Norton Sound Region

This region¹¹ includes lands that drain into Norton Sound from Rocky Point in the northwest to Saint Michaels and Stebbins in the south. The Kotzebue Sound (South) and Nome regions form its western and northern boundaries. Its eastern boundary is not formed on a definite legal or municipal boundary and is generally formed by the Yukon River drainage. Most of the uplands in this unit are under federal or Native corporation ownership, although, since the initial preparation of the NWAP in 1986, the state has increased its holdings in this region greatly. In addition, there are large areas of state-selected land. State-owned and selected land is scattered throughout the region, but is somewhat concentrated in the northwestern and southeastern parts of the region. There are also several small communities scattered throughout the regions, there are no federal Conservation System Units in this region.

Unalakleet is the primary town in this region; but, Nome also serves as a regional hub. A number of smaller communities exist, including Elim, Koyuk, Shaktoolik, Unalakleet, St. Michael, and Stebbins. These are scattered throughout the region along the coast.

Distribution and Characteristics

There are 0.4 million acres of state-owned and 1.1 million acres of state-selected land. Within this region, most are state selections rather than state topfiled (over Native corporation selections). It is therefore likely, depending on the outcome of the initial adjudication of state land on a statewide basis¹² that many of these areas will end up in state ownership. The basis for these selections in this region was related to mineral values or potential transportation corridors. The large holdings of state land near McCarthy Marsh and along the Norton Sound coast (eastern part) are both related to selections for transportation corridors. The remaining selections, which constitute the bulk of the state selections, occur adjacent to areas of state-owned land in the Darby Mountains and were selected for their mineral resource values. The northern part of this latter area is also related to the continuation of a transportation corridor situated to the west along the general alignment of a RS 2477 route (RST 216).

Reflecting the large area encompassed by this region, topography and vegetation vary but are characterized by two relatively distinct patterns. In the Darby Mountains hilly to mountainous terrain is common and the vegetation is alpine tundra or barren rock, whereas lowland areas, which are characteristic of almost all of the remainder of the region, are

¹¹ The boundaries of this region have been expanded from their original configuration in the 1989 area plan. The boundary has been extended to the west, to pick up the large areas of state-selected land and state-owned land that drain into the Norton Sound through, in part, Golovin Bay.

¹² Selections advanced by the DNR to the BLM in 2007.

uniformly flat and are comprised of moist or wet tundra. Only in a few, well drained locales are high brush present; this occurs on the western flanks of the Darby Mountains and the area east and northeast of Unalakleet.

Access, Resources, and Uses of State Land

Access to the region is by air, sea, or overland trail. Community airports exist at all villages. The airport at Unalakleet has jet facilities. Other access within the region is by boat along the navigable rivers and along the coast, and by snowmachine or dogsled along the numerous regional and local trails. Major trails follow the Inglutalik, Ungalik, Shaktoolik, Unalakleet, North, and Koyuk Rivers. The Iditarod Trail extends along the Unalakleet River and north along the coast through the Shaktoolik, Koyuk, and Elim.

Residents of the small communities use the region for hunting, fishing, reindeer herding, mining, and subsistent activities. Although the communities rely on coastal resources for much of their harvest, they also use the Koyuk River and other inland areas for harvesting caribou, moose, brown bear, and furbearers. Caribou migrate through this region, and it is an important part of their winter range. Waterfowl concentrations occur in coastal areas and in the wetlands and rivers adjacent to the coast. Moose are also present throughout the region and winter concentration areas occur along the principal drainages, including the Unalakleet, Koyuk, Ungalik, Tubukulik, and Fish rivers. Public recreation is concentrated along the Koyuk, Egavik, Shaktoolik, and Unalakleet rivers, St. Michael Bay, and Stuart Canal. Tidelands support herring, Beluga, ringed seal, walrus, ducks, geese, and anadromous fish. There are numerous seabird rookeries along the coast. All coastal areas, especially at Shaktoolik, Koyuk, Isaacs Roadhouse, Unalakleet River, Twenty-Two Mile Cabin, and the Innoko River, have known cultural values.

Within this region there are several areas with moderate to high mineral potential. The principal area, however, occurs in the Darby Mountains, where zinc, lead, silver and antimony are known to be present.

In addition, there are several important tideland areas within this region; these occur at Golovin Bay and Golovin Lagoon. Other tideland areas do not have the same concentration of sensitive resources, but are still valuable, depending on location, as concentration areas for waterfowl and seabirds, particularly within nearshore areas and coastal wetlands.

Management Constraints

Few state and local management plans affect this area. Only one state resource management plan affected this area, the 1989 Northwest Area Plan, which is now superseded by this update. The Bering Straits Coastal Resource Service Area maintains a district coastal management plan and this was consulted in the development of this plan.

Management Summary

State land is to be managed consistent with the plan designations and management recommendations contained in the Resource Allocation Table. State land will be managed in a manner similar to that inferred from its designation; further guidance is provided by management intent and management guidelines.

<u>Uplands.</u> State land will be primarily managed for the development of mineral resources in areas designated Minerals, the protection and maintenance of habitat values in areas designated Habitat, the development of possible transportation facilities in areas designated Transportation Corridor, and for multiple uses in areas designated General Use. Authorizations in this region shall ensure the maintenance of important habitat areas and species. Specific review requirements affect authorizations issued within areas designated Minerals or Transportation Corridor. All of this area is open to mineral entry and development and to mineral, and oil and gas leasing. Tidelands will be managed for the protection of the resources and uses indicated in the Resource Allocation Table. Grazing is recognized as an appropriate land use. Shorelands in this unit will be managed consistent with the general management intent for such areas described in the *Navigable Rivers and Lakes* section at the end of Chapter 3.

<u>Tidelands.</u> The two primary tideland resource areas, at Golovin Bay and Golovin Lagoon, are designated Habitat and are to be managed for the protection of the waterfowl and other sensitive species within these areas. The remainder of the tidelands are to be managed for multiple uses and are designated General Use. Adequate consideration must be given in the issuance of authorizations to the protection of sensitive species and habitats within each designation.

N-01 Mi 2.5 Manage for mineral values. Grazing is recognized as an appropriate This large unit encompasses an area considered to have high to very high mineral potential; this area was selected by the state for its mineral value. use. Various 244.246 Uranium prospects are under exploration (2008) within parts of the unit. Mineral development is considered appropriate within the unit but shall consider impacts upon grazing activities and habitat and shall adhere to Except for the westernmost part of the unit, mountainous topography is the following guideline: characteristic and generally coincides with the alignment of the Darby Mountains. This western area is part of much larger lowland and it is Authorizations issued in this unit involving long-term or permanent typically level and has relatively good drainage. Vegetation corresponds uses are to consider impacts upon the WACH, particularly during the with elevation and drainage. Within mountainous terrain, alpine tundra and winter when parts of this unit are used as part of their winter range. barren rock are common. The generally flatter western part is characterized Consult ADF&G prior to issuing an authorization involving a longby high brush. term or permanent use. Portions of the unit are utilized by the WACH as part of their prime winter Maintain access associated with local/regional trails and RST 16. range. A number of streams within the western, level part of the unit support anadromous fish. An RS 2477 route (RST 216, Topkok-Candle) traverses the northern part of the unit in a generally west-east direction. Portions of this unit have been used historically for reindeer herding, although this activity is limited at present (2008). N-02 Gu 2,5 Manage for multiple uses. Grazing and mining are recognized as This large unit consists of four large subunits: these occupy areas north of appropriate uses. Maintain access. unit N-08 (McCarthy Marsh) and to the northeast and southeast of unit N-298,041 Various 01. N-02 is an important habitat area and N-01 contains important mineral Maintain the potential for transportation corridor development. Ensure concentrations. Except for an area immediately northeast of N-01, which is that authorizations that could affect this development are carefully a lowland with extensive wetlands, these areas are characteristically hilly reviewed to ensure that this use is not precluded. mountainous and are considered to part of the Bendeleben and Darby Mountains. The one lowland area is characterized by wet tundra, and the DNR is to consult with ADOT/PF to determine is a proposed use or mountainous areas, by alpine tundra in the higher elevations and by high activity is compatible with the transportation corridor. The purpose of brush in other areas. The unit is considered to have lower mineral potential this review is to determine if it would adversely affect the development than N-02, although some parts may have high mineral potential. of a transportation facility. Any development that may be authorized shall adhere to the following

