural classification and potential development, preparing subdivision guidelines, carrying on the state land classification program and other implementation, and performing a variety of other tasks, including participation in the DNR's Alaska Land and Resources Information System (ALARS).

General objectives of ADL "area land management planning studies" (sometimes referred to as "regional land planning" or just "regional planning") have been described as follows:

1. Identify major land issues including private and municipal land needs, state interest in lands, and conflicting demands for state-owned lands or resources.
2. Establish a basis for classifying or reclassifying state-owned lands.
3. Determine which lands are suitable for disposal to private parties or municipal governments.
4. Determine land use guidelines addressed to questions related to the amount, location, purpose, and timing of state land disposals.
5. Develop land and resource management objectives and guidelines for lands to be retained in ownership by the State.
6. Identify any subareas where more indepth study is required to assure wise classification, management, and disposal decisions are made.¹

1. Stephen Reeve memorandum of March 20, 1978, Classification System Revision, pages 3-4.

In brief, then, area planning studies are to provide a basis for decisions with respect to the use and management of state lands.²

Accordingly, the boundaries for such planning studies have been specified to cover geographical areas containing significant quantities of state land.

The Delta and Haines-Skagway planning projects, as well as the newly-initiated Kenai land planning, have provided ADL's Planning and Classification Section with experience that has been useful in fashioning the approaches and methods to be utilized in future planning. At the same time, these projects and in-house programming help bring about an understanding of the shortcomings of the current approach to planning.

The essence of the problem with ADL's current approach is this: In order to provide the basis for classification, management, and disposal of state lands, a relatively sophisticated, comprehensive planning process is established for a limited geographic area. Because so many factors can influence land use and management decisions, ADL has to cover all facets of comprehensive regional planning, in effect carrying on a comprehensive regional development planning process for an area relatively small in size.

2. For purposes of this report, "state lands" and "state-owned lands" include lands that are patented to, tentatively approved for, or selected by the State.

In this process, ADL has had to deal with subject matter far beyond its own direct responsibilities in order to make sure that an appropriate basis would exist for decisions affecting land. Thus, planners have had to deal with a broad gamut of social; economic, community development, resource development, environmental, transportation, and other factors. P&C has, in effect, covered the gamut of subject matter falling within the purview of the whole Department of Natural Resources: agriculture, forestry, minerals, parks and recreation, water management, etc. In addition, it has had to concern itself with subjects falling under non-DNR agencies, dealing with these agencies directly in areas such as coastal management, community development, fish and game, public facilities, transportation, and the like. Also in the process, P&C has dealt with federal land and resource managers, Native corporations, local governments, and a variety of other private owners and organizations.

Planning area delineation on the basis of state land ownership also creates a problem in land use planning or comprehensive regional planning. This is demonstrated better in the Delta project than the Haines-Skagway study, which covers a relatively isolated area in the southeast region. On the one hand, the Delta study covered more than the land ancillary to the Delta community; on the other it did not cover an area large enough to constitute a logical regional planning unit.

The problem is also more than just a matter of proper planning area delineation--it is an important matter of scale. Many aspects of the planning program simply could not be dealt with in the Delta planning

area context. For example, in order to establish the economic value and development potentials of the forest resources of the area, it was necessary to not only examine possible production costs for the timber stands near Delta, but to also look at markets outside the Delta area, define availability of potential production from other forests that might be in competition with Delta timber (and this would encompass a large proportion of Interior Alaska), examine potential transportation that could serve Delta and competitive areas, etc. The same amount of effort required to analyze the development potentials in the Delta area could have gone a long way toward doing the same for a much larger region, possibly much of Interior Alaska. The same, of course, holds true for other elements of the planning program, for trade-offs between the Delta area and others more or less similarly situated had to be considered in the case of recreation, mining, and other activities.

Due to lack of necessary planning capability, the Delta and Haines-Skagway efforts have taken more than three years to accomplish. Given greatly strengthened professional resources, either project could have easily been completed within a year. Certainly, future projects of a similar nature could be carried out quite expeditiously. Even so, it is clear that an area-by-area progression of planning throughout Alaska would mean that the planning framework for land decisions in many parts of the state would still be years away. As a result, just as before, implementation decisions would precede comprehensive land use planning.

Both from the standpoint of effectiveness and efficiency, the still relatively limited professional, financial, and other resources available for planning need to be directed toward doing comprehensive planning on a more appropriate, i.e., larger, scale and at a much more rapid pace. Intensive planning for smaller target areas requiring special study can best be handled in the context of the broad regional program.

Planning and Research¹

The Planning and Research Section (P&R) was established in December, 1975, to coordinate planning and policy formation actions of DNR and to establish and implement a land selection process. The general intent was to bring a departmentwide and statewide perspective to planning and policy formation activities. It was to address the land ownership pattern of the state, special planning activities related to new program initiating, special high-priority projects, DNR policy formation and program formation, and maintenance of a balance in the Department's approach to resources management.

1. Based on Dave Hanson memos of November 7 and November 15, 1978; interview December 18, 1978.

P&R planning coordination was directed toward the following activities:

1. general coordination through the Planning and Information Exchange Meetings and other activities designed to keep the various parts of DNR informed of what other sections are doing in the planning area;
2. participation in most planning efforts to ensure departmentwide perspective;
3. provision of a comprehensive statewide viewpoint to assure appropriate planning efforts are taking place and to provide direction for new planning efforts;
4. initiation of new planning programs as required and assuring their incorporation into appropriate line functions;
5. organization of DNR resource inventory;
6. leadership toward establishment of the Department's computerized information system (ALARS).

P&R's ability to pursue its broad and important mission was severely strained by two all-consuming priority efforts: state land selection and leading a major part of the (d)(2) effort. P&R established a land selection process based on available resource inventory and assessment

information and involving public and professional participation. The result was that, unlike earlier state selections covering up to 66-million acres, the choosing of 43-million acres of land for the state accomplished over the past three years was based on a thorough policy and planning-oriented process which will pay further dividends by having laid the basis for land and resources management.

