# Lisburne Region

The Lisburne Region includes the lands on the Lisburne Peninsula west of the National Petroleum Reserve within the North Slope Borough. Most of this land is owned by Native corporations. The remainder is a mix of state-owned and state-selected lands. The unit also contains small parcels of private land, such as Native allotments and federal mining claims. Much of the state-selected land overlaps Native selected land, and it is not certain how much of the state-selected land will end up in state ownership. The state also owns tidelands and submerged lands adjoining the coast. Federal land within this region is also extensive, but most of it has been selected either by the state or Native corporations, except for lands at Cape Thompson and Cape Lisburne that are part of the Alaska Maritime National Wildlife Refuge. This region includes the communities of Point Lay and Point Hope.

## Distribution and Characteristics

State-owned uplands are scattered throughout the region, with concentrations in the southern part directly north of the DeLong Mountains. There are approximately 1.0 million acres of state-owned uplands and 1.0 million acres of state-selected uplands. State-selected uplands generally follow the same distribution as state-owned lands, either filling in areas currently in state ownership or extending from these lands. Reflecting the size of this region, topography is varied, consisting of the Arctic Coastal plain in the northern part of the region, by the Northern and Southern Foothills of the Arctic Mountains in the more central part, and by rugged mountainous terrain of the DeLong Mountains, a westward extension of the Brooks Range, in the western part. Vegetative patterns reflect topography. Tundra dominates within the lowlands and alpine vegetation in mountainous areas. River bottoms are characterized by high brush. There is very little development within the region and population is centered in the two villages of Point Lay and Point Hope.

## Access, Resources, and Uses of State Land

Access is limited within the region to air and water, with water access primarily associated with the major rivers. Except for a limited road system associated with Point Hope and the Red Dog Mine roads are non-existent. Wheel plane landings are feasible along much of the outer coast, in the Lisburne Hills, and along portions of the Wulik River.

The dominant terrestrial mammal in the region are the caribou of the Western Arctic Caribou Herd. The herd uses major portions of the region as part of its annual life cycle. Winter calving grounds occur in the more northern parts in the northern and southern Arctic Foothills. The western and southern parts of the region experience high use levels during the summer. This is associated with the migration of the caribou from the more northern winter

calving areas to areas of their summer range and to specific areas that provide insect relief. A small portion of the far western part of the region is also important as winter range, but this area does not occupy state land whereas the other areas occupy both state-owned and state-selected lands. Brown bear, moose, and polar bears are also present within the region as well as waterfowl and anadromous fish.

There is limited use of state land, reflecting the low and dispersed character of settlement. State land is used for dispersed recreation, sport hunting and fishing, subsistence, and, intermittent settlement, and resource exploration.

This region contains concentrations of bituminous coal and the occurrence of oil and gas is rated as high. Bituminous coal is situated on the western flanks of the Lisburne Hills and along the coast at Cape Sabine and Cape Lisburne. The coal formation extends inland from Cape Beauford to the National Petroleum Reserve (and continues some additional distance within the NPR). An oil and gas province occupies most of the area north of the Lisburne Hills, and it is rated at moderate to high potential.

Tideland areas are extensive, totaling 0.7 million acres, and a particularly high value tideland area occurs in the Kasegaluk Lagoon. An exceptionally large lagoon, it stretches from Naokak in the south to Icy Cape in the north, a distance of over 80 lineal miles. It provides important habitat for whales (primarily Beluga), waterfowl and shorebirds, and pinnipeds (ringed seals). Numerous seabird colonies, some with over 10,000 birds seasonally, and anadromous streams are present.

## 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 North Slope Borough maintains both a comprehensive plan and a district coastal management plan. Both were 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.

Uplands. Large areas of the region are designated Habitat; these generally correspond to the winter calving and summer insect relief areas of the WACH. The remaining areas are to be managed for multiple uses. Although resource development is limited currently and is uncertain in the future, should it occur, it is likely to be associated with mineral or coal exploitation. While such activities are appropriate in areas designated General Use, and may be appropriate in areas designated Habitat, careful consideration must be given to potential

impacts upon the WACH as well as to the other species and habitats listed in the *Fish and Wildlife Habitat and Harvest Areas* section of Chapter 2. Specific management requirements affect mineral resource utilization and are described in the *Subsurface Resources* section of Chapter 2. Local communities use nearby state lands for personal harvest of fish, wildlife and plant species. These resources and the opportunity to harvest them should be protected. 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.

Tidelands. Large portions of the region are encompassed by tideland management units associated with lagoons (Kasegaluk Lagoon, Marryat Lagoon) and with an area along the coast south of Cape Lisburne. These areas are rich in sensitive resources and are designated Habitat. The remainder of the tidelands in this region is designated General Use and are to be managed for multiple uses, with consideration for the presence of sensitive species, and especially related to pinniped and whale migration and concentration.