guideline: Authorizations issued in this unit involving long-term or

permanent uses are to consider impacts upon grazing activities, moose

winter concentration areas, and the WACH. Special consideration is to

be given to activities occurring during the winter and to the protection

of movement corridors. Consult with ADF&G prior to issuing an

Resource Allocation Table for Upland Units – Norton Sound Region

Management Intent

Designation(s) / Map(s) /

MTR

Unit #

Acres

With the exception of an area in the south, this entire unit is in state selection status.

Resources and Uses

Moose are present and winter concentration areas probably exist within the larger drainages. Caribou are present in portions of this unit and the unit is within the core winter range. Several anadromous streams occupy the larger drainages. Portions of this unit have been used historically for reindeer

Unit #	Designation(s) / Acres	Map(s) / MTR	Management Intent	Resources and Uses
		authorization involving a long-term or permanent use, including mineral development.	herding, although this activity is limited at present (2008).	
			The Iditarod Trail traverses a part of the unit. In addition, there are at least three other winter trails. A RS 2477 route (RST 216) traverses the northern most parts of the unit. State land in this part of the unit was selected for the purpose of reserving land for the eventual development of a transportation route.	
N-03	Ha, Hv	2	Manage for the maintenance of habitat values. Grazing is recognized as	believed to have habitat values. Depending on location, they are either located in hilly, inland areas; one smaller parcel is located on Golovin Bay.
	16,312	Various	adhere to the following guideline: Authorizations issued in this unit involving long-term or permanent uses are to consider impacts upon grazing activities and the WACH. Special consideration is to be given to activities occurring during the winter and to the protection of measurement exercisions. Anadromout the protection of measurement exercisions.	
				Each of these areas was identified in the 1989 Plan for its habitat values. It is likely that the WACH uses portions of these parcels as part of their winter range. Marine mammal haulout concentrations exist in the southern part of the unit adjacent to Golovin Bay. Anadromous streams are present within the unit. Grazing may have also occurred on these parcels. All are in selection status.
N-04	Тс	1, 2, 5	Unit is to be managed to maintain this area for the potential	This unit was selected for potential use as a transportation corridor. Except for an area that occupies the area immediately adjacent to the coast in the northern part of this unit, it consists entirely of state-selected land.
	372,255	Various	development of a transportation route. See discussion in 'Resources and Uses' section. Grazing is recognized as an appropriate use. Protect bird concentration areas and anadromous streams.	
				Unit is aligned in a north-south direction, essentially from the north
			DNR is to consult with ADOT/PF to determine if a proposed use or activity is compatible with the transportation corridor. The purpose of this review is to determine if it would adversely affect the development of a transportation facility.	boundary of this region to its southern end near the community of Saint Michael. This corridor is situated to the east of Norton Sound, about
				15 miles from the coast. Its east-west extent is narrow, averaging about 5-6 miles, and, in its northern part, follows the alignment of the Ungalik River. In its southern extent, it is significantly wider and does not follow a waterway. It is believed that the transportation corridor is related to transportation movement on this river. Terrain throughout the unit is characteristically level and is typically characterized by wet tundra.
			Any development that may be authorized shall adhere to the following guideline: Authorizations are to consider impacts to principal habitat areas, particularly along the major drainages, grazing activities, and to the WACH. Special consideration is to be given to the impacts of activities occurring during migration periods or when this area is used for its winter range. Consult ADF&G prior to issuing an authorization involving a long-term or permanent use.	
				Portions of this unit contain significant concentrations of wildlife. Areas adjacent to the principal rivers, all of which are anadromous, are particularly rich in species. Besides anadromous fish, many are characterized by waterfowl and there are several areas of nesting concentrations. The northern portions of this unit are affected by the WACH during the winter period; this is part of their winter range. Grazing has occurred within this unit historically.