In mid-1977, P&R became a focal point for much of the State's involvement in the (d)(2) struggle. It functioned as a planning and a research unit, providing most of the information and analysis that lead to establishment of state policy positions, and representing those positions in working with both houses of the U. S. Congress. P&R's resource inventory was used as an analytic tool in attempting to assure that the most appropriate lands for state ownership were left out of (d)(2) reservations.

Both the land selection and (d)(2) involvements were of critical importance to the state. At the same time, they kept P&R from fully performing its central policy and planning functions within the Department. As a result, the comprehensive perspective on statewide and regional planning is still lacking, both from the standpoint of dealing with issues of departmentwide concern and providing guidance to other planning efforts within the Department.

Elements of Other DNR Planning

Functional planning authority exists for a number of the Department's programs. These and a few non-covered programs are briefly mentioned.

The Division of Parks is responsible for planning a system of state parks and historical sites. It also prepares the statewide outdoor recreation plan, which is a prerequisite for obtaining federal aid for park and recreation development. The Division of Parks has pursued its planning activities on a limited functional basis, essentially proceeding on its own in the absence of departmental policy guidance and of a statewide or regional planning and development framework.

The 1978 Forest Resources and Practices Act (AS 41.17) establishes the basis for managing Alaska's forest lands. Although the act provides that state forests may be established only after planning and classification procedures have been completed, the regulatory and administrative standards it establishes (Section 41.17.060) should materially assist in the planning and classification process itself. Furthermore, development and maintenance of a long-range plan for administering the state forest program, as required under the act, will facilitate general state planning for timber resources management and development. As of now, the capability to do this effectively does not yet exist.

In the area of oil and gas, the AS 38.05.108(b) requirement for annual preparation of a five-year oil and gas leasing plan provides an initial base for planning land uses and other developments that might relate to potential petroleum activities. Since the state controls tidelands along Alaska's entire coasts, possible impacts of their being leased and developed could extend far beyond just the uplands owned by the state.

No formal planning requirement exists to cover non-petroleum minerals. However, the subsurface mineral development presents some of the more significant economic development potentials in Alaska. While discovery is, of course, a precondition to development, a conscious, planned effort could certainly facilitate exploration and discovery. In order to assure effective consideration in statewide and regional planning, a capability to help establish a planning foundation for mineral exploration and development is sorely needed. In addition to pursuing the discovery and appropriation method for establishing rights to minerals, the state needs to also delineate the special conditions under which and the areas where leases and permits giving an exclusive rights of exploration for specified minerals for given periods may facilitate mineral development. The recent experience of Native regional corporations in inducing large-scale and extensive exploration by mining companies is a good example of the exploration and discovery benefits that can accrue from the leasing system as a complement to traditional methods.

The Division of Agriculture has no planning and little development orientation whatsoever. Its activities are limited to meat and other

food inspection, enforcement of some agricultural regulations, a small loan fund administration and other minor functions. It is unlikely that agricultural development in Alaska will move ahead except on an occasional ad hoc basis, unless DNR develops a more constructive and development-oriented approach toward establishing an agricultural industry in Alaska.

Conclusions

Planning within the Department of Natural Resources is essentially in an embryonic stage. Despite broad authorities and good intentions to undertake statewide and regional planning, only initial steps have been taken in that direction.

The Division of Lands has up to now been viewed as the principal vehicle for comprehensive regional and area planning for lands and resources, but it is only recently that the necessary capability has been established. From the standpoint of its operational and management responsibilities, ADL's focus is on areas where the state owns land. Accordingly, the Division needs comprehensive or regional planning only insofar as that facilitates decisions as to lands under its jurisdiction.

These factors and other ADL planning problems discussed above, plus the need for statewide and departmentwide perspectives to guide DNR programs, argue for redirection of the current planning program. The time for this is opportune in view of the planners' own felt needs, the yet fluid state of regional planning, and the DNR reorganization study process.

In summary: The Department of Natural Resources now has a well established commitment to statewide and regional planning for all state lands and resources. This commitment can best be realized by taking the embryonic regional planning program and considering it as not only serving the needs of land-oriented decisions, but functioning in support of the total mission of the department and all of its components. In brief, regional planning will function and will serve best if made a department-level program.

PLANNING RELATIONSHIPS WITH OTHER STATE AGENCIES

The concept of DNR actively pursuing a broad-scale regional planning program is further developed later in the report. Prior to examining this approach and its implementation, however, a look is needed at other major planning elements of Alaska's state government. For even if the Department of Natural Resources undertook a comprehensive planning program, it would need to do so in the context of the entire state government and in cooperation with other state agencies engaged in or capable of contributing to comprehensive planning. Participation of others is important not only for purposes of promoting broader state policy and coordination of objectives, but to also make it possible for DNR to undertake a highly intensive and productive planning program.

In undertaking this quick look at planning within Alaska's state government, our perspective is strictly limited. We are looking at other agencies in terms of how they relate to and can facilitate DNR's planning with its principal focus on land and resources. We are here concerned with building a framework for statewide and regional physical and development planning, recognizing, of course, that such planning takes into account many social, economic, and other non-physical factors.

Planning authorities and responsibilities exist in many agencies within the state government. Most of these deal with specific functional areas such as health, manpower, law enforcement, fisheries enhancement, and others. Some agencies are principally involved in the channeling of

funds to others who will engage in planning activities, e.g., the Department of Community and Regional Affairs and the Office of Coastal Management. Others deal mainly with protection and regulation, as in the case of the Department of Environmental Conservation. Only three state agencies have a wide-ranging responsibility for comprehensive statewide and regional planning--Division of Policy Development and Planning, Department of Natural Resources, and Department of Transportation and Public Facilities--and only the latter two have a real capability to undertake such planning.

A review of actual and prospective planning within state government shows that transportation planning of DOT/PF comes closest to complementing DNR's regional planning. The role of other departments is principally one of support, though responsibilities of some agencies would work to establish specific parameters and constraints for DNR planning. DPDP is a special case, both because it has the broadest existing planning jurisdiction within state government and the potential for providing policy direction and coordination.