# Resource Allocation Table for Upland Units – Lisburne Region

| Unit # | Designation(s) / Acres | Map(s) / MTR | Management Intent | Resources and Uses |
|---|---|---|---|---|
| L-01 | Ha, Hv<br>112,480 | 12<br>Various | Manage unit to protect sensitive species and habitats, and to. Maintain harvest opportunities. Consult with ADF&G and the appropriate federal agencies on the siting of marine mammal haul-out locations and walrus use areas prior to issuing authorizations. | This unit occupies large areas of uplands adjacent to the Arctic Ocean, stretching from Icy Cape in the north to just north of Point Lay in the South. Almost all of this land is state-owned. Occupying the western edge of the Arctic Coastal Plain the topography is level and the vegetation is characterized by wet tundra. There are numerous lakes, some of which are quite large. Caribou are known to be present in the unit, although this area is considered to be their outer range. Areas adjacent to the coast and immediately inland, but also including lagoons, are characterized by high concentrations of waterfowl during the spring and fall periods. USFWS reports, presumably because of the loss of ice in the region, that walruses have begun hauling out in numerous places along the coast between Icy Cape and Cape Lisburne.<br><br>This area is not known to have high mineral potential and there are few ARDF mineral occurrences. Public access is either by snow-machine or by floatplane in the summer, although there is an airstrip at Point Lay. Portions of this unit are important for harvest purposes by residents of Point Lay. |
| L-02 | Gu<br>132,914 | 12<br>Various | Manage for multiple uses. The extraction of coal is considered appropriate. Maintain harvest opportunities.<br><br>Uses may be authorized in this unit but consideration must be given to the impact upon the caribou herd by a potential use. Consult ADF&G prior to issuing an authorization involving a long-term or permanent use that may impact this population. Consult with ADF&G and the appropriate federal agencies on the siting of marine mammal haul-out locations and walrus use areas prior to issuing authorizations. | This unit occupies large areas of uplands east of the Arctic Ocean and within the Arctic Coastal Plain. Relatively little of this unit consists of state-owned land; most of this unit consists of state topfiled selections. Occupying the western edge of the Arctic Coastal Plain, the topography is level and the vegetation is characterized by wet tundra. There are numerous lakes, some of which are quite large. Caribou are known to be present in the unit, although this area is considered to be part of their outer range. A seabird colony is located within a portion of this unit. This unit shares a common shoreline with a portion of Kasegaluk Lagoon which is important habitat for waterfowl, shorebird, and beluga whale and other marine mammals. The following subsistence resource is present in this unit: furbearer. Anadromous fish streams and their tributaries lie adjacent to and within the unit. USFWS reports, presumably because of the loss of ice in the region, that walruses have begun hauling out in numerous places along the coast between Icy Cape and Cape Lisburne.<br><br>This area is not known to have high mineral potential and there are few ARDF mineral occurrences. Coal is known to be present in a geosyncline and is part of a bituminous coal deposit extending from the coast inland considerable distances. The coal deposit is situated some distance from the |

| Unit # | Designation(s) / Acres | Map(s) / MTR | Management Intent | Resources and Uses |
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| | | | | surface and it is anticipated that, should mining occur, there will be minimal surface disturbance, with most excavation occurring underground. An exploration Agreement has been issued for this area (2008).<br><br>Public access is by snowmachine or floatplane in the summer, although there is an airstrip some distance away at Point Lay. The northern parts of this unit are important for harvest purposes by residents of Point Lay. |
| L-03 | Ha, Co<br>553,030 | 11, 12<br>Various | Manage unit to protect the calving grounds of the Western Arctic Caribou Herd. The extraction of coal is considered appropriate but must utilize management techniques that avoid or minimize impacts to the WACH, especially during the winter calving period. Maintain harvest opportunities.<br><br>Uses may be authorized in this unit but consideration must be given to the impact upon the caribou herd by a potential use. Consult ADF&G prior to issuing an authorization involving a long-term or permanent use that may impact this population. Maintain harvest opportunities. | This unit consists of both state-owned and state-selected land and is situated in the Amatusik Hills, northwest of the Brooks Range. Generally hilly topography characterizes the unit and vegetation consists of wet or alpine tundra, depending on altitude. Caribou are present in this unit seasonally during the winter and summer and portions are important for insect relief. The western calving grounds of the WACH caribou herd occupy nearly the entirety of the unit. Brown bears are also present seasonally, coinciding with the presence of caribou. The following subsistence resources are present in this unit: caribou and furbearer.<br><br>Coal is known to be present in a geosyncline and is part of a bituminous coal deposit extending from the coast inland considerable distances. The coal deposit is situated some distance from the surface and it is anticipated that, should mining occur, there will be minimal surface disturbance, with most excavation occurring underground. An exploration Agreement has been issued for this area (2008). This area is not known to have high mineral potential and there are few ARDF mineral occurrences. This unit is not known to contain mineral resources and no ARDF occurrences are present.<br><br>Public access is limited and occurs by snowmachine or plane. The northern parts of this unit are important for harvest purposes by residents of Point Lay. Anadromous fish streams and their tributaries are present in the unit. |
| L-04 | Ha, Co<br>485,444 | 11, 12<br>Various | Manage unit to protect the habitats associated with the WACH, which are primarily related to insect relief concentrations. The extraction of coal is considered appropriate but must utilize management techniques that avoid or minimize impacts to the WACH, especially during the summer high use period. Maintain harvest opportunities.<br><br>Authorizations issued in this unit involving long-term or permanent uses are to consider impacts upon the WACH. Special consideration is to be given to activities occurring during the summer migration period and particularly to uses that may impact areas used for insect relief. The protection of caribou movement corridors is also to be an important | This unit consists of two large parcels of both state-owned and state-selected land inland from the Arctic Ocean and south of Cape Sabine. The topography of these units is characteristically hilly and vegetation is a mix of moist tundra along with high brush within the larger river valleys. The following subsistence resource is present in this unit: furbearer. Caribou are present in this unit seasonally during the summer and portions are important for insect relief. The western calving grounds of the WACH occupy portions of this unit. Brown bear are also present seasonally, coinciding with the presence of caribou. Bears congregate along certain of the anadromous streams as well. |

| Unit # | Designation(s) / Acres | Map(s) / MTR | Management Intent | Resources and Uses |
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| | | | consideration. Consult ADF&G prior to issuing an authorization involving a long-term or permanent use. | Coal is known to be present in a number of specific geosynclines that occupy a variety of locations throughout the unit. The coal deposit is situated some distance from the surface and it is anticipated that, should mining occur, there will be minimal surface disturbance, with most excavation occurring underground. An exploration Agreement has been issued for this area (2008). This area is not known to have high mineral potential and there are few ARDF mineral occurrences.<br><br>Public access to this area is limited, and is provided by fixed wing and float planes. |
| L-05 | Co, Ha<br>83,449 | 11, 12<br>Various | Unit is to be managed to maintain this area for potential coal production and to protect sensitive habitats associated with the WACH, brown bear, and waterfowl concentrations.<br><br>Authorizations issued in the southern parcel involving long-term or permanent uses are to consider impacts upon the WACH. Special consideration is to be given to activities occurring during the summer migration period and particularly to uses that may impact areas used for insect relief. The protection of caribou movement corridors is also to be an important consideration. Consult ADF&G prior to issuing an authorization involving a long-term or permanent use. Maintain harvest opportunities. Consult with ADF&G and the appropriate federal agencies on the siting of marine mammal haul-out locations and walrus use areas prior to issuing authorizations. | Unit consists of two separate parcels: one near Cape Sabine on the Chukchi Sea and another south of Point Lay on the Arctic Ocean. These parcels both have important coal deposits, although their mineral potential is considered to be low and there are no ARDF occurrences. The northern parcel, which consists of state-owned land, is part of the Arctic Coastal Plain. The topography is uniformly level and vegetation is typically wet tundra. It is part of the outer range of the WACH and also has important fall spring waterfowl concentrations. Brown bear and waterfowl are also known to be present in the unit. The southern parcel appears to be a southern extension of the Arctic Coastal Range and is also topographically flat and has predominantly tundra type vegetation, although high brush vegetation is found along the major river valleys. This area is considered part of the WACH summer range and may also be used for insect relief. Brown bear concentrations also occur seasonally. This unit is used seasonally for harvest by residents of Point Lay. USFWS reports, presumably because of the loss of ice in the region, that walruses have begun hauling out in numerous places along the coast between Icy Cape and Cape Lisburne. |
| L-06 | Ha<br>220,090 | 11<br>Various | Manage unit to protect habitat values, particularly those associated with the WACH, fish and musk ox concentrations.<br><br>Authorizations issued in this unit involving long-term or permanent uses are to consider impacts upon the WACH. Special consideration is to be given to activities occurring during the summer migration period and particularly to uses that may impact areas used for insect relief. The protection of caribou movement corridors is also to be an important consideration. Consult ADF&G prior to issuing an authorization involving a long-term or permanent use. | This large unit is situated at western end of the Lisburne Peninsula in hilly terrain (Lisburne Hills). Vegetation is characterized by moist tundra in lower elevations and alpine tundra in higher elevations. Lowlands adjacent to the Kukpuk and Ipewik rivers are vegetated by moist tundra or high brush. It consists mