

Alaska Range East Region (4)

General

The East Alaska Range region is unique among the regions within the ETAP; it is characterized almost entirely by mountainous areas that are heavily glaciated or contain exposed, barren rock either associated with glacial retreat or high mountainous terrain. It encompasses over 642,000 acres, of which the majority of the land is owned by the State, although significant areas within the central area of the region are owned by the federal government. The region extends from the Fort Greely Military Reservation in the north to an area north of the Amphitheatre Mountains in the south, and from the Denali and Matanuska-Susitna Boroughs in the west to the eastern extremity of the Alaska Range, located near the Robertson River drainage. The other dominant landscape feature within the region is the valley associated with the Delta River, a heavily braided, glacially-influenced river. The valley created by this river is quite broad and generally flat. This valley contains the Richardson Highway and the Trans-Alaska Pipeline System. Refer to Map 3-4 for this region.

Amount and Distribution of State Land

Within this planning region, the state is the dominant land owner (approximately 586,650 acres). The State has also selected a considerable amount of federal land, most of which is concentrated in townships F015S009E and F016S009E²³. Other areas have been selected by the State but in comparison to the concentration in these two townships, the areas are small and scattered and located in the area west of the Richardson Highway. There is also a small amount of private land. Lands owned by the University and Mental Health Trust are not present in this planning area. Federal land concentrates in the townships within and near the Black Rapids Glacier, the dominant landscape and geomorphic feature in the area west of the Richardson Highway.

The size of this planning region has decreased substantially from that included in the 1985 TBAP. That part of the 1985 region south of T018S has been removed from the ETAP plan boundary. This area is more properly dealt with by area plans that affect the regions south of the main parts of the Alaska Range. It is intended that a management plan for the Denali Block will be prepared in the foreseeable future. This area includes the Tangle Lakes, which are rich in cultural history and archeological features, and generally includes the

²³ These selections are actually top-filed selections and are affected by PLO 5150 (TAPS Utility Corridor). The State could obtain these lands in the future, depending of the results of BLM adjudication but is uncertain when this action may occur. The east one-half of these townships are, however, a high priority selection by the State.

Amphitheater Mountains and the area west of the Richardson Highway. The area east of the Richardson Highway will be included in the upcoming revision of the Copper River Basin Area Plan.

Unlike other regions within the plan boundary, only general domain land exists within this region. This type of land is to be managed as public domain land under AS 38 requirements.

Access, Resources, and Uses of State Land

Access: Access within the region is limited, constrained by glacial features and mountainous terrain. The main access corridor to and through the region is the Richardson Highway, which follows the broad valley created by the Delta River. The Trans-Alaska Pipeline System traverses generally the same corridor as this highway. Other than the Richardson Highway, access is limited. There are no evident RS 2477 routes within the region.

Wildlife and Habitat: Wildlife is scarce throughout the region compared to other portions of the planning area, reflecting mountainous and glacial terrain and the general absence of favorable habitats. Brown bear are found throughout the region, generally along river valleys and exposed, non-glacial uplands that are less steep. Caribou also are found in the far northern and scattered southern parts of the region on a seasonal basis. The northern use areas are confined to areas within townships 014S and 015S, and are associated with caribou wintering habitat. Dall Sheep are also present throughout the region, extending southward to township 018S and are concentrated in those areas with vegetated river valleys. This area is part of their general range.

Minerals and Hydrocarbons: Mafic-ultramafic deposits occur in large portions of the western and central parts of the region. These deposits encompass the following complexes: Fish Lake, Eureka, and Rainy. Although these deposits cover a relatively small area, the DGGs regards them to have high potential for mineralization. There is a very large block of state mining claims within townships 018S007-011E. There are no known coal bearing units or basins with potential hydrocarbon formations within the region. Additionally, there is a string of mineral occurrences along the north slope of the Alaska Range between the East Fork of the Little Delta River and the Big Delta River that appear to be metamorphosed volcanogenic massive sulfides. There could be future exploration or development of these prospects. There are two antimony occurrences in the vicinity of Black Rapids; which is a strategic and critical mineral.

Forest and Agriculture: Reflecting terrain and topographic features, there are no areas with agricultural or forestry potential.