Policy Development and Planning

The Division of Policy Development and Planning (DPDP) was established four years ago as a successor to the Office of Planning and Research in the Office of the Governor. DPDP was created as the Governor's staff advisory unit for coordinated policy planning, implementation, and evaluation.

Although DPDP was thus conceived as the Governor's policy arm and its authority and functions were not clearly defined, the Division inherited a number of statutory requirements pertaining to comprehensive state planning (AS 44.19.880). Among these is a requirement that the Division prepare and maintain a state comprehensive development plan. This neither DPDP nor its predecessor state planning agencies have done or even attempted to accomplish. Furthermore, it is highly unlikely that DPDP or any other element of the Governor's Office will engage in state development planning in the foreseeable future.

Although no coherent program is underway to prepare a state development plan, policy planning documents covering housing and land use were prepared over the last two years. Both were endorsed by Governor Jay Hammond (in letters of April 21, 1978 addressed to the Department of Housing and Urban Development) as elements of the "Alaska State Comprehensive Planning Process." However, the only reason these plan elements--consisting of compilations of goals, objectives, and policies--were prepared is a HUD requirement that states have a land use and housing element as a prerequisite to continued receipt of federal planning funds.

The land use element prepared by DPDP sets forth current goals for land development, land conservation, and preservation. Series of objectives deal with resource management, growth management, environmental quality, and public participation. A number of categories under each set of objectives provide a framework for both substantive and procedural

policies. Some are so vague and nonspecific as to be virtually meaningless; for example: "The state shall base its land use planning on solid planning principles." Others could well provide guidance for state development decisions: "The state shall encourage concentrated growth in the existing communities in order to promote efficient use of land, energy conservation, and to minimize costly public expenditures for community facilities and services."

DPDP is currently refining and updating the land use element, revising the submission to HUD for use in Alaska. A review draft of the revision is to be available shortly, and printing and distribution to agencies is scheduled for March, 1979. Transmittal to state departments as a policy guide would be over the Governor's signature.

No other state plan elements are being prepared nor is it anticipated that additional steps in that direction will be taken unless mandated by HUD as a requirement for federal funding.

In not pursuing statewide development planning, Alaska is very much in accord with national trends. Elsewhere also, state planning agencies have been largely transformed into policy development and program coordination units. And their work is increasingly linked to the budgeting function in governors' offices.

It is in the exercise of these evolving policy and coordination functions, with their links to budgeting, that DPDP can

provide important help to DNR's regional planning program. Such help from the Governor's Office can come in two ways:

1. providing DNR with a state policy framework that establishes goals and directions within which resources planning and development should be pursued; and
2. helping coordinate planning efforts of the various departments, including use of the budget process to assure that fiscal and manpower resources will be available in one cooperating agency to provide, in timely a fashion, needed planning and support services to the planning efforts of another agency.

Transportation and Public Facilities

Governor Hammond's Executive Order No. 39, effective July 1, 1977, established the Department of Transportation and Public Facilities and gave it powers and duties to "develop a comprehensive, long-range, intermodal transportation plan for the state . . . study alternative means of transportation in the state, considering the economic and social, and environmental impacts of each alternative . . . coordinate and develop state and regional transportation systems . . ."

The statewide transportation plan is being developed on a region-by-region basis. Regional plans are prepared by DOT/PF staff and a major transportation

planning consultant for each region. Guidelines and schedules for regional planning are developed by the Transportation Planning Division headquarters in Juneau. Actual work and regional transportation planning studies are carried out by Transportation Planning Division staff in the Juneau, Anchorage, Fairbanks, and Nome regional offices. A coordinator for each regional project is provided by the headquarters office. A preliminary transportation plan for Southeastern Alaska is now undergoing public review and completion is scheduled during the first part of 1979. The Western/Arctic Transportation Study has been initiated; and the plan is to be completed in mid-1980. Transportation planning for the southwest and interior (excluding Fairbanks) regions will be started this March. Southcentral region (excluding Anchorage) planning will commence in April. These three studies are expected to take 12 to 15 months each.

In addition to these large regions, transportation planning is carried out for special areas (Mat-Su and Prince William Sound studies) and for both large and small communities. The Transportation Planning Division also works on policy development, needs assessments and system performance evaluations, coastal management, and interdepartmental liaison.

Implementation elements include a capital improvement program presented annually to the legislature for approval, development of operating procedures for aviation and port construction, and monitoring of design and construction. The scope of DOT/PF's \$5-million planning program for the current fiscal year is summarized in the appendix.

The transportation planning process is still evolving, and the Western/Arctic Transportation Study (WATS) shows major advances over the Southeastern project in terms of concepts, procedures, and methods. The appendix to this report also includes a review of the WATS planning design, with special attention paid to those program elements relevant to DNR planning.

WATS planning is both multi-modal and comprehensive. The work program includes extensive studies and work elements that would be pertinent to regional planning for lands and resources:

- ° population, employment, income;
- ° production, consumption, subsistence, imports, exports;
- ° land ownership and land use patterns;
- ° resources and other potentials for growth;
- ° environmental inventory and analysis;
- ° forecasts of population, employment and income, production, etc., taking into account development plans and programs of public and private agencies as well as subsistence production.

These forecasts and other factors are used to arrive at high, low, and "most probable" rates of development. Alternative development scenarios are developed as appropriate. Alternatives are tested and evaluated in terms of their transportation, economic, social, and environmental effects.

In its basic essentials and scope, this transportation planning process is very much akin to the methodology now used in DNR land use planning and likely to be applied under future regional planning for lands and resources. And though some of the techniques may differ, enough commonality exists between the respective planning processes to justify carrying them out on a cooperative basis.

Methods of linking DNR with DOT/PF regional planning will be covered in the Phase II report. Suffice it here to say that the concept is one of cooperative and coordinated planning, rather than providing for unified and integrated projects. Planning projects would be jointly designed so as to serve the objectives and needs of both agencies, information would flow from one to the other as agreed in the project design, and, as appropriate, some of the analyses, scenario development, and evaluations would be carried out in common or in close coordination. However these processes are made to work, both agencies are sure to benefit, and further pursuit of regional planning cooperation is recommended.