Unit #	Designation(s) / Acres	Map(s) / MTR	Management Intent	Resources and Uses
N-05	Ha 30,792	2 Various	Manage for sensitive species, grazing, and habitat values. Grazing is recognized as an appropriate use. Maintain Iditarod Trail. Although unlikely given the poor drainage and extensive wetlands, certain types of authorizations are, nonetheless, possible within this unit. Prior to issuance, the adjudicator shall carefully consider impacts upon sensitive species, grazing operations, and the WACH.	Comprising an area of significant waterfowl concentrations and coastal wetlands, this unit is situated immediately southeast of the community of Koyuk. Physiographically, it is part of the Yukon-Kuskokwim Coastal Lowland, and the terrain is uniformly level. The vegetation is similarly uniform and is characterized by wet tundra. The entire unit is poorly drained. The northern part of the unit is in selection status, while some of the southern part is owned by the state. Grazing has occurred within this unit historically. The Iditarod traverses this unit in a north-south alignment.
				The WACH is known to use parts of this area as part of its core winter range.
N-06	Gu 5,047	1 K018N010W, K018N011W, K019N010W, K019N011W	Use of this parcel for community development may be appropriate, given its adjacency to Unalakleet.	This small unit is situated in level terrain directly east of the community of Unalakleet. The entire unit is state selection status and lies within an area used by the WACH as part of their winter range.
N-07	Mi 247,785	1, 2 Various	 Manage for mineral values. Grazing is recognized as an appropriate use. Mineral development is considered appropriate within the unit but shall consider impacts upon grazing activities and habitat, and shall adhere to the following guideline: Authorizations issued in this unit involving long-term or permanent uses are to consider impacts upon the WACH, particularly during the winter when parts of this unit are used as part of their winter range. 	Consisting of three separate parcels, the two larger parcels adjoin the coast while the third is situated inland and eastward of the transportation corridor that occupies unit N-04. The two westerly parcels consist of numerous lakes, ponds, and remnant rivers that occupy a generally flat coastal plain. Hilly terrain characterizes the easterly situated parcel. The former is occupied by wetlands, lakes, and wet tundra and the hilly area, by high brush and wet tundra. This unit is considered to have high mineral potential and was selected for that value by the state. The entire unit is in selection status and the
			Consult ADF&G prior to issuing an authorization involving a long- term or permanent use. DNR is to consult with ADOT/PF to determine if a proposed use or activity is compatible with the transportation corridor that occurs in the southernmost of the three parcels. Maintain access associated with local/regional trails and RST 218.	adjudicator should review land status carefully prior to issuing an authorization. The northern part of the unit is within the winter range of the WACH. Several anadromous streams traverse this unit. Summer and winter trails are present, including a RS 2477 route (RST 218). An extension of Unit N-04 affects the most southern of the three parcels; it functions to connect the inland portions of N-04 to the coast.

Unit #	Designation(s) / Acres	Map(s) / MTR	Management Intent	Resources and Uses
N-08	Ha 235,575	2, 5 Various	Manage for sensitive species, grazing, and habitat values. Grazing is recognized as an appropriate use. Maintain access routes and ensure protection of the transportation corridor. Although unlikely given the poor drainage and extensive wetlands, certain types of authorizations are, nonetheless, possible within this unit. Prior to issuance, the adjudicator shall carefully consider impacts upon sensitive species, grazing operations, and the WACH. Consult with ADF&G prior to issuing authorizations.	The McCarthy Marsh is an extensive lowland area that is characterized by numerous lakes, wetlands, and remnant rivers. Vegetation is characterized by low brush bog and marsh. The area of the Kwiktalik mountains contains a mixture of alpine tundra, barren ground, and high brush, depending on location. Mineral values are considered to be low to moderate, depending on location. The Marsh contains several important habitats: portions include a known moose wintering area and there are several tributaries of the Fish River that contain anadromous fish. Portions of the unit are utilized by the WACH as part of their prime winter range. There are a number of important regional trails and one RS 2477 route (RST
				 216). The northern parcel (McCarthy Marsh) was selected, in part, because of its importance as a transportation corridor. This RST occupies the portions of the area selected for its transportation function. Portions of this unit have been used historically for reindeer herding, although this activity is limited at present (2008).

