# BLM Land Use Plan for Southcentral Alaska A Summary

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Cover: Peaks of the Alaska Range loom behind forested hills near the Denali Highway in Southcentral Alaska. Photo by Page Spencer. .

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We are pleased to share with you the results of our Southcentral land use plan. In this booklet we show maps of the areas likely to be administered by BLM, give a brief discussion of the resources of those areas and their present uses, and summarize the most important decisions made for each resource activity. Since this plan is intended to be implemented over a number of years, actions taken to carry out the decisions will necessarily hinge on funding.



Land status in Alaska has been changing quickly and often dramatically in recent years as Congress, the President, the courts, the State of Alaska and Native Corporations all interact to vie for land ownership. The State or Native corporations may select areas we show as being administered by BLM. For this reason, the boundaries we show here may change – may even have changed while this booklet was in press.

We began working on the Southcentral plan in late 1977. The first thing we did was to contact other government agencies, special interest groups, and individuals likely to be interested. Detailed resource information was gathered by specialists who work for BLM and from other outside sources wherever available. By December of 1978, we had completed the analysis of resources and the ways those resources are now being used. An economic and social analysis had been prepared by our economist. During the summer of 1979, we talked with the residents

By December 1979, we had finished a proposed or tentative plan. We sent a brochure describing this proposal to federal, state and local government agencies, to residents and landowners of the affected areas, and to interested citizen groups. We held meetings with state, federal, and borough groups to explain the proposed plan. We advertised and held open houses in Anchorage on January 17 and 22, 1980, and in Fairbanks on February 7, 1980. Comments we received, whether verbal or written, were carefully considered by the planning staff, the Area

to find out their preferences for land use.











convenience.





We would like to thank all of you who participated, who gave us information or suggestions to help us develop this plan. We would also like to emphasize that BLM's land use plans are not static, but dynamic, and will be changed as national or local conditions require. We invite your comments and suggestions at any time.



Richard W. Tindall Anchorage District Manager

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# Southcentral

Photo by R. L. Ward



Spruce covered islands follow the curves of the Nenana River as it winds through Southcentral Alaska.

## Southcentral Planning Area

### **General Description**

In preparing our Management Framework Plan, we first studied the whole general region of Southcentral Alaska, some 55 million acres of land, of which about 5.5 million acres are public lands expected to be administered by the Bureau of Land Management (see map next page).

Mountains rim all four sides of the Southcentral Area. Along the southern coast are the Kenai, Chugach, and Robinson mountains. Along the eastern boundary with Canada are the Wrangells, while on the west is the northern end of the Aleutian Range. The Alaska Range forms the northern border.

The great watersheds of the Copper, Susitna, and Matanuska rivers and their tributaries drain the area. During previous geologic periods the entire region was glaciated, and today all the mountain ranges still contain active glaciers.

Terrain varies in Southcentral Alaska from some of the highest peaks on the North American continent to vast marshy lowlands. Between are some of the best agricultural lands in Alaska, including the much-publicized Matanuska Valley, where homesteaders started new lives during the 1930's.

Three basic climatic zones affect the southcentral planning area. Along the coasts is a maritime climate characterized by cool summers and warm winters, but heavy precipitation and strong winds. Inland is a continental zone affected by land mass temperatures. It is characterized by hot summers, cold winters, and has a temperature range of 100 degrees F or more, although precipitation and winds are usually light. Between the coastal maritime and the inland continental climatic areas is the transitional zone, which can be affected either by water or by land mass temperatures, depending on the locality. Its general temperature ranges are greater than the maritime, but smaller than the continental, with variable precipitation and generally light winds.

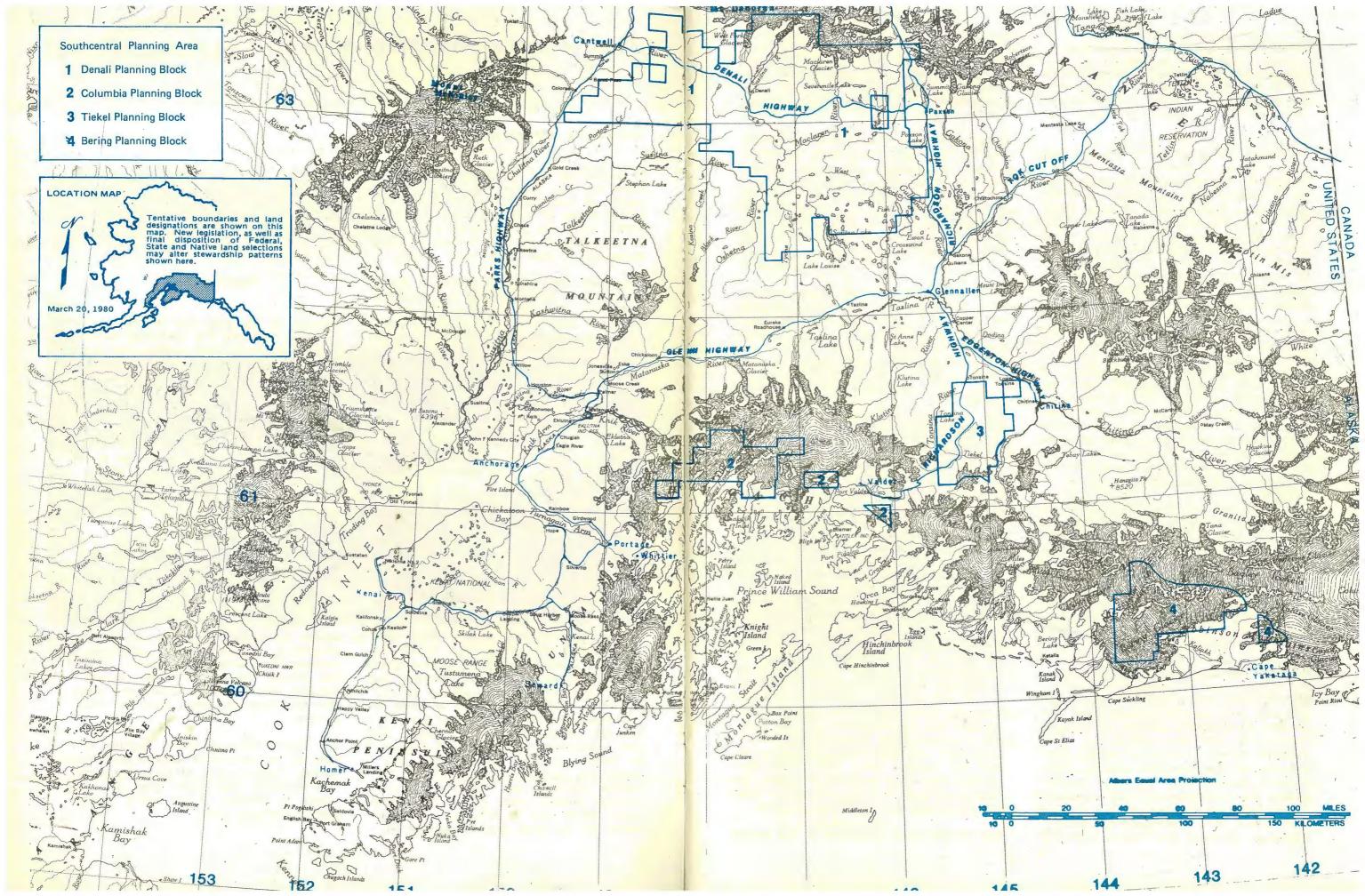
#### Planning Blocks

Because of the vast size of the overall planning area and the scattered locations of BLM-managed lands within that area, we divided our area of special planning emphasis into four smaller units called the planning blocks. The Denali block, largest of these, is also the largest remaining single parcel of Bureau-Its 4.5 million acres managed land. surround the Denali Highway and stretch to the crest of the Alaska Range in the northern part of the general Southcentral planning area. The Denali block extends from the Richardson Highway on the east almost to the Parks Highway on the west.

Columbia block contains approximately 346,600 acres of land in three parcels grouped about College Fiord and Port Valdez.

Tiekel block, a parcel of about 507,000 acres, is located southeast of Denali, straddling the Richardson Highway between Glennallen and Valdez. Part of the Alaska Pipeline corridor passes through this planning block, and separate planning has been done for that portion.

The fourth planning block, Bering, consists of two parcels of land on and about Bering Glacier north of Cape Yakataga. The following map shows these planning blocks in relation to the entire Southcentral planning area.



#### Economics

The present population of Southcentral Alaska is about 250,000. In 1978, almost half of the whole state's nonagricultural wage and salary employment was in Anchorage.

Petroleum and government are the basic industries of Southcentral Alaska. Although the oil and gas industry accounts for a relatively small number of direct employees, it is a major driving force throughout the economy, generating more than half of the state's revenue. The second economic force, government, accounts for 27 percent of all employment in Anchorage. Falling third behind these major economic bases is manufacturing, primarily fish processing.