Fish and Game

The Alaska Department of Fish and Game is as important to any DNR regional planning effort as DOT/PF, though more in the form of providing critical planning parameters and giving support than active planning involvement. ADF&G has an excellent record of cooperation with other agencies and their programs, including ADL planning, coastal management,

FSLUPC studies, resource development projects, and other activities entailing the use of lands and waters in Alaska.

ADF&G engages in some statewide planning, though that is principally for its own programs. Thus, the statewide game management plan covers, by regions, policies and procedures for managing various species of game. A statewide program for fisheries enhancement is underway, and an identification study of good aquaculture sites has been completed.

Principal interface for land use planning is with the Habitat Protection Section, which carries ADF&G responsibility for land and water resource issues and does in-house coastal management planning for fish and game species. Through its access program, potential problems are identified and proposals developed for maintaining public access.

Extensive information is available on the distribution of game, fish, and small furbearers, and sometimes on their relative abundance also. A data and management information system is being developed.

Of potentially greatest value to DNR planning is a new effort, which unfortunately is just in its beginning phase: a habitat classification and evaluation program. The proposed inventory and mapping of the relative value of habitats would provide a direct input to regional land use planning through designation of areas for critical habitat protection, refuges, and sanctuaries.

Commerce and Economic Development

DCED can assist regional planning through (1) provision of data and (2) assistance with planning analysis.

The Alaska Economic Information and Reporting System (AEIRS) provides a central source of statistical data on Alaska that is collected and maintained by a variety of public and private agencies and individuals. The data bank presently covers over 800 regularly updated monthly, quarterly, and annual time series describing the Alaskan economy. Data include quarterly employment, earnings, average weekly hours, and average hourly earnings by industry; energy consumption by fuel type and by sector of the economy; state and local government revenue and expenditures; population by age; Anchorage consumer price indexes; and a variety of data on the fishing and lumber industries, waterborn freight, and many other features of the Alaska economy. Depending on the series, information is provided for the state as a whole, for regions, census divisions, local government units, communities, election districts, or on other bases.

DCED can also provide assistance with analyses of data and economic opportunities, particularly from the standpoint of economic development planning. Utilizing the department's information and projections of potentials for development, DCED staff can facilitate reflection of production and market prospects in regional development plans.

Environmental Conservation

DEC planning responsibilities are oriented toward protection and conservation of the environment. Although concerns of public health, safety, and welfare are paramount, the department has broad planning responsibilities for coordinating and developing policies, programs, and planning related to the environment. DEC is mandated under law to formulate a statewide environmental plan for management and protection of the quality of the environment and natural resources of the state. Comprehensive plans for water pollution control are also required under state law.

These functions are concerned primarily with establishment of standards and regulations to protect environmental quality in this state. Such standards and regulations can affect both patterns and character of development and will, thus, affect use of lands and resources.

The relevance of these DEC functions to DNR planning lies in the constraints they may establish in regard to uses of land and development of resources. Such constraints need to be kept in mind throughout the planning process and must be reflected in planning analyses and results. This can best be accomplished by obtaining pertinent information during the early stages of each project and by providing for DEC review at pertinent points in the planning effort.

Community and Regional Affairs

DCRA is not an active participant in regional planning. Rather, it functions to render aid to cities and rural communities in their own local or areawide planning efforts. With respect to DNR regional planning, DCRA's principal contribution can be through coordination with localities and provision of information on existing conditions and prospective developments.

The NANA region provides a good example of the kind of effort that could be coordinated with DCRA's assistance, should DNE concurrently engage in regional planning for such an area.

NANA Regional Strategy

A "regional strategy" is currently being initiated for the NANA region. The term, based on HUD's latest gimicky nomenclature, is in effect another way of referring to a comprehensive regional development plan. In the NANA case, the emphasis is on preparation of community development plans within a framework of regional development policies and prospects, including transportation and resources.

The NANA regional strategy project is being carried out by Mauneluk Association, the regional nonprofit organization. The Department of Community and Regional Affairs is providing technical assistance for the planning process and regional policies development, as well as helping with coordination of other agencies participation.

DOT/PF is coordinating its Western/Arctic Alaska Transportation Study with the NANA effort. The Alaska Public Forum (Office of the Governor) is assisting both NANA and WATS through sponsorship of a household survey in the region and rendering assistance to Mauneluk with public involvement and goals definition.

The final product of the regional strategy will be a document outlining regional development policies and, as developed, specific community development plans. The document will also contain an inventory and assessment of environmental and socioeconomic data, including projections of population and economic factors.

ADL's water section is being involved in the NANA program in connection with its water research activities. The Planning and Classification Section was invited, along with many other state and federal agencies, to attend an information and coordination meeting in Kotzebue. However, DCRA staff did not involve P&C in the NANA project on the premise that the state had selected only a small amount of land within the NANA region. (In fact, there are some significant state selections in the region.)

Coastal Management

Coastal management has the potential for important interaction with DNR planning and programs. So far, as can be seen in the "State of Alaska Coastal Management Program and Draft Environmental Statement" of

January 1979, insufficient progress has been made to clearly define specific prospects and areas of interaction. However, both state law and plain logic call for mutually reinforcing planning for areas covered by coastal management jurisdiction. It will be necessary, therefore, to maintain close program and planning linkages and to exploit all possible opportunities for cooperation, and if these are to be achieved, it appears that DNR will have to take some major initiatives.

The principal emphasis of the coastal management program will be on provision of financial and technical support to districts for development of their individual coastal management programs. As described in Appendix 2, DNR is responsible for provision of specific information to local districts. The Department is also a member of the Alaska Coastal Policy Council and the State Agency Coastal Coordinating Team, as also discussed in the appendix.

DNR could strongly advance the objectives of the coastal management program by moving its own regional planning effort ahead as rapidly as possible. Doing so would not only provide a regional framework for district management plans, but would also help give them guidance by establishing parameters for use and development of lands and resources in coastal and adjacent areas. The overall effect of an intensive DNR regional planning effort could thus potentially result in speeding completion of district coastal management programs and the entire statewide program. (Accordingly, it might be appropriate to negotiate with the Office of Coastal Management for partial financial support of DNR's regional planning efforts.)