Total state uplands within region = 1,450,052 (8 units)

Unit #	Designation(s) / Acres	Map(s) / MTR	Management Intent	Resources and Uses
NT-01	Ha 31,764	2 Various	Manage to protect habitat values. Consult ADF&G and USFWS (for marine mammals) prior to issuing authorizations.	This large tideland unit comprises the Golovin Lagoon; Golovin Bay is a separate unit (NT-02). This lagoon has a large waterfowl population and
	51,704	v arious		areas used by pacific herring for spawning. Anadromous fish are present.
NT-02	На	2	marine mammals) prior to issuing authorizations. The development of port facilities within this unit may be appropriate,	Golovin Bay provides important habitat for a number of species, including waterfowl, marine mammals, anadromous fish, and beluga whales. The development of a port site to accommodate freight and material movement is under consideration within portions of this unit.
	60,443	Various		
NT-03	Gu	1, 2	Prior to issuing an authorization consult reference sources mentioned in 'Resources and Uses' and consult ADF&G, NMFS, or USFWS, as appropriate. Refer to guidance in chapter 2 concerning the Spectacled Eider. Lid	This tideland unit includes all areas of the coast not otherwise included in a tideland polygon or identified as a seabird colony on plan maps. The USFWS has designated the eastern half of Norton Sound as critical molting habitat for the Spectacled Eider, a federal threatened species and state species of special concern. Both the area around Rocky Point and Cape Darby contain marine mammal populations. A variety of species occur within this large area, often associated with migratory patterns. Present in nearshore areas and coastal wetlands are seabirds, shorebirds, and waterfowl. Also present are pinnipeds and whales. Offshore migration patterns include pinnipeds and whales. For more information, see alaskacoast.state.ak.us/District/FinalFinalPlans/NorthWestArctic.htm
	794,166	Various		
NT-04	На	2	Manage to protect habitat values.	This extensive tideland unit occupies the tideland areas at the mouth of the
	17,464	Various		Koyuk River in Norton Sound. Present within this unit are coastal wetlands, extensive estuarine environments, and anadromous streams, in addition to extensive concentrations of shorebirds and waterfowl. For more information, see <u>alaskacoast.state.ak.us/District/FinalFinalPlans/NorthWestArctic.htm</u> . Also see the NOAA Environmental Sensitivity Index: Northwest Arctic, Alaska.
NT-05	Ha, Rd	1	Manage to protect habitat values and, consistent with the best interest of the state, for compatibility with the upland management policies of the federal conservation management plan for the Yukon Delta National Wildlife Refuge.	The boundaries of this tideland unit match the upland boundaries of the Yukon Delta National Wildlife Preserve. Within this unit are concentrations of waterfowl and both diving and wading birds. For more information see the NOAA Environmental Sensitivity Index: Northwest Arctic, Alaska.
	35,371	Various		
NT-06	Ha, Hv	1	Manage to protect habitat values.	This tideland unit runs from Tolstoi Point in the east to Stuart Island in the
	188,770	Various		west. This area supports seabirds, seals, walrus, belugas, gray whales and Pacific herring. Eelgrass beds provide nursery areas for fish, crab, and are used for spawning by herring. For more information see the NOAA Environmental Sensitivity Index: Northwest Arctic, Alaska.

Resource Allocation Table for Tideland Units – Norton Sound Region

Total state tidelands within region = 1,127,979 (6 units)