Recreation: Also reflecting terrain and topographic features and the general absence of caribou and moose, there is little recreation, including sport hunting and fishing, within this region. What little that occurs is associated with Dall sheep and caribou in more accessible locations. The Delta River with its broad, braided floodplain acts as a barrier to easy

movement to the area west of the Richardson Highway. The scenic values of the Richardson Highway will be protected through the management guidelines associated with unit U-07 (which contains state land east of the Richardson Highway). All Generally Allowed Uses under 11 AAC 96.020 are permitted within the region; this plan does not recommend the creation of areas of special use designation that could restrict such uses.²⁴

Management Planning Constraints

The East Alaska Range region does not contain any municipalities and is not included within an organized borough. Accordingly, there are no local comprehensive plans.

Extensive portions of the region west of the Richardson Highway are owned by the federal government and are managed by BLM. Most of the townships within 016S and 017S are under and will continue to be under federal management since these areas have not been selected by either the state or native corporations. The areas in selection status in townships 015S and 016S, 009E are also likely to remain under federal ownership and management for the foreseeable future because of the presence of Public Land Order 5150, which must be lifted before these areas might be conveyed to the state. These areas are affected by the BLM Eastern Interior Resource Management Plan. This plan was of limited utility in plan revision because of the focus upon federal land and since the plan, at the time of plan revision (2015), was in the process of being revised and the plan did not identify a preferred alternative that would have indicated the general intent of federal land management.

Other than the 1985 TBAP, there are no other state plans affecting this area. In the 1985 TBAP the Denali Scenic Highway Plan affected the Richardson Highway, but this area has been removed from the ETAP planning areas. The 1985 TBAP was consulted and was helpful in developing management intent for the units in this region. However, because of new mineral and habitat information, the delineation of the specific management units differs and reflects this newer information.

Management Summary

The overall management intent for this area is generally similar to that developed in the initial 1985 TBAP. Both the original plan and this revision reflect the reality of this region: that it is made up of mountainous terrain with extensive glaciers and glacial topographic features, that it is inaccessible and lacks significant resource or recreational values, but that it also contains unique geologic and terrain features. The uniqueness of these features and the viewscapes that they create mandates that this region needs to be managed in a conservative fashion. This management orientation differs from the other regions in this area plan; the latter focus on a more active use of state land and resources and have a strongly multiple use

²⁴ This statement is not intended to preclude the creation of such special use designations in the future, should they be warranted.

orientation. All state land, including state-selected land, within this region is to be retained in state ownership and is to be managed for its recreation, habitat, and scenic values. Mining is recognized as an appropriate use and is subject to applicable state and federal permitting and regulatory requirements. The majority of land is designated Habitat, Public Recreation-Dispersed, or Resource Management, totaling approximately 558,400 acres. The use of the Resource Management designation reflects the character of the land: that there are no known resources and no known economic demand for its use during the planning period. Lands affected by this designation are also to be retained by the state.

Reflecting the absence of suitable land, no land disposals are recommended, and reflecting the absence of suitable agricultural soils or significant forest stands, neither are agricultural or forestry development/management recommended. The potential for the development of mineral resources exists, however, and large areas west of the Richardson Highway are designated Mineral (183,295 acres). There is also limited potential for commercial development at level sites along the Richardson Highway. The state lands east of the Richardson Highway are designated Public Recreation-Dispersed, but management intent text recognizes that some amount of commercial development may be appropriate at locations along the highway. Specific management guidelines for such development are included in unit E-07.

Designation	Acreage, Region 4
Habitat	312,238
Public Recreation	126,126
Resource Management	157,186
Settlement	0
Minerals	183,295
Forestry	0
Agriculture	0
Water Resources	0
Materials	26
Reserve Use	0

Resource Allocation Table – Alaska Range East (4)