A summary of pertinent aspects of the coastal management program appears in Appendix 2.

RECOMMENDED APPROACH FOR DNR PLANNING

A series of recommendations has emerged from the review of ongoing planning and needs in the Department of Natural Resources and other parts of state government. The recommendations are also based on a variety of considerations not specifically discussed in this report. Among these are the continuing uncertainty about the future status of much land in Alaska, impending more rapid transfer of selected lands to the state and to Alaska Natives, desire of many Alaskans to own land, low level of exploration for and development of resources coupled with the state's need for a stronger-based economy, requirements for protection of subsistence resources, and others. Coupled with these considerations is the absence of effective local self-government in most of rural Alaska, the low level of knowledge about Alaska's resources, the limited land and resource management capacities of most agencies, and a whole variety of problems related to conflicting jurisdictional interests, absence of coordinated planning and management, and other deficiencies in cooperation among governing and managing institutions. For our purposes, recognition of these conditions is assumed.

Recommendations for policies and strategies of the Department of Natural Resources are as follows:

1. DNR regional planning should encompass the scope of the whole Department: land, water, forests, agriculture, parks, and recreation, oil and gas, other minerals, and other functions. This approach will:

- a. give the Commissioner additional means of assuring that all programs under his jurisdiction are pursued in accordance with policies established by him, the Governor, and the Legislature;
 - b. provide a common framework to guide functional plans and decisions of the various programs;
 - c. assist in defining problems and program deficiencies, establish policy and decision needs, and facilitate appropriate responses;
 - d. aid in managing, programming, and budgeting the Department's work to effectively discharge the Commissioner's responsibilities.
2. "Regional resources action plans" (RRAPs) are proposed as the principal vehicle for DNR planning.* The regional resources action plan concept is premised on the desirability of effecting management-oriented decision making within the context of a comprehensive regional perspective, coupled with our ability to do this. Here are some of the ideas that underlie the RRAP concept:

*It is felt that a special name or label would be appropriate to emphasize that we are not talking about routine regional planning or land use planning, but creating a somewhat unique, intensive and decision-oriented process. This process and its methods are to be elaborated in Phase III.

- a. The planning is to be comprehensive: all relevant aspects of the region, its people, and its development are to be covered (see Definitions).
- b. RRAPs should be prepared on the basis of Alaska's six regional macroregions. This will permit DNR to achieve a quick regional overview and to move rapidly toward a coherent statewide land and resources development plan.
- c. While planning will encompass large regions in order to provide a broad overview and an appropriate framework for DNR programs and decisions, the RRAP focus will be on state lands and resources and the process and its outputs will be oriented toward DNR program decisions and implementation.

Discussion: What is meant is that RRAPs should, whenever possible, lead directly to implementation actions such as determinations as to whether to dispose of or retain land, classification, establishment of reserves, initiation of resource development, and the like. For example, it can be fairly assumed (and I am sure) that in much of Alaska, decisions as to best use or multiple use of state lands will be readily apparent. This is certainly true of the most recent land selections, for they were preceded by planning analyses. But with the aid of the planning process, it will also be so in the case of earlier selections, especially as most of them,

too, had some underlying purpose. Thus, even though the experts will always decry the lack of adequate information, areas suitable for agriculture, forestry, recreation sites, and other uses will generally be identifiable, and regional planning analyses should lead to appropriate decisions. In other cases, potentials of resource development or other activities may point to a need for access, such as roads or airstrips, to facilitate private investment. Or a special disposal program may be called for to achieve such a result. Thus, planning would lead to action decisions.

The RRAP context can also lay the basis for land exchange, municipal selection, cooperative management, and other types of decisions that would ordinarily take place on an isolated, ad hoc basis. Similarly, DNR could discharge many if not most of its coastal management responsibilities as part of this planning approach, again doing so within the framework of regional planning rather than in response to individual coastal management district needs.

d. The output of RRAPs will, accordingly, consist of the following elements:

- (1) Overview of region population, economy, governmental jurisdictions, land ownership patterns, major existing land and resource uses, transportation systems, significant natural features, etc.

- (2) Identification of goals, policies, issues, problems, plans and prospects, needs and demands, determinants and constraints, etc., from perspectives of people in the region (residents, businesses, organizations, etc.), government agencies (state, local, federal), special interest groups, others.
- (3) Inventory of state lands and resources and evaluation of land carrying capability and resource productivity; similar overview of land and resource holdings of others from standpoint of relationship to and influence on state lands and resources.
- (4) Assessment of state-owned land and resource development potentials, taking into account influences and constraints. (2 above).
- (5) Delineation and analysis of integrated development alternatives on basis of above elements, taking into account compatibility of different land use and resource development scenarios and their resultant management implications.
- (6) Recommendations, derived from selected alternatives, for land and resource management: classification, land disposal and retention, multiple and limited use practices,

establishment of management categories and reserves (state forest reserves, wildlife reserves, parks, trails, wild and scenic rivers, other public reserve lands, state public domain), disposal of land and resources (sale, lease, conveyance of partial rights, etc.), preparation of functional plans, land exchanges, cooperative management, and other implementation actions.

(7) Determination of follow-up: additional data requirements, area planning for selected target areas, implementation strategies and procedures, schedules for continuing regional planning, etc.

- e. Development of RRAPs can be and should be carried out on a rapid and intensive basis. While planning resources will certainly be stretched and squeezed, it should be possible to complete RRAPs for the entire state within two to three years (even if some elements of these plans would only be preliminary or tentative in nature).
- f. Regional planning is a process that does not end with one-time preparation of a plan. Rather, it entails a continuing updating and refinement of plans as needed due to changing conditions, revised goals and policies, availability of new data, and experience under and requirements of management programs. One product of the planning process should be a set of conditions

and procedures for revisions necessary to ensure current directions for program management.

3. The macroregional approach will not work in all cases and in all parts of the state. Then, area resources action plans" (ARAPs) will focus in greater detail on special target areas. This may occur in areas characterized by competing demands for land or resources, complex ownership patterns, areas of relatively dense settlement or intensive use, and other situations necessitating a closer look and more difficult decision making to lay the basis for use and management decisions. The Susitna Basin and Haines-Skagway area raise these types of issues and call for an area planning approach. Preparation of regional and area resources action plans can be pursued at the same time; in fact, doing them concurrently will aid both.

4. Priorities for developing regional and area resources action plans should be based on state land and resource holdings, on the need for DNR management decisions, and on related planning considerations.
 - a. From the standpoint of the scale of state ownership, the Southcentral, Central, and Southwest regions would receive the highest priorities.

 - b. Program requirements, development pressures, need for allocation decisions, and other considerations may significantly outweigh land ownership in arriving at planning priorities.

c. Schedules of cooperating agencies will also affect DNR timing. Thus, it could be advantageous for DNR to revise its planning sequence if the department would realize significant gains from coordinating its planning with that of another agency. (Conversely, others might be willing to relate their priorities to DNR's needs.)

d. DNR's planning capability is not unlimited. While it should be possible to carry out concurrent planning for two, maybe three, macroregions and for several target areas, it is not likely that staff and financial resources would permit tackling all of the above-mentioned, more important state regions at the same time.

e. Once regional planning is fully implemented, the process will generate the basis for determining priorities and scheduling further work.

5. DNR regional resources action planning should be carried out in close liaison with DOT/PF regional transportation planning.

Cooperative planning for lands and resources and for transportation and public infrastructure will, in effect, lead to formulation of a comprehensive state development plan based on its regional components. Discussion: The cooperative effort with DOT/PF on regional planning is seen as a key to the success of DNR's program. Not only would it result in a partnership and coordinated planning with the other

state agency most directly affecting and, in effect, controlling the directions and characteristics of state development, but it also will allow DNR to take advantage of the large financial investments being made in transportation planning. As pointed out earlier, many elements that go into transportation planning would have to be also undertaken by DNR to study the same region. Through a cooperative effort, DNR will be able to utilize much of the information generated by DOT/PF and would also have an opportunity to participate in coordinated analysis, forecasting, and delineation of development alternatives. Equally important, of course, is the value of relating resources development policy to transportation and other public facilities development. DOT/PF officials have expressed a willingness to participate in a cooperative program of regional planning and in area planning studies that might examine more complex, smaller-scale development areas. All in all, such cooperation should permit DNR to carry out a much more thorough and a more effective program of planning for land and resources decisions than could be pursued by itself alone.

6. Cooperative arrangements should also be established with other state agencies.
 - a. As appropriate, DNR's planning will need to be so structured and managed as to be responsive to the needs of other agencies, facilitate provision of information by them, and obtain their

help in the analysis and review of planning process elements.

(As will be discussed in the Phase III report, such arrangements are best handled on a bilateral basis.)

- b. Though it may be difficult to accomplish, efforts should be made to bring about some form of joint or correlated programming and budgeting for major planning projects such as conceived here. This need arises because a lead agency engaged in planning, such as DNR, frequently places demands for massive amounts of information on another agency. Thus, the Department of Fish and Game often finds itself in this position: it has information that is basic to planning and desires to cooperate, but doing so must be at the expense of its own priorities and work. In such a case, it would be in DNR's interest to make sure that ADF&G is aware of planning schedules and will have enough staff and money to assist as needed. Such planning program and budget coordination can best be effected by the Governor's Office. In general, as has been pointed out more than once, DNR has a major stake in the establishment of effective coordination of the state's planning activities and provision of state policy guidance by the Division of Policy Development and Planning.

The above recommendations have focused on regional planning directions and decisions that are essentially internal to DNR. As a result, many elements and aspects of an ongoing planning process have not been dealt

with. Actual planning for lands and resources would, of course, have extensive interaction with local governments, federal agencies, Native corporations, and other private and public groups and interests. Furthermore, public participation is a basic element that will certainly play a key role in DNR planning. These are additional subjects that will be taken up in Phases II and III.

In conclusion, it might be pointed out again that the regional planning program proposed here is the most expeditious and most effective means for providing a common policy base and coordination framework for DNR management decisions. It also needs to be emphasized once more that this kind of planning process, even though at a very large and broad scale, can, if properly managed, lead directly to implementation decisions. The approach eliminates the redundancy and unnecessary detail that frequently results from more deliberate and smaller area planning. Thus, one result of the proposed effort would be both faster results and conservation of DNR planning, manpower and other resources.

DNR ORGANIZATION FOR PLANNING: PHASE II

If regional planning is to serve as a framework for all programs of the Department of Natural Resources, it follows that responsibility for regional planning must be lodged at the department level rather than within one of the operating divisions. Only in that way can it serve the Commissioner and the whole department as a guidance, coordination, and management tool. For it is through the regional planning process that a statewide and departmentwide perspective can be infused into the various management programs.

Specifics of planning organization within DNR will be dealt with in Phase II. Whatever approach is taken, however, here it is less important whether the Planning and Research Section of the Commissioner's Office and ADL's Planning and Classification Section are combined or otherwise reorganized than it is to assure that the necessary policy, planning, coordination, and other functions are performed at the most appropriate level.

Establishment of an active planning program at the department level is premised on the assumption that the proposed regional planning program will function in the context of the Planning and Classification and the Planning and Research Section budgets, regardless of how these sections are organized or reorganized. Assuring that both planning and other ongoing and special functions of the two sections are pursued is a critical element to keep in mind during the reorganization effort. At

the same time, it is also important to assure that regional planning will not fall through the cracks, either through program operation pressures or as a result of staff diversion to deal with never ending crises.

Analysis of P&C staffing shows that about 3/4 of the 25 or so positions would have to continue to be devoted to area planning, disposal planning, land exchanges, municipal selections, classification processing including related planning, and to planning support services. P&R personnel are similarly engaged in specific duties, some of which have to be protected under any reorganization plan. It is assumed that P&R could also provide several positions toward a regional planning effort; in addition, a number of its functions, (such as resource inventory) are integrally related to land and resources planning of a statewide and regional nature.