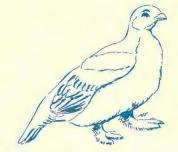
Recreation also forms an important part of the southcentral region's economy. In 1978, recreation and visitor-related business accounted for \$762 million, of which \$275 million came from sales to out-of-state visitors. This industry employed 6,000 people. It has been estimated that visitor-related expenditures accounted for about 6 percent of gross business receipts for that year and that well over half of those expenditures were made in the southcentral region.

The state has just been through an economic boom that culminated with the construction of the Trans-Alaska oil pipeline. When pipeline construction began in 1974 it superimposed a construction boom on top of an economy already expanding from previous oil-related activities. Between 1973 and 1975 the employment rate leaped 18.4 percent annually, population grew 10.3 percent, and income grew 18 percent. Since the completion of pipeline construction, this growth rate has dropped abruptly.

The possible construction of other major projects such as the gas pipeline, the Susitna hydropower project, or the relocation of the state capital may bring another growth surge. Already the creation of the new Wrangell-St. Elias National Monument is expected to increase travel between the Monument and Mount McKinley National Park. Much of that travel will pass over the Denali Highway, through the Denali planning

#### block.

Now, however, the resources of the planning blocks play only a minor role in the economy of Southcentral Alaska. Denali block makes the greatest impact and has the greatest potential for future impact; Tiekel, Columbia and Bering blocks have no significant economic activity at present. The most important economic role now played by BLMadministered public lands is providing access and materials for projects actually outside the blocks, such things as rights-of-way for communications sites and gravel for construction.



### Issues

Since 1971 and the passage of the Alaska Native Claims Settlement Act, a very considerable amount of land has been withdrawn from general use. This Act required that more than 103 million acres of land be patented to the State and 44 million to regional and village Native corporations. Of these corporations, Cook Inlet Region, Inc.; Ahtna, Inc.; and Chugach Natives, Inc., have selected their lands in Southcentral Alaska. This same act also authorized the Secretary of the interior to choose up to 80 million acres from all over the state for inclusion in the four national conservation systems. President Carter in 1978 created three new national monuments (totaling 15,410,000 acres principally in Southcentral Alaska) including a large addition to Mount McKinley National Park out of part of this. The State of Alaska has now made most of its selections as granted by the statehood act of 1959. All of these land commitments have drastically changed the availability of land for general use. After final disposition has been made of the land, the Native entitlement and some of the State selected land will become private.

One of the major concerns of the people

of Southcentral Alaska is that there may not be enough land for them to use in the pursuit of their traditional economic and recreational activities. Therefore, they will begin looking more toward lands administered under the multipleuse mandate of the Bureau for these activities. Alaskans also are concerned that the Bureau may place new restrictions on uses now occurring on its lands. At the same time, they want the visual quality of key areas to be maintained, wildlife habitat to be maintained or enhanced, and work to be coordinated between the various government agencies so as to manage the overall habitat to the best advantage for wildlife and fisheries.

Another point that was felt to be of potential concern was the need for gravel supplies from BLM lands if a large construction project should be undertaken on adjacent lands. However, coordination with other agencies and the public revealed that there was not a great demand for this resource.

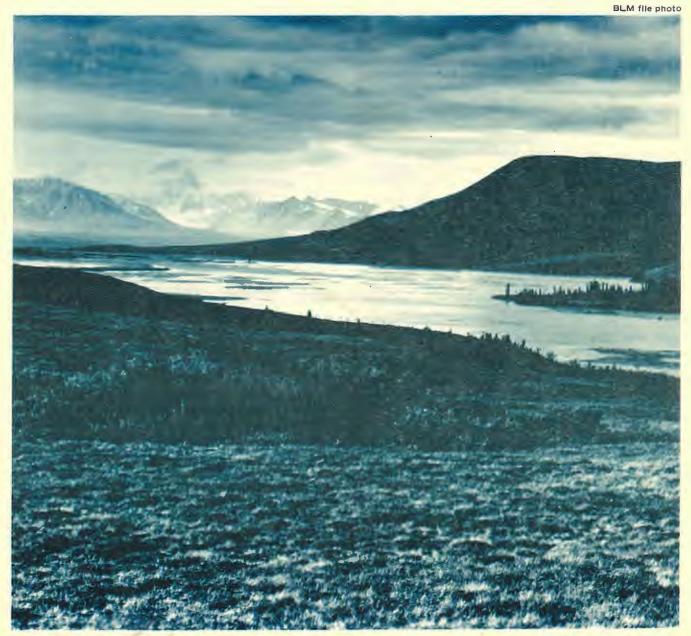
Following is a summary of issues and concerns related to specific resources that were addressed during preparation of the plan:

- Recreation will continue to be a major activity in this region. How will the Bureau help to meet the demand?
- Cultural resources are well represented in this area. What is the Bureau going to do to preserve and protect these resources?
- Wildlife populations are a concern in the region. Moose populations have declined; caribou populations have leveled off and are starting to increase. How is the Bureau going to manage wildlife habitat?
- Southcentral Alaska has spectacular scenery. How will the Bureau protect scenic quality while allowing development to take place?
- Most of Alaska has water of excellent quality. How will the Bureau insure that the water quality is maintained?

- Much of Southcentral Alaska is going into either private ownership or single-use management systems. How much land will remain in multiple-use management?
- Mining continues to be a major activity in this region. How will the Bureau help to meet the demand?
- Commercial and sport fishing are big business in Southcentral Alaska. The Bureau is responsible for management of a sizeable amount of spawning habitat. How can the Bureau maintain or enhance this habitat?
- The forested areas under Bureau administration are generally of low commercial value. Their value is considerably greater as a future source of products and for resources other than forest products. How is the Bureau going to manage the forest resource?
- There is some demand for domestic livestock grazing in the area. Traditional grazing areas may not be available in the future. Will the Bureau accommodate requests for domestic grazing in Southcentral Alaska?

There are two issues that have not been addressed in this plan. Management of easements designated under the Alaska Native Claims Settlement Act (1971) is being addressed in separate easement management plans. The decision was made because these easements cross private land and the U.S. Government holds only a very specific, limited interest. Wilderness has not been addressed. During the year when the area's resources were being analyzed (in the report entitled Southcentral Planning Area Unit Resource Analysis, June 1979) there was a Congressional freeze on spending money in Alaska on wilderness review. All the decisions in this plan must be consistent with the Interim Wilderness Management Policy dated December 1979. Those that are now consistent can be implemented immediately. All others must be delayed until a wilderness review is completed.

# Denali



Seen from the Denali Highway, the Susitna River cuts through rolling hills and alpine meadows.

## Denali Planning Block

## **General Description**

Land in the 4.5 million-acre Denali planning block ascends northward from forested, rolling country into treeless alpine meadows and finally touches the glittering peaks of the Alaska Range, that formidable band of glacier-covered mountains clustered around North America's tallest peak. The Alaska Range is a curving band of volcanic mountains arching from east to west across the midsection of Alaska. Its massive ridges generally extend from 6,000 to 18,000 feet in height.

Within most of the planning block south of these mountains, the topography consists of more rounded ridges of 3,500 to 5,000 feet separated by wide lowlands formed of glacial deposits. Viewed from the Denali Highway, the single road that crosses the planning block, the country is rolling hills punctuated by glacial lakes and streams, with a backdrop of jagged, snow-covered peaks to the In this rolling terrain, moist north. tundra alternates with alpine tundra. Farther south, away from the road, lowland spruce-hardwood forests grow. interspersed with upland spruce-hardwood forests around the river valleys.

The Susitna, Copper, Delta, and Nenana rivers all drain this region.

Although there are no towns within the planning block itself, the small communities of Paxson, Cantwell, Glennallen, and Gakona are important service centers for the area. There are about 60 permanent residents scattered along the Denali Highway. These people operate lodges and guide services, or are trappers. Since the highway is not kept open during the winter, many of the local residents leave during that season.

Denali planning block provides fish habitat in many streams near the highway. Most fishing is done in the Tangle Lakes area and on the Gulkana River.

North of the community of Sourdough, the Gulkana River experienced an approximate threefold increase in angler use between 1976 and 1978, with 2,510 visits recorded in 1978. Brushkana Campground in the western part of the block received about 8,000 visits, of which about 5,000 included the, activity of fishing in the Brushkana River as part of the visit. During late summer and early fall, when bears are feeding on berries on the open slopes above timberline, this is popular hunting and sightseeing country.

The 460,000-acre Tangle Lakes Archeological District is located within the boundaries of the Denali planning block. Placed on the National Register of Historic Places in 1971, the district contains hundreds of archeological sites in an outstanding setting of glacial landforms. More than 220 sites have been recorded, making this one of the densest occurrences of prehistoric sites in the North American subarctic. Some sites have been estimated to be as much as 10,000 years old. The area also contains geological formations with the potential to contain sites not yet identified.