Unit #	Designation(s) / Acres	Map(s)	Management Intent	Resources and Uses
E-01	Ha 120,018	Map 3-5	<p>Manage to protect and maintain fish and wildlife habitat values. Unit is to continue in its native state and be retained in state ownership.</p> <p>Development is not anticipated in this unit and is inappropriate except for certain types of utilities, communication facilities, roads, and similar types of projects that provide a general public benefit. Projects may be authorized if they are determined to be in the best interest of the state and maintain the values and resources of the unit. Mineral development is recognized as an appropriate use in this unit. Mineral licks are to be maintained in any proposed mineral extraction operation. Consult ADF&G prior to issuing an authorization.</p> <p>Portions of this unit are in selection status; review land status prior to any authorization.</p>	<p>Unit is located west of the Richardson Highway and Delta River. The headwaters of Delta Creek and the Little Delta River traverse the unit. The terrain is mountainous, with elevations ranging from 2,000-6,000 feet. Shrubs are present through the majority of the unit, with barren rock, ice and snow at the higher elevations and smaller areas of evergreen, deciduous and mixed forest and woody wetlands at low elevations.</p> <p>Caribou wintering is present throughout the unit, and calving appears in the northern portions of the unit. Moose are concentrated in valleys throughout the unit, with rutting present in the north and west portions of the unit, and wintering present along the west, north, and east portions of the unit. A moose migration corridor also traverses the unit. Bison occur in the far eastern part of the unit toward the Delta River. Dall sheep occur throughout the unit except in the lowlands near the Delta River and East Fork of the Little Delta River. Dall sheep wintering habitat occurs throughout the northern and central part of the unit. Brown bear spring concentrations are found along the valleys of Delta Creek and the East Fork of the Little Delta River.</p> <p>There is a string of mineral occurrences along the north slope of the Alaska Range between the East Fork of the Little Delta River and the Big Delta River that appear to be metamorphosed volcanogenic massive sulfides. Specific mineral occurrences including MH004, MH005, MH006, MH007, MH008, and MH011 are present in this unit. Mineral licks have been reported in two townships: F014S005E9, 10 and F015S008E22, 23.</p> <p>State selections are present in the eastern part of the unit.</p> <p>There is a leasehold location order, LLO 3, in F014S005E.</p> <p>There is a trapping cabin on the East Fork of the Little Delta River. It is under ADL 400595.</p>
E-02	Rm 157,191	Map 3-5	<p>Manage for multiple uses including mineral exploration and development. Retain in state ownership.</p> <p>Except for mining, development is unlikely within this unit and is generally inappropriate except for certain types of utilities, communication facilities, roads, and similar types of projects that provide a general public</p>	<p>Unit is located west of the Richardson Highway and Delta River, in the east Alaska Range. The terrain is mountainous, with elevations ranging from 2,000-13,000 feet. The majority of the unit is covered by glaciers and moraine except for shrubs on lower slopes and evergreen, deciduous and mixed forest and woody wetlands at low elevations near the Delta River.</p>