While P&R and P&C functions may or may not be placed in the same organizational unit, planning at the department level needs to be very closely associated with policy development and coordination. Together, such functions could well be lodged under a deputy commissioner responsible for operational management of the Department or under an assistant commissioner for policy and program coordination, or some such appropriate title.

Furthermore, it is clear that successful action-oriented regional planning will require the closest possible participation by management program

and district office staffs. The benefits will be reciprocal: planning will benefit from their particular knowledge and their implementation of plans will be more effective.

These and other issues pertinent to how regional planning is approached and managed by the Department will be the subject of this study's Phase II report. Its principal emphasis will be on the respective roles of central office planners, program managers, and district staffs throughout the planning continuum from macro regions to micro management decisions. These roles will be discussed from the standpoint of goals for eventual distribution of responsibilities and current arrangements that take into account present needs, capabilities, and constraints. Phase II will also focus on how planning should be structured within DNR.

APPENDIX 1

DOT/PF TRANSPORTATION PLANNINGCurrent Program

DOT/PF's annual work program (September 1978) sets forth transportation planning activities for the present fiscal year. The FY-79 program of the Transportation Planning Division totals over \$5-million. It is broken down into 53 separate tasks falling under the following categories: statewide planning, regional planning, local transportation planning, support services, mapping and graphics, administration, and special studies. Descriptions of each task, covering one or two pages, include task number, title, objective, previous work, scope of work, methodology, product, functional responsibility, and funding.

The statewide planning category includes such tasks as preparation of the overall capital improvement program for transportation, life cycle costs, transportation system performance evaluation, traffic and regulation review, interdepartmental and federal liaison, and the like. The regional planning covers the large-area transportation studies, airport master plans and land use plans, participation in coastal management and air system studies, Northwest Pipeline investigations, and others. The local planning category covers principally the Anchorage, Fairbanks, Juneau, and Ketchikan transportation studies.

The Transportation Planning Division currently has a major data base covering the highway mode of transportation. This data base will be expanded to include aviation and marine modes. The entire base is to be assembled on a compatible computer process allowing utilization by all interested agencies.

A system of program evaluation and monitoring is being developed to assure appropriate use of available funds. The system will establish starting dates, intermediate check points, and completion dates for each element.

Transportation Planning Methods: WATS

The Western/Arctic Transportation Study (WATS) provides an illustration of the approach to regional planning currently followed by DOT/PF and gives an inkling of potential relevance and value to DNR planning.

The WATS planning area coincides with the boundaries of the Arctic Slope Regional Corporation, NANA Regional Corporation, and Bering Straits Native Corporation. (For the purpose of marine transportation planning, coastal villages from St. Michael south to Cape Newenham within Chalikof Corporation are also included.) The study will cover an area of approximately 173,000 square miles.

WATS' objectives are to develop a comprehensive transportation system plan and establish an ongoing transportation planning process for the region. The study is to be accomplished in three phases:

Phase I--transportation inventory, data acquisition, and development of a procedure for periodically updating this information.

Phase II--evaluation of Phase I data, identification of transportation needs, development of community profiles, and forecasting of community and resource development.

Phase III--identification and evaluation of transportation alternatives, development of an implementation program, and establishment of an ongoing planning process.

The initial goal for completion of the final phase of the study is June 30, 1980. Total estimated cost is \$484,100.

Most of the work will be the responsibility of a consultant, who will provide the expertise, technical tools, and support necessary to formulate the comprehensive, multi-modal transportation plan for the region. The consultant was also responsible for preparing the final study design. (It might be noted that consultants are used because DOT/PF decided not to recruit specialized professional personnel for large-scale, short-term activities such as development of a regional planning process and, more specifically, development of highly sophisticated transportation modeling and planning tools.

The WATS project manager is the transportation planning director for the DOT/PF interior region or his designee. The planning director, who is located in Fairbanks, is responsible directly to the director of the Transportation Planning Division of DOT/PF in Juneau.

A steering committee comprised of selected public officials from the study area as well as a representative from the DOT/PF planning office helps guide the study. The DOT/PF project manager is responsible for formation of the steering committee and for coordination between the committee and the consultant.

Public involvement is a major element of the program. Conduct of public hearings, placement of advertising; mailings, and public announcements are the responsibility of the DOT/PF project manager. The consultant participates in all public hearings.

Review of the WATS planning design shows clearly the extent to which information and analyses of the transportation study are similar to aspects of DNR regional planning. While many aspects of the detailed study design of 12/21/78, which covers 42 pages, deal strictly with transportation factors, others cover social, economic, resource, and environmental elements basic to any regional planning effort. In addition, many activities that are transportation oriented could readily be expanded or complemented to extend to land, resources, or other areas of regional planning concern.

The following selected activity descriptions illustrate these points.

Designations refer to activity codes of the 12/21/78 WATS design.

Code A stands for Phase I, B for Phase II, and C for Phase III.

- A1. General review of the geography, economy, social structure, and environment of the study area . . . review of all available economic and transportation development plans.

- A2. (a) (The region will be divided into zones for purposes of data collection and analysis.) The zones defined in this step should as far as possible be homogeneous in terms of population, social structure, economic structure, geography, and other characteristics. However, for purposes of data collection and later updating through formal reporting systems it is usually necessary to make the zones coincide with existing political or administrative subdivisions as far as possible. Zonal systems now in use or under consideration by other agencies will be carefully reviewed in this step of the planning process. . .

- A4. Collection of socioeconomic data by zones. An extensive amount of information is to be collected for the latest year available and the previous ten years. These include population (number of people, ethnic origin, age, sex distribution); employment (numbers employed, by occupation and industry and by season); income (per capita income and income distribution); land

ownership and land use patterns, policies and their effects on land use in terms of both economic activities and transportation corridors; production by major commodity; consumption, including subsistence production and consumption; imports; and exports. At this stage, data will also be assembled for use in forecasting the socioeconomic parameters, including the plans and programs of the various agencies involved and the resource and other potentials for growth in mineral, fishing, tourism, and other industries.