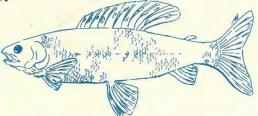
A rich variety of wildlife inhabits the Denali block. Black bears, grizzly bears, moose, caribou, Dall sheep, waterfowl including Trumpeter swans; and many kinds of furbearers use the region. Nine grizzly bear denning areas have been identified at scattered locations throughout the block.

Denali block contains certain areas where high concentrations of waterfowl occur during the nesting and molting seasons. During this period the birds are very vulnerable to predators. Numerous small rivers and lakes throughout the planning block are also important habitat and spawning areas for grayling and other sport fish species; the Gulkana River and its tributaries are very important spawning areas for salmon.

The climate is continental. Relatively hot summers in the range of 66° to 70° F are followed by very cold winters ranging from 10° F to -30° F. Winds and precipitation are light, although locally high winds are generated by downslope movement of dense, cold air along the footslopes of the Alaska Range in the northern part of the block. Such winds intensify wind chill, increase danger of wildfire, and cause damage to manmade structures.

The Denali planning block is crossed by a system of active faults with high This system, earthquake potential. called the Denali fault system, extends along the Alaska Range southwest through the Clearwater Mountains and across the Susitna River near Watana Creek. In the northern part of the block, the Alaska Range has extreme slopes with a high erosion rate and landslide potential. These slopes may limit resource development and constitute a hazard to man in some places.

In the mountains are deposits of metallic minerals including gold, platinum, copper, lead, zinc, and iron. In the southern part of the planning area an oil and gas basin occupies an ancient lake bed.



Over the next few years it is expected that demand for the resources of the area, particularly those related to recreation, will increase dramatically. This increase will not be related to the resident population of the area, but rather to the area's accessibility by road from the large population centers of Anchorage and Fairbanks.

This region is noted for its scenery and its opportunities for hunting, fishing, and camping.

Land Use Decisions



Recreation

Map page 10

Study the following areas in order to designate them as either open, restricted or closed to Off-Road Vehicle (ORV) use: (a) Tangle Lakes Archeological District, (b) Butte Lake area south of the Denali Highway, and (c) Susitna River area. In any area where it is found that an Area of Critical Environmental Concern exists, consider only a restricted or closed designation. In any area where mineral development is possible, allow for necessary access. Consider opening all areas where ORV use would not be in specific conflict with other resource values.

Summer off-road vehicles are popular in Alaska. Most of their use away from populated areas is in support of other recreational activities such as hunting and fishing, or of economic activities. Much of the land in Southcentral Alaska that has traditionally been used for ORV's is being transferred to private ownership and will probably be closed to ORV use, especially in the Anchorage bowl and the Matanuska-Susitna River basin., Other large areas are now national monuments where ORV use may either be prohibited or significantly re-While the Denali planning stricted. block would normally be considered too far from populations centers by the most users, there are only limited use-areas close to the population centers. For this reason, people seeking this kind of recreation may be willing to travel farther than before to find a suitable place for this activity. On the other hand, the increasing cost of fuel may deter many people.

ORV use and regulation are controverisal subjects. ORV's are used to provide access to private lands within the planning block, and to reach remote hunting and fishing grounds.

Develop the following water trails in the Denali block: Delta River, Gulkana River, Maclaren River from the Denali Highway to the Susitna River to the

Tyone River to Lake Louise, and the Upper Tangle Lake to Dickey Lake circle route. Establish a 1/4-mile buffer zone on either side of the river or around the lake to separate this activity from others proposed in the planning block.

Water trails such as lake systems or river systems attract visitor use that is increasing substantially each year. Already the three main systems in Southcentral Alaska (Swan Lake, Swanson River, and Nancy Lake) are being heavily used. The water systems radiating from the Denali Highway are ideal for such routes, and can be used to provide new recreational experiences. Public comment was very supportive of this recommendation.

▼ Rehabilitate the Tangle Lakes campground, which is suffering from constant use. A rehabilitation program for this campground at the east end of the Denali Highway should correct most of the major problems, such as uncontrolled camping and site deterioration.

▼ Rehabilitate Brushkana Campground. Because it receives heavy, sometimes excessive use, Brushkana Campground is in very poor condition. This campground serves the west end of the Denali Highway and the Parks Highway; its location, will tie into the planned hiking trail system, so it may become even more important in the future.

▼ Develop a series of 3-unit waysides along the Denali Highway. Roadside camping is popular with many campers who prefer undeveloped sites. Recently more people have been observed camping at gravel pits. These could easily be developed into small waysides.

▼ Construct a 10-unit family campground in the area of the Clearwater River on the Denali Highway. The two existing campgrounds are now receiving constant, seasonal use, and parts of them are beginning to need rehabilitation. Building a new campground about midway between these two will disperse use and will meet the anticipated use levels.

▼ Create an interpretive program to explain the natural history and archeology of the Denali Highway area to visitors. Signs, brochures, or visitor centers might be appropriate parts of the program. An interpretive program will reach a large number of people and would not conflict with any other resource recommendation.

▼ Establish a foot trail system for extended hikes. Give highest priority to (1) a trail from the Denali Highway to Glacier Lake to Landmark Gap Lake to the Highway and (2) to a trail from Fielding Lake Campground to Tangle Lakes Campground. Develop others as time and money permit.

▼ Also develop day-length trails at the following locations: Denali Highway to Landmark Gap Lake, Tangle Lakes to Dickey Lake, and Denali Highway north along the Maclaren River.

▼ Prepare a winter recreational use plan for the area east of the Maclaren River trails. Include plans for dogsled trails, cross-country ski trails, and for snowmobile trails starting at Paxson Lake and Fielding Lakes. Preparing plans now will hold open as a future option winter use of the eastern part of the planning block, where there is year-round access.

There was some public concern about the exact nature of the proposals that could result from this proposal.