Unit #	Designation(s) / Acres	Map(s)	Management Intent	Resources and Uses
			<p>benefit.</p> <p>Other types of projects may be authorized if they are determined to be in the best interest of the state and maintain the values and resources of the unit.</p> <p>Portions of this unit are in selection status; review land status prior to any authorization.</p>	<p>Dall sheep wintering habitat is found in small portions along the northern edge of this unit. The Black Rapids Glacier provides recreational values to the region. The Delta River borders the eastern end of the unit, and high recreational uses occur within the Delta River corridor, and the area around the Black Rapids access site.</p> <p>There is a string of mineral occurrences along the north slope of the Alaska Range between the East Fork of the Little Delta River and the Big Delta River that appear to be metamorphosed volcanogenic massive sulfides. Specifically, mineral occurrences MH009, MH010 are present. Mining claims are present in F018S007E and F018S008E. There is a leasehold location order, LLO 3, in F014S005E. MCO 529 occurs along the Trans-Alaska Pipeline System corridor following the highway.</p> <p>The Delta Wild and Scenic River corridor occurs along the eastern side of this unit and is managed by the BLM.</p> <p>State selections are present throughout the unit.</p> <p>Unit is adjacent to unit E-03.</p>
E-03	Ha, Rd 27,000	Map 3-5	<p>Manage to protect and maintain the habitat and public recreation values. Retain in state ownership.</p> <p>Development is unlikely in this area and is generally inappropriate except for certain types of utilities, communication facilities, roads, and similar types of projects that provide a general public benefit. Projects may be authorized if they are determined to be in the best interest of the state and maintain the values and resources of the unit.</p>	<p>Unit abuts the Delta Wild and Scenic River. Unit is mountainous with elevations over 6,000 ft. Groundcover consists of shrubs and barren rock with deciduous forest at low elevations toward river.</p> <p>Dall sheep wintering habitat occurs throughout this unit.</p>
E-04	Ha, Rd 5,088	Map 3-5	<p>Unit encompasses the navigable portion of the Delta River and adjoining riverine uplands and is to be managed for its habitat and recreation values. Retain in state ownership.</p> <p>Development is unlikely in this area and is generally inappropriate except for certain types of utilities, communication facilities, roads, and similar types of projects that provide a general public benefit. Projects may be authorized if they are determined to be in the best interest of the state and maintain the values and resources of the unit. Maintain right-of-way associated with the Trans-Alaska Pipeline System.</p> <p>Check land status or those areas conveyed to the state prior to issuing authorizations.</p>	<p>Unit encompasses a portion of the Federal Delta Wild and Scenic River. Groundcover is mostly barren rock along river bar and some patches of deciduous forest and shrub.</p> <p>Dall sheep wintering habitat occurs throughout this unit. The Richardson Highway forms the eastern boundary of the unit. The Trans-Alaska Pipeline System also runs through unit, east of the highway. The unit is narrow, running north and south and lies mostly in the valley bottom along the Delta River.</p> <p>Mineral Closing Order 529 affects the eastern half of the unit.</p> <p>Unit is comprised entirely of state selected lands.</p>

Unit #	Designation(s) / Acres	Map(s)	Management Intent	Resources and Uses
E-05	Mi 28,260	Map 3-5	<p>Manage unit for its mineral values and resources. Retain in state ownership.</p> <p>Any mineral development shall, in addition to the management guidelines of the Fish and Wildlife Habitat section of Chapter 2, consider impacts upon moose habitat.</p>	<p>This unit is located in the Alaska Range, west of the Richardson Highway and north of the Denali Highway. Unit contains significant mineralized potential based on the widespread presence of numerous copper, nickel, chromium, palladium, and platinum occurrences and prospects housed in mafic-ultramafic complexes.</p> <p>Terrain is mountainous with peaks over 7,000 feet, glaciers and river valleys. Groundcover consists of barren rocks and snow at high elevations, shrubs on mountain slopes and high valleys.</p>
E-06	Mi, Ha 155,035	Map 3-5	<p>Manage unit for its mineral values and to maintain important Dall sheep wintering habitat. Retain in state ownership.</p> <p>Any mineral development shall, in addition to the management guidelines of the Fish and Wildlife Habitat section of Chapter 2, consider impacts to wildlife and Dall sheep habitat, and shall either avoid or minimize development related impacts. Activities and projects that do not preclude the primary uses of this unit, however, may be authorized.</p> <p>Authorizations shall consider impacts to both the caribou herd that uses this area (Nelchina Herd) and the need to maintain this area as a recreation area, as an extension of the activities that occur to the south in the Denali Highway area. This area generally occurs within Townships: F018S010E, F019S007-010E, F020S007-010E.</p>	<p>This unit is located in the Alaska Range, west of the Richardson Highway and north of the Denali Highway. Unit abuts the Delta Wild and Scenic River.</p> <p>Terrain is mountainous with peaks over 5,000 feet, glaciers and river valleys. Groundcover consists of barren rocks and snow at high elevations, and vegetation consists of shrubs on mountain slopes and high valleys.</p> <p>Dall sheep wintering habitat occurs throughout unit.</p> <p>Unit contains significant mineralized potential land based on the widespread presence of numerous copper, nickel, chromium, palladium, and platinum occurrences and prospects housed in mafic-ultramafic complexes. Mining claims occur in the western, central, and southern portions of the unit.</p>
E-07	Ha Rd 1,822	Map 3-5	<p>Manage unit for its recreational and habitat values. Retain in state ownership.</p> <p>Development is unlikely in this area and is generally inappropriate except for certain types of utilities, communication facilities, roads, and similar types of projects that provide a general public benefit. Other types of projects may be authorized if in the best interest of the state and with the management intent of this unit. Structures should be set back approximately 100' from the Richardson right-of-way.</p> <p>Authorizations issued adjacent to the Richardson Highway for permanent structures of a commercial type should be few in number and situated at a nodal location. Other areas adjacent to the Highway should remain undisturbed and be retained in state ownership. Settlement is inappropriate within this unit.</p>	<p>Unit occupies the area immediately to the east of the Richardson Highway. Depending on location, terrain may be gentle to hilly. Vegetation in the southern portion of the unit is characteristically shrub while areas to the north are occupied by evergreen forest. Brown bear and caribou are present.</p> <p>The more level terrain in this unit has already been conveyed out of state ownership, although portions of the unit within sections 18 and 19 are somewhat suited for limited development.</p> <p>The Richardson Highway is part of this unit. The Trans-Alaska Pipeline System is situated just west of this unit on private land. Some portions of the pipeline may also be within the Richardson Highway right-of-way.</p> <p>There is one mineral occurrence in this unit (MH206). This site contains the same package of rocks that host the metallic deposits in units E-06 and</p>

Unit #	Designation(s) / Acres	Map(s)	Management Intent	Resources and Uses
E-08	Rd 88,940	Map 3-5	<p>Manage this unit to maintain scenic views, public recreation activities, and significant habitat areas (if present). Unit is to be retained in state ownership. Mineral exploration and development is recognized as an appropriate use.</p> <p>Except for mining, development is unlikely in this area and is generally inappropriate except for certain types of utilities, communication facilities, roads, and similar types of projects that provide a general public benefit. Other types of projects may be authorized if in the best interest of the state and with the management intent of this unit, which emphasizes the maintenance of scenic views, recreation and significant habitats. Because of the widespread presence of significant metallic minerals south of the Canwell Glacier, there should be an increased level of management (for mineral resources) in this area. DMLW should coordinate with DGGS prior to issuing any permanent authorizations or disposals in this area.</p>	<p>E-08.</p> <p>This very large unit is situated east of the Richardson Highway and is characterized by mountainous terrain and numerous glaciers, including the Eel, Canwell, and Johnson. A heavily braided portion of the Robertson River is situated in Ranges 13 and 14. There is relatively little vegetation in this unit given the widespread presence of high elevations and glacial terrain features. Dall sheep wintering habitat occurs on the eastern and western edges of the unit. A portion of a caribou range extends northward along the Richardson Highway. State mining claims blanket large portions of F018N011E, and four significant mineral occurrences are present. There is the widespread presence of numerous copper, nickel, chromium, palladium, and platinum occurrences and prospects housed in mafic-ultramafic complexes. That part of the unit south of the Canwell Glacier is considered to have a high potential for mineral resources.</p>
E-09	Ha, Rd 3,305	Map 3-5	<p>Unit, which consists of the Delta River, is to be managed for its water resources, habitat and public recreation values. Particular emphasis in this management is to focus on maintaining water quality, sensitive habitat and recreational use of the river. Activities and projects that do not preclude the primary uses of this unit, however, may be authorized.</p> <p>Retain in state ownership including islands and other uplands within the navigable waters of the Delta River. Unit encompasses segments of the Delta River as measured from bank to bank from Ordinary High Water. Besides the water column itself, islands and exposed gravel bars are also included in this parcel.</p>	<p>Unit encompasses segments of the Delta River as measured from bank to bank from Ordinary High Water. Besides the water column itself, islands and exposed gravel bars are also included in this parcel.</p> <p>The Delta River is an anadromous stream. It is also designated by BLM as a National Wild, Scenic and Recreational River.</p> <p>The state asserts that the Delta River is navigable and is therefore owned by the state.</p>
E-10	Ma 26	Map 3-5	<p>Manage unit for its material values and resources consistent with the authorization issued by DNR. Material sales to the public may be considered with the concurrence of ADOT/PF. Retain in state ownership.</p>	<p>This small unit contains a material sale site (MS 71-0-035-2, ADL416203) on the east side of the Richardson Highway.</p>

Map 3-5: Alaska Range East Region Boundary and Unit Boundaries