- A8. An institutional review of government, public and private organizations, and other groups will be made from the standpoint of their functions that affect, or are affected by the transportation sector. (This, of course, includes virtually all agencies and organizations in and dealing with the region.)
- A9. An environmental study will be undertaken to incorporate significant environmental and socioeconomic aspects into the formulation of WATS. A general analysis of these aspects will serve as a basic framework for recommending subsequent, more specific environmental studies to be continued beyond the project. . . . A general environmental inventory will be prepared in order to identify the critical environmental issues, assess the major potential impacts involving the potential transportation system, identify major data gaps, and to assist in the

identification of possible mitigating measures . . . Critical issues will be identified in one or more of the following areas: population and employment growth patterns, land use growth patterns, environmentally sensitive areas, aquatic and terrestrial habitats, water quality, air quality, noise quality, cultural and historical features, and esthetic features.

Critical environmental issues would include potential impact on rare and endangered species, bird migration and population patterns, spawning and nursery areas, primary foodchain production areas, terrestrial animal migration and population patterns, and commercial and subsistence fisheries or shellfish areas. Potentially critical social issues would include changes in cultural and social patterns associated with the future development of mineral and energy resources, areas of natural beauty and esthetic value, and historic/prehistoric sites and structures of local, state, or national significance.

- B5. All of the socioeconomic determinants of transportation demand listed in A4 will be forecast by zone for the years 1985, 1990, 1995, and 2000. These will include forecasts of population, employment and income, production, etc., and will take into account development plans and programs of public and private agencies as well as subsistence production. The forecasts will indicate a "most probable" high, and low rate of development to permit later sensitivity tests. Alternative development scenarios will be formulated where appropriate.

The analytical system is to be sufficiently flexible to permit changed and updated forecasts to be tested without excessive additional time and cost.

Methodological similarities between DOT/FF transportation planning and DNR regional planning include not only socioeconomic, environmental, and resource analyses and alternative development scenarios. Potentially, they also cover a variety of steps to test and evaluate alternatives to be considered in the final recommended transportation system. Although some of the techniques will certainly differ, interaction between land and resources on the one hand, and transportation on the other, are clear enough to justify appropriate linkages in the process of analyzing and evaluating alternatives.

By the way, public involvement is a program element that occurs in all three phases of the transportation planning process; study activities A10, B3, C13/14. These activities cover the gamut from periodic newsletters, advertisements, and notices to small group meetings, workshops, and public hearings. Provision is made for testing of different methods, exchanging information and opinions within the area involved, and subsequent utilization of the methods that are found most effective. It certainly appears that public involvement, which is a basic component of DNR's planning, could also be pursued cooperatively.

APPENDIX 2

COASTAL MANAGEMENT PROGRAM

The Alaska Coastal Management Act of 1977 was designed to enhance land and water management in coastal areas of the state. Policy under the act specifically encourages coordinated planning and decisionmaking among state agencies, levels of government, and citizens engaging in or affected by activities involving the coastal resources of the state.

The Alaska Coastal Policy Council is established under the act to guide the overall program. It is composed of representatives of nine major coastal regions of the state and of members from seven state agencies, including DNR. The council has promulgated standards for the Alaska Coastal Management Program and has set guidelines for district activities. Plans and implementation programs for regions and districts are subject to council approval.

A principal purpose of coastal management is to identify "uses of state concern." This means those land and water uses that could significantly affect the long-term public interest and are deemed to be of greater than local concern. Among these are: (a) uses of national interest, including ports and major facilities contributing to meeting national energy needs, construction and maintenance of navigational facilities and systems, resource development of federal land, and national defense and related security facilities; (b) land and water uses that

confer significant environmental, social, cultural, or economic benefits or burdens beyond a single coastal resource district; (c) major energy facilities or large-scale industrial or commercial development activities; (d) facilities serving statewide or interregional transportation and communication needs; and (e) state parks, major recreational areas, state game refuges, game sanctuaries, and critical habitat areas. An interagency regional planning team was initially established to delineate the uses and define areas of state concern. The team, consisting of representatives from state agencies with coastal management interests and responsibilities, was to concentrate its efforts on the nine major coastal regions and was to (1) assist the council and coastal districts in identifying uses of state concern and developing management policies for these uses; (2) provide resource, social, and economic information on a coordinated regional basis; and (3) assist the council and districts in identifying, avoiding, or minimizing existing or potential conflicts.

However, as the coastal management program began the transition from the initial planning phase toward planning district programs during the latter part of 1978, the thrust of the original regional planning concept was redirected. This was done in view of the excessive magnitude and complexity of the original regional planning task as delineated, the lack of time before districts were required to submit their local plans, and the decision to give highest priority to preparation of district programs.

Under this redirection, the former regional planning team was reconstituted the State Agency Coastal Coordinating Team (SACCT). This unit "is to bring together in a unified state perspective, on a site-by-site basis, the views, policies, authorities, activities and plans of the different state agencies dealing with the Alaska coast. By presenting the districts with a comprehensive state perspective concerning coastal management for their particular area, the state agencies will:

(1) Insure that the interests of the state are being considered in the drafting of local programs."¹ The team is to do this by identifying uses of state concern on a site specific basis. (2) Delineate areas meriting special attention by local districts and recommend management policies for such areas, and (3) Identify dissimilarities in agency perspectives regarding uses of state concern, areas meriting special attention, and other areas as yet undetermined. (Whatever all this may mean!)

The principal emphasis of the coastal management program will be on provision of financial and technical support to districts for development of their individual coastal management programs. State agencies will be required to provide a broad gamut of specified information to the districts. Under tentative specifications, DNR will provide the following information for each district:

1. land status and ownership;

2. mineral and mining sites, leases, prospects, and existing policies;
3. existing and proposed parks, waysides, historical and archeological sites and resources, and applicable policies;
4. hazardous areas, potential hazards and hazard policies;
5. energy resources, development sites, and related information;
and
6. timbered areas and pertinent policies.