### Cultural Resources

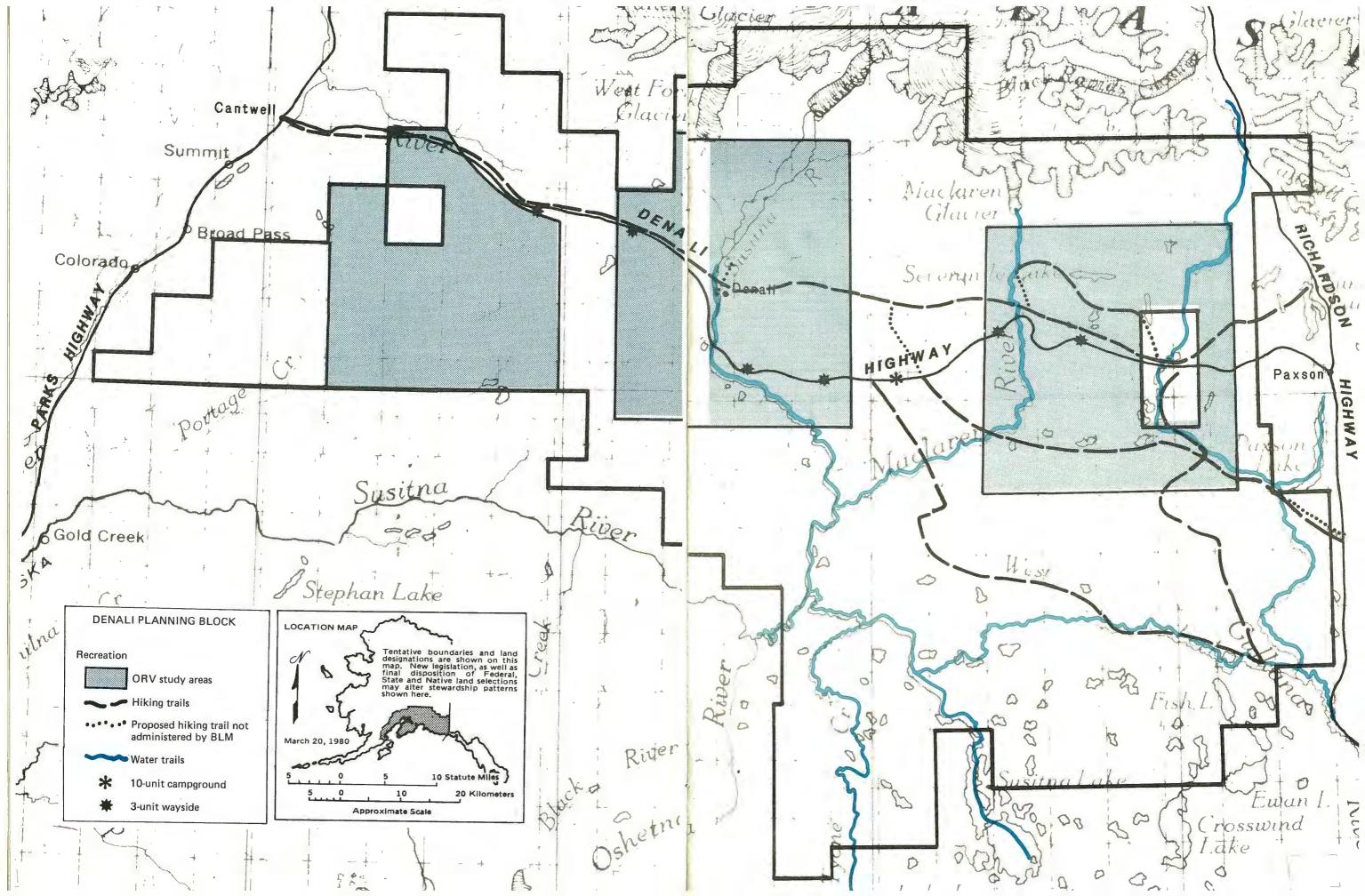
Map page 12

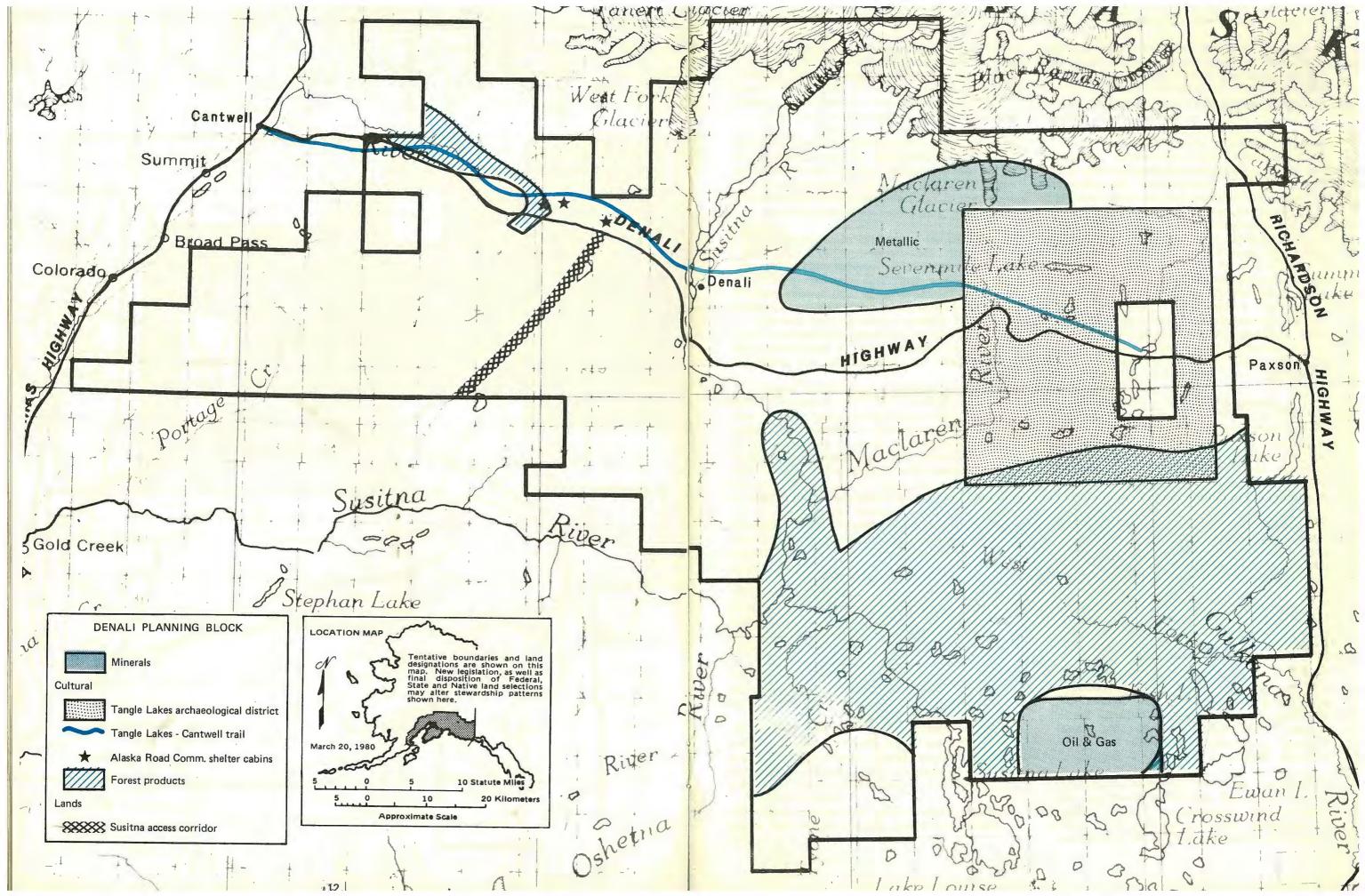
▼ Make a thorough field inventory of the cultural resources of the Tangle Lakes Archeological District to determine its actual extent and the methods needed to protect these cultural resources.

Public comments reflect support of an effort to delineate cultural resources for protection of these resources and for a possible reduction in size of the archeological district.

▼ Protect known cultural resource values from direct fire effect and from damage caused by fire suppression activities.

Cultural resources are non-renewable;





structural sites and shallow archeological sites may be adversely affected both by wildfire and by fire suppression activities. The cultural integrity can be maintained through fire management.

▼ Preserve the shelter cabins and structures built along the trail from Cantwell to Valdez Creek mining camp by the Alaska Road Commission during the I920's. These cabins are important examples of shelter cabins built during that period when winter sled travel was a major means of transport. They are accessible from the Denali Highway and along the trail itself.

Vandals and the natural elements have caused deterioration of the shelter cabins and other structures. Through protection and preservation, they might be used for recreation or other purposes.



Visual Resources

▼ Define the "seen areas" of the Delta River and the Middle Fork and West Fork of the Gulkana River. Manage the wild sections of these rivers to maintain a completely natural setting as much as possible.

These rivers, which are now providing unique wilderness recreation experiences, need management attention. Seen areas provide a logical management unit for protecting those experiences.

Because these rivers are considered to be of national significance, the protection of wilderness qualities of the seen areas should have management priority.

▼ Evaluate all proposed management activities for their visual impact; encourage those projects that are compatible with the character of the natural landscape. This will assure that the visual impacts of proposed activities are considered before a project is begun.

▼ Improve all sites in public ownership where there are man-made scars on the surrounding landscape. Tangle Lakes Campground and the existing ORV trails have the highest priority for rehabilitation. Additional sites have been identified in the Southcentral Unit Resource Analysis, one of the background planning documents.

The overall area displays such high scenic quality and such high visual sensitivity that we should attempt to improve visual intrusions in the landscape. The sites mentioned above are ideal places to start a visual resource improvement program. They are consistent with other resource recommendations.

▼ Evaluate all proposed management activities with the visual resource management contrast rating system. Encourage those projects that are compatible with the character of the natural landscapes. This will assure that visual impacts are considered before projects are started.



### Watershed Management

Map page 16

▼ Insure that any land use or development is consistent with the Alaska Water Quality Standards. BLM is required by law to maintain the standards to protect human safety and habitat for fish.

▼ Inventory likely habitat in the Alaska Range for the species <u>Smelowskia</u> <u>borealis</u>, a plant proposed for inclusion on the Federal list of threatened and



endangered plants. Designate any areas where it occurs as potential Areas of Critical Environmental Concern. Only three specimens of this variety are known, and one is from this area. It is in a remote location above 4,500 feet in the Alaska Range. BLM has the responsibility, by law, to protect "sensitive" plants that could be designated as threatened or endangered. This action of inventorying likely habitat will partially fulfill BLM's responsibility.



Wildlife Habitat

Map page 16

▼ Consider raptor nest areas of primary importance in land management.

The management priority would afford the protection of the specific species required by legislation or treaty.

▼ Initiate prescribed burning in areas where it would not affect viewsheds seen from either roads or trails. Work for quick, light burns.

This would accomplish the objective of benefiting moose browse without harming the vegetation mat or the water quality, or causing erosion.

By writing fire management plans to incorporate other social values, we can benefit the wildlife without causing harm to other uses.

▼ Use mechanical crushing or removal of timbered vegetation to promote new growth where moose browse has deteriorated in areas of crucial winter range where use of fire is impractical.

This would increase moose browse without harming the vegetative mat; it would give good control to preserve esthetics.

▼Assure that all activities that could occur within caribou migration routes would not adversely affect caribou migration. This would help to protect this important part of caribou's life cycle.

Create protective buffer strips around lakes and water bodies used by waterfowl. ▼ Designate the primary calving area of the Nelchina caribou herd as an Area of Critical Environmental Concern. Caribou calve in the same general area year after year. It is important to avoid maninduced stress on these caribou at this time.

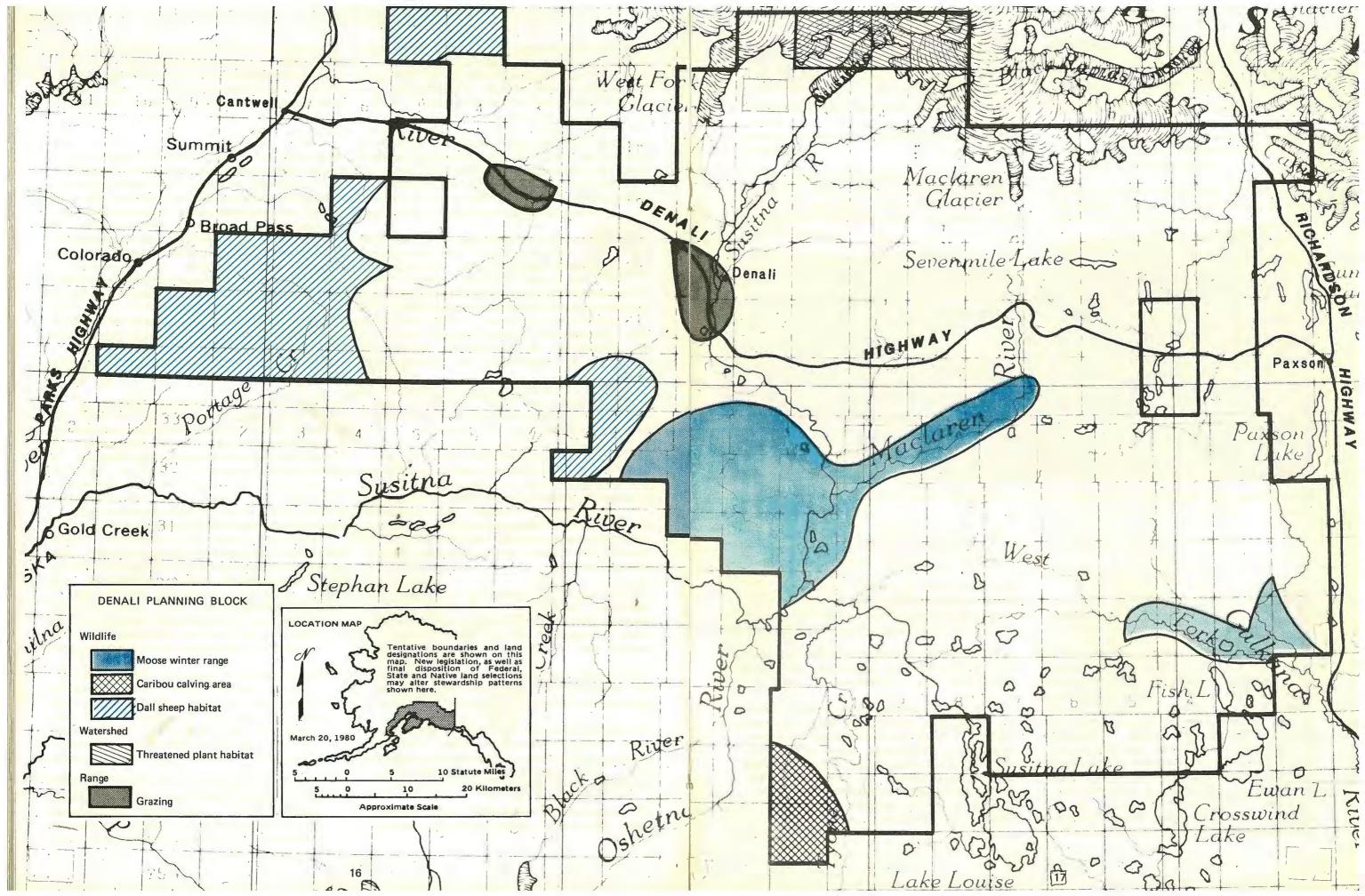
♥ Provide for natural fire occurrence where other important resource values would not be harmed. A number of plant and animal species require the special environment that is created by the occurrence of fire. While some species require a mature, unchanging vegetation, other species need the changes caused by fire. By providing for this through fire management plans, all resources will be accommodated.

♥ Protect from fire the portions of caribou range that have a strong lichen component. Develop a fire management plan that identifies those portions of the range.

Caribou habitat is to be considered of prime importance in managing the resource. Small, controlled fires may be beneficial to caribou range, but large fires over vast acreages are probably harmful to the range.

▼ Protect Dall sheep winter range and lambing areas from all activities not consistent with maintaining the population.

Dall sheep winter habitat and lambing areas constitute crucial habitat which Dall sheep depend on for their existence. This is a recognized use in the public interest.





Hikers stop for lunch in a meadow with a mountain view in the Denali planning block.



▼ Provide a right-of-way corridor to the proposed Susitna Project site, using visual rating criteria to mitigate visual impacts. This project, currently being planned by the State of Alaska, would be the construction of two hydroelectric dams on the Susitna River. Although the damsites would not be located on BLM-managed land, access is necessary for preconstruction studies and for dam construction, if that is undertaken. This will allow planned access to a potential hydroelectric site. Future development within the corridor could facilitate public access to the backcountry. No other potential corridors have been identified on BLM-managed land.

Through resource inventories, identify lands that would best meet the public needs if they were managed by other agencies. Exchange those lands so identified as best meeting public needs by being managed by other agencies. This provides the Bureau with the ability to adjust boundaries and classify lands to facilitate management.



▼ Make areas available for exploration based on seasonal use to protect wildlife resources and to provide surface protection.

▼ Provide opportunities for the development of gold, silver, copper and other minerals in the Clearwater Mountain area, with consideration for other resource values.

▼ Consider the Alphabet Hills in the southern portion of the Denali planning block for oil and gas leasing. Write stipulations to protect other resource values, especially nesting grounds of waterfowl.

The State of Alaska has sold leases in the southern part of this potential petroleum basin. To promote better opportunities to determine the oil and gas potential of this basin, BLM should consider opening the northern part of the basin to leasing.



▼ For stream management, key the management efforts to identifying and protecting salmon spawning areas.

We feel salmon spawning areas are most important to sport and commercial fishing and, therefore, put emphasis on their management over lower-valued fish.



#### **Forest Products**

♥ Protect any timber stand which produces 20 cubic feet per acre per year (or has the potential to meet commercial standards) from destruction by fire or mechanical manipulation.

This decision recognizes the value of the forested areas for non-timber purposes such as wildlife habitat.



▼ Allow saddle and pack horse grazing in the Brushkana Creek-Denali Highway and the Susitna River-Denali Highway areas upon lease application and determination of carrying capacity. This could benefit local guides, with no forseeable impact on other Bureau programs.

# Columbia

Photo by Maynard Nuss, U.S.F.S.



Mount Grosvenor is surrounded by the glaciers that cover most of the Columbia planning block.

## **Columbia Planning Block**

## **General Description**

Columbia planning block consists of three separate parcels of land totaling approximately 346,000 acres. BLM-managed land borders Yale Arm and Harvard Arm of College Fiord, which is a deep, glaciated bay off Prince William Sound. Here the land rises abruptly from sea level to the peaks of the Chugach Mountains, some of which reach heights of approximately 10,000 feet in this part of the range. There are no known residents of the planning block. The closest towns are Whittier (pop. 240) to the west, Valdez (pop. 8,250) to the east, and Cordova (pop. 2,406) to the southeast. Some trapping originates in Valdez and Cordova. Some hunting parties are based from Valdez. Hunting and sightseeing are essentially the only economic activities based in this planning block.

The largest of the three land parcels in the planning block lies north of College Fiord along the northern boundary of the Chugach National Forest. This area consists almost entirely of glaciers and mountain peaks. Barry Glacier, Harvard Glacier, Yale Glacier, and Meares Glacier all pass through this parcel, draining into Harriman Fiord and College Fiord. Prominent peaks here include Mount Muir (7,705 feet), Mount Gannett (10,000 feet), Mount Goode (10,610 feet), and Aspero Peak (9,831 feet).

The second parcel of land in this planning block lies to the west of Valdez Arm approximately 10 miles west of the town of Valdez, and covers two townships along Shoup Bay. This parcel is also almost entirely covered by the ice of Columbia Glacier. The land here rises from sea level on the east around Shoup Bay to altitudes of about 3,000 feet. There is a single body of water, Number One Lake, 1.6 miles long, that has formed at the terminus of Anderson Glacier. Vegetation extends about three miles inland, principally bordering Shoup Bay. Here coastal western hemlocks are mixed with Sitka Spruce and some Alpine tundra.

Southeast of Valdez is the third parcel, a roughly triangular piece of land with no coastal areas. This is steep, rugged terrain with glaciers over the entire area. There is some mineralization here, but at present it is inaccessible because of the glaciers.

Climate for this planning block is maritime-transitional. In Maritime areas cool summers averaging from 60° to 65° F alternate with warm winters averaging 20° to 30° F. Precipitation is heavy. Areas with transitional climate have more temperature fluctuation than the maritime and are subject to extreme winds because of the influence of the glaciers. Winds in this region frequently reach 100 100 mph.

One of the most noteworthy physical features of this parcel is Solomon Gulch, a ravine that extends north and south into the parcel from the coast. The gulch is 3 miles long and drains Solomon Creek. It is historically interesting as the site of an old gold mining operation.

Significant wildlife species using Columbia planning block are black bears, brown/grizzly bears, mountain goats, marine mammals, waterfowl, and sea birds. Approximately 20,000 acres have been identified as critical spring habitat for black bears. Black bears usually winter in hillside dens and concentrate in valleys, small alluvial plains, lake shores and tidal areas during spring. During the summer months they feed at the salmon streams. They generally stay close to timber and move up slope as the snow line recedes. Berries make up a large portion of their diet in late summer Intensive spring conand early fall. centration areas are located on the west

side of College Fiord and Harriman Fiord. Brown/grizzlies occur throughout the block except for the parcel north of College Fiord. Their use of the habitat is in general very much like that of the black bears. To many hunters, the brown bear represents the ultimate in sport hunting trophies. For the years 1961 through 1975 between 13 and 63 brown bears were taken annually in this State Game Management Unit, (which covers a much larger area than just this planning block).

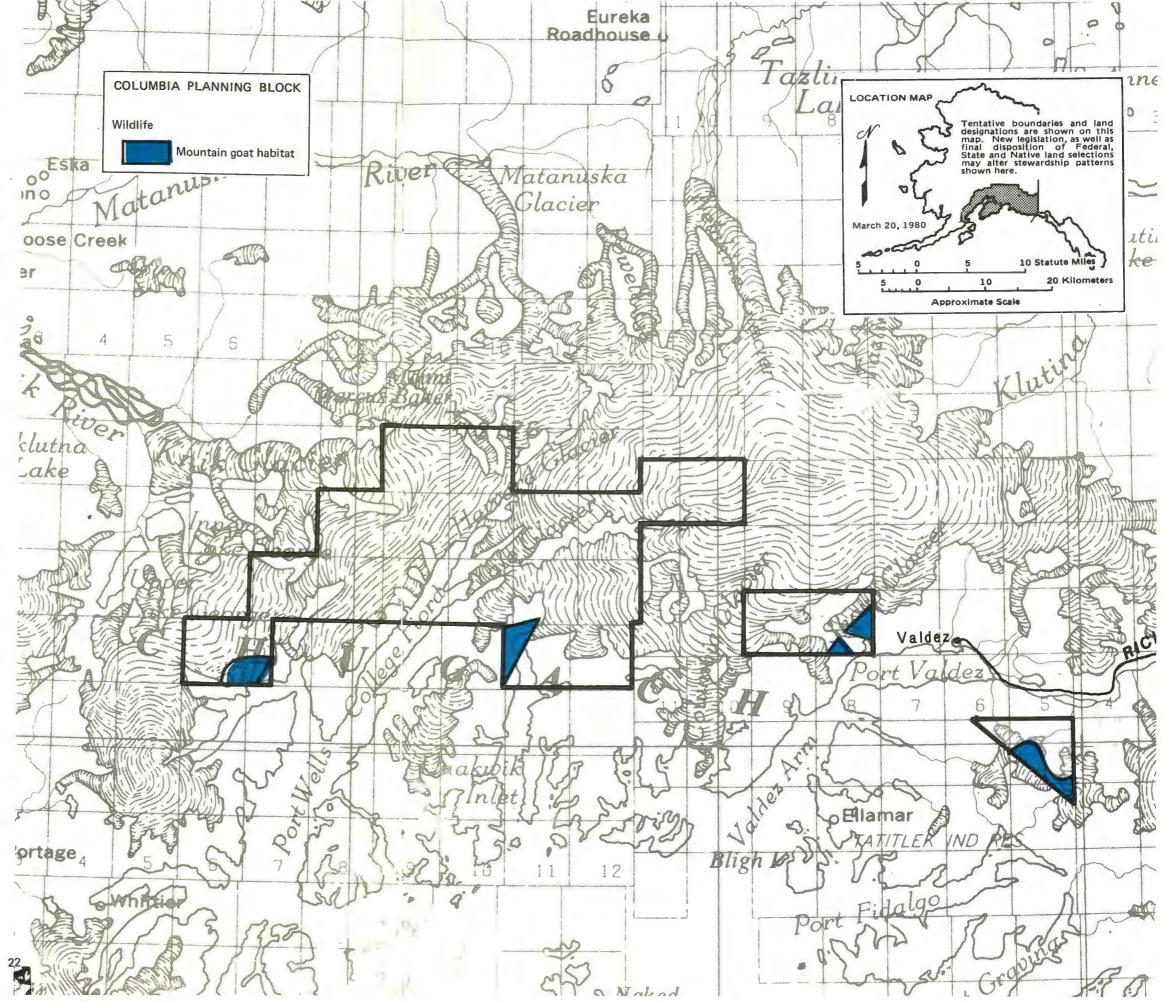
In addition to bears, mountain goats live among the rugged slopes of the Columbia block. Critical habitat for goats generally consists of windblown ridges closest to salt water. South-facing alder slides are critical spring habitat. In this planning block, goats are found on the south-facing slopes above Harriman and College Fiords and Unakwik Inlet and in the mountains around Valdez Arm. The Alaska Department of Fish and Game intends to manage this area to provide for the greatest opportunity to participate in hunting of mountain goats. About 100 goats are taken annually in the whole State Game Management Unit.

High densities of marine mammals are found in Harriman Fiord, College Fiord, Unakwik Inlet, and Valdez Arm.

All along the coast there are colonies of sea birds. These birds usually occupy rugged, rocky islands or mainland cliffs above the water, free from predation.

No rare or endangered species are known to inhabit the area. Common in the Prince William Sound area are the bald eagle and osprey, while Peales Peregrine Falcon (not endangered) also inhabits the area. Trapping has some significance to people in this region. In Cordova and Valdez live approximately 30 people who go trapping as a recreational activity.

These lands are quite isolated, and hunting constitites the primary use by man.





## Land Use Decisions



▼ Protect known cultural resource values from fire and from fire suppression activities that might damage the site or structure.

Cultural resources are non-renewable and must be considered in fire management.



Wildlife Habitat

▼ Manage mountain goat range primarily for goat habitat.



**Visual Resources** 

Evaluate all proposed management activities for visual impacts, and encourage those projects that are compatible with the character of the natural landscape.

This will assure that the impact of proposed activities on visual resources is considered before a project is started.



### Watershed Management

▼ Insure that land use or development is consistent with the Alaska Water Quality Standards.

The BLM is mandated by law to maintain the Alaska Water Quality Standards to protect human safety and fisheries habitat.



Identify lands that would best be managed by other agencies to meet the public needs. Exchange those lands identified by future resource inventories as best meeting public needs by being managed by other agencies.

This provides the Bureau with the ability to adjust boundaries and classify lands to facilitate management.



▼ Make areas available for exploration based on seasonal use to protect wildlife resources and to provide surface protection.

# Tiekel

Photo courtesy of Jerry Zamber



A Dall sheep, one of the most prized of game animals, stands warming in the sun.

## **Tiekel Planning Block**

## **General Description**

Located southeast of the Denali block, Tiekel planning block is a parcel of about 507,000 acres of land straddling the Richardson Highway roughly midway between the towns of Valdez and Copper Center. The Alaska Pipeline Corridor crosses this planning block. A separate management plan has been prepared by Anchorage District BLM for this part of the corridor (see Pipeline Corridor, South Half, MFP, 1975).

There are no towns in the planning block, but important, if very small, communities nearby are Chitina and Lower Tonsina to the east, Tonsina to the north, and the city of Valdez (pop. 8,250) to the south. At present the main contributions this area makes to the general economy of Southcentral Alaska are provided by tourism, hunting, and some trapping.

The Richardson Highway runs northsouth through the western half of the planning block following the Tonsina, Little Tiekel, Tiekel, and Tsina River valleys.

Tiekel planning block is dominated by the Chugach Mountains. The clustered lower peaks of this range cover the entire block except where swift rivers have cut steep channels. Mount Billy Mitchell at 7,217 feet is one of the highest peaks in the planning block. In general the peaks range from 1,800 to 5,300 feet. Numerous small glaciers hang at the 4,000-foot level on the northern and eastern slopes of the mountains. The tallest peaks are found in the southern part of the planning block. In the western part of the block there are some extreme slopes with a high erosion rate and high landslide potential. Extreme slopes, avalanches, and glacial activity may limit development of resources or be a hazard to man. In this planning block the Border Range

fault system crosses from the Uranatine River westward to the outlet of Tonsina Lake, outside the block. This is an active fault system with a high potential for earthquakes.

Upland spruce-hardwood forests grow along the drainages of the Tiekel and Tsina Rivers in the northern and western parts of the block and along the drainages of the Copper River in the southern and eastern parts of the block. This upland spruce-hardwood forest grades into high brush and then alpine tundra toward the tops of the ridges.

This area has a transitional climate, with temperature extremes greater than those of the maritime climates but less than those of the continental climate in the Denali block. Precipitation in Tiekel block is variable; winds are generally light, although locally strong winds do occur.

Wildlife is plentiful, with black bears, grizzly bears, moose, caribou, Dall sheep, mountain goats, various species of waterfowl, and furbearers all utilizing this area. It is especially good country for mountain goats and Dall sheep. Black bears can often be seen from the Richardson Highway in the spring. Grizzlies also range throughout the area. Their best summer habitat is the foothill country where rivers and lakes support spawning salmon. Seasonally dense concentrations of grizzlies occur near these salmon spawning areas along the Tonsina River. Moose range throughout the planning block, and caribou range through the northern half of the planning block. Dall sheep generally occupy the hills of the central part and northeastern corner of the planning block. Mountain goats occupy an area in the southeast part of the block along the Copper River.

Fire occurrence is low, with only three fires recorded during the five year period from 1973 to 1977.

## Land Use Decisions



Develop or maintain a foot trail system for extended hikes. A component of the system would be a trail from Hurtle Creek to Tonsina Lake. This particular trail has a lower priority than those in Denali block, but is part of a sound and achievable development plan. Hiking continues to be a major recreation use in Southcentral Alaska. The Tiekel block offers a diversity of scenery and terrain for the hiker.



**Cultural Resources** 

▼ Preserve the cultural integrity of the part of the Copper River and Northwestern Railway in the Tiekel planning block that is under interim BLM manage-The railway was an important ment. part of the early mineral development of the area. Buildings and other structures are deteriorating, and preservation is needed until land status has been determined. At present it is undetermined whether the railroad right-of-way is Federal or State land.



### Wildlife Habitat

▼ Protect Dall sheep lambing areas and winter range from all activities not consistent with maintaining the population.

Dall sheep winter habitat and lambing areas constitute crucial habitat that the sheep depend on for their existence. It is Bureau policy to maintain through habitat management a maximum diversity

of wildlife species, in sufficient numbers to meet public demands.

Through fire management plans, provide for the occurrence of natural fires in places where vital resources would not be harmed. During winter, a variety of species are sought by trappers in Tiekel planning block. Some of these species require a mature plant community, while others depend on the introduction of new plants or a mixture of the two. By providing for this through planned management of fires, resources will be accommodated.

▼ Protect mountain goat range in the Tiekel block from all activities not consistent with maintaining the population for sport hunting and enjoyment of recreational areas. As traditional hunting grounds for goats in the Wrangell Mountains are closed to sport hunting, the demand for huntable populations on Bureau-administered lands may increase.



### **Visual Resources**

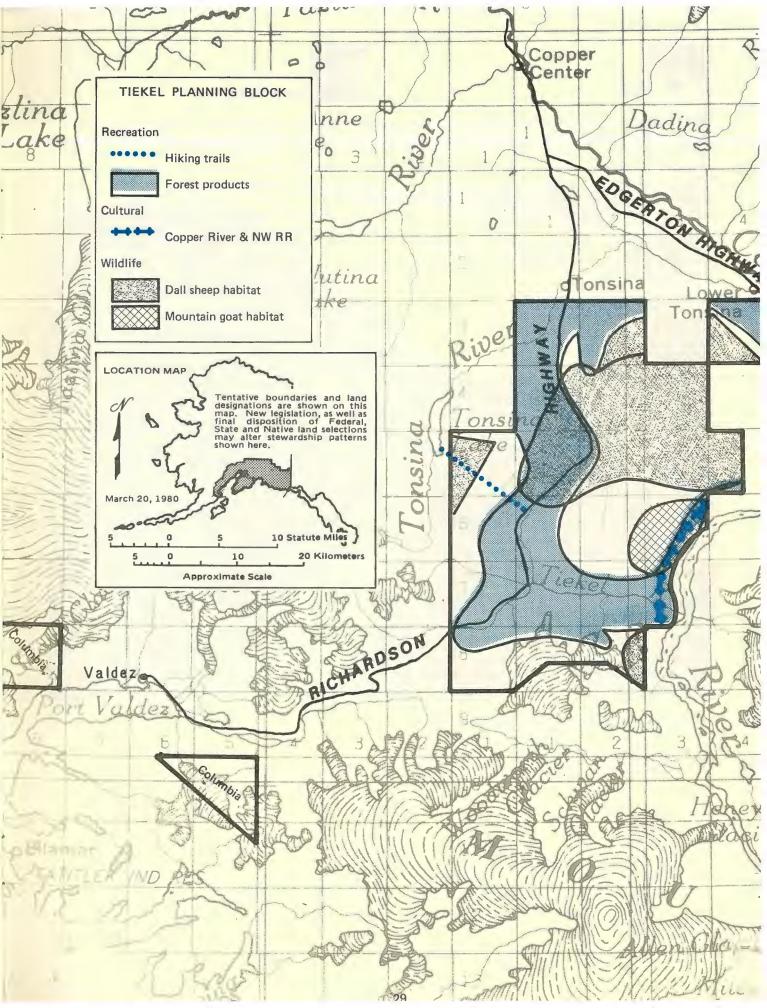
Evaluate all proposed management activities for visual impacts. Encourage those projects that are compatible with the character of the natural landscape.

This recommendation will assure that the impacts: proposed activities have on visual resources are considered before projects are started.



### Watershed Management

▼ Insure that land use or development is consistent with the Alaska Water The Bureau of Land Quality Standards. Management is mandated to maintain the Alaska Water Quality Standards to protect human safety and fish habitat.





▼ Through resource inventories identify lands that would best be managed by other agencies to meet the public needs. Exchange those lands identified by future resource inventories as best meeting public needs by being managed by other agencies.

This gives the Bureau ability to adjust boundaries and classify lands to facilitate management.



▼ Make areas available for exploration, based on seasonal use to protect wildlife resources and to provide surface protection.

Both minerals and wildlife are important resources. Exploration for minerals can avoid crucial wildlife periods through seasonal uses and can comply with surface protection needs through winter use.



Fisheries

▼ Give first management priority to identifying and protecting salmon spawning areas, then for other species as need arises.

We feel that salmon spawning areas are most important to sport and commercial fishing, and therefore put emphasis on their management over lower valued fish.



#### **Forest Products**

▼ Protect any timber stand which produces 20 cubic feet per acre per year (or has the potential to meet commercial standards) from destruction by fire or mechnaical manipulation.

This decision recognizes the value of the forested areas for non-timber purposes such as wildlife habitat. Where commercial timber production is possible, though, it will be given a priority, since there is a very limited area of potential commercial stands within the planning unit.

Photo by R. L. Ward

An old Alaska Road Commission cabin still stands near the Denali Highway.

# Bering



Glaciers and mountain peaks dominate the Bering planning block.

## **Bering Planning Block**

## **General Description**

For real raw, awesome wilderness, it would be hard to beat the Bering planning block. Peaks of the Chugach Range stab up through the glaciers like islands in a sea of ice. No roads, no inhabitants, nothing penetrates this forbidding territory but mountain goats, a few roving black bears, wolves, and other hardy animals. Seven large glaciers flow from the peaks of this area, ultimately draining into the waters of Prince William Sound.

Bering planning block consists of two parcels of land containing approximately 714,000 acres, located north of Cape Yakataga in the Chugach Mountains. Exposed peaks reach elevations of more than 10,000 feet. Mount Steller is one of the highest at 10,267 feet. The closest cities are Valdez and Cordova.

In general, the rocks of the area are highly faulted, metamorphosed rock. At the edge of the glacier on the western side of the planning block, the Bering coal beds are exposed. This coal field has a low potential because of the presence of active glaciers.

Crossing the Bering block near Bagley icefield and along the southeastern edge of Bering Glacier, the Chugach-St. Elias fault system has a high earthquake potential. Mass wasting caused by avalanches and glacial activity occurs in the planning block.

Climate is transitional, with temperature ranges more extreme than a coastal climate, but less extreme than a continental one. Precipitation is variable. Winds are often extreme because of the glacial influence. There are some very small areas with alpine tundra and some coastal western hemlock-Sitka spruce forest, primarily along the eastern shores of Berg Lakes, on the extreme western boundary of the planning block. Since the Bering block is almost entirely glacier covered, it has few significant wildlife species. Mountain goats are known to inhabit the rugged areas, and brown bears gather on some streams in the area, but black bear and moose use more coastal areas in this general region, and normally are not found within the planning block. Bald eagles may forage in the area; waterfowl nest on the southern boundaries of the planning block. Ranging through this area are wolves, wolverines, and an occasional black bear.

### Land Use Decisions



#### Wildlife Habitat

Map page 35

♥ Protect mountain goat range from all activities not consistent with maintaining the population for sport hunting and enjoyment of recreational areas. As traditional hunting grounds in the Wrangell Mountains are closed to sport hunting, the demand for huntable populations on Bureau-administered lands may increase.



Map page 35

▼ Evaluate all proposed management activities for visual impact, and encourage only those projects that are compatible with the character of the natural landscape. This decision will assure that the visual impact of a proposed activity is considered before a project is started.



### Watershed Management

▼ Insure that land use or development is consistent with the Alaska Water Quality Standards.

The BLM is mandated by law to maintain the Alaska Water Quality Standards to protect human safety and fisheries habitat.

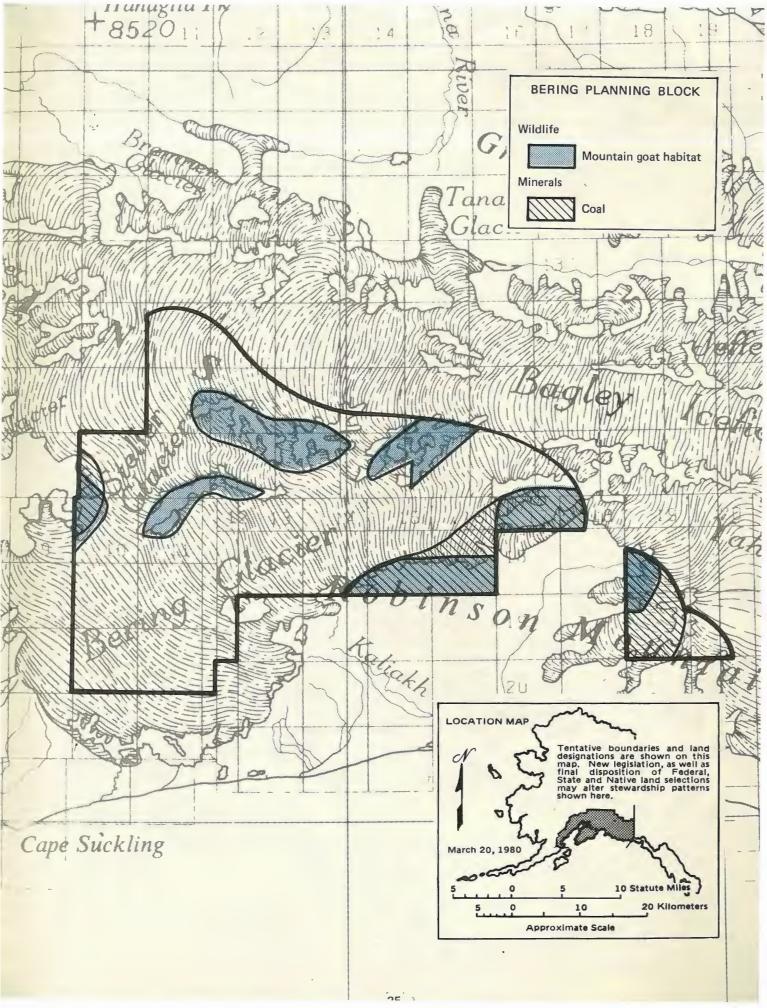


▼ Through resource inventories, identify lands that would best be managed by other agencies to meet the public needs. Exchange those lands identified by future resource inventories as best meeting public needs by being managed by other agencies.

This provides the Bureau with the ability to adjust boundaries and classify lands to facilitate management.



▼ Although the Bering River area has been identified as a high potential coal basin, much of the area is covered by the Bering Glacier. Exploration and development of the coal field would probably take place first on the surrounding native lands, although the coal on BLM administered lands may eventually be in demand. The decision, therefore, is to withhold action until coal reserves on Native lands have been fully developed.





# The Planning System

The Federal Land Policy and Management Act of 1976 requires BLM to use a systematic, interdisciplinary land-use planning process. The fundamental question that the Bureau's planning efforts must answer is, how will BLM-managed lands help meet the needs and desires of the public, both now and in the future, while insuring that environmental quality is maintained? To answer the question, we follow an orderly series of steps so that many complex and interacting factors are given consideration. Throughout the process, people are encouraged to contribute their ideas and their special knowledge about the land and how it should be used. Briefly, these are the general steps we follow in our planning process:

• Contact government agencies, citizen groups, and individuals interested in the area, so we can be aware of and responsive to their needs and concerns.

• Meanwhile, gather information about the land, its resources, and their present uses. Analyze the information. • Recommend for each land use the best possible management objectives, without giving consideration to other possible resource uses.

• Identify and resolve conflicts between these recommendations.

 Propose a balanced multiple-use plan for use of the land.

• Ask public review of the proposed plan.

• Make changes based on comments and administrative review.

Circulate the decisions.

• Make periodic future revisions to the plan as needed.

## **Relationship To Other Plans**

The Bureau of Land Management has completed two other plans for lands within the Southcentral Planning Area: the Pipeline Corridor, South Half (1975) and the Portage Flats Management Framework Plan (1977). Decisions in both of these plans are considered fully valid and compatible with those of the Southcentral Plan. Another area, the Halibut Cove Natural Area, located on the Kenai Peninsula, has been designated as an "instant wilderness study area" under the Federal Land Policy and Management Act of 1976. A wilderness review is projected for this area; therefore, the Southcentral Plan does not address Halibut Cove.

## What Happens Next?

The life of this plan is expected to be no more than 10 years. A comprehensive review should be undertaken at the end of 5 years. Also, this plan has shown the need for a second level planning effort for the Denali planning block. Within 5 years, this area should be scheduled for detailed planning.

A Management Framework Plan (MFP) such as this one is intended to be dynamic and never really finished. Through the Bureau's planning process it is subject to update and revision when new information becomes available and as resource conditions or land use demands change. Any major changes are, of course, subject to public review.

The MFP is a working document that is used, with its supporting studies and analyses, in the following ways: • guiding land use decisions and management actions that are required in daily operations.

• programming and preparing the Bureau's annual work plans.

• guiding preparation of activity plans for individual resource programs such as Cultural Resource Management Plans, Habitat Management Plans, Timber Management Plans, etc.

• coordinating the Bureau's actions with other government agencies.

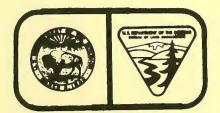
• making environmental analyses of specific actions, for the preparation of environmental analysis records and environmental statements.



As in most systems BLM's Planning System has its own "language". This glossary is included to help you understand some of the terms used in this brochure.

- ACEC (Area of Critical Environmental Concern) an area within the public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards.
- Archeological District a concentration of archeological values recognized by inclusion in the National Register of Historic Places. This designation insures that the district will be considered in land-use management.
- Family campground an area designed for weekend or longer stays. It may be either a transient or destination location. Units are designed to accommodate four people and one vehicle. Privies and potable water may be provided.
- Management Framework Plan (MFP) a land use plan and the report that documents it. It establishes the project land uses and management objectives to meet identified public needs for a given planning area.
- ORV (off-road vehicle) a motorized vehicle designed specifically for travel over natural terrain.

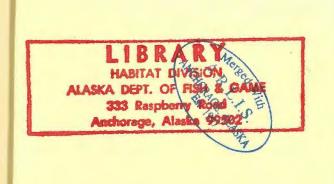
- Planning Area the overall geographic region that affects the smaller blocks of land for which BLM is preparing this land use plan. Information about the entire Planning Area is analyzed in order to make realistic land use plans for BLM-managed areas.
- Planning Area Analysis the analysis of present and future needs and public demands for land and for renewable and non-renewable resources. This analysis shows the significance of BLM land within a planning area to the region's people.
- Planning block a block of land or grouping of blocks expected to remain under BLM's jurisdiction, and for which land use decisions are being prepared.
- Public Land (as used in this document) land owned by the Federal government and administered by the Bureau of Land Management.
- Seen area that portion of the landscape which can be observed from a particular observation point.
- Waysides An area designed specifically for short term or overnight stays. No developed facilities other than privies and a fire ring are provided.
- Unit Resource Analysis (URA) the analysis of information about the land and its resources within the Planning Area; also the document in which the analysis is recorded.



#### U.S. Department of the Interior

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people.

The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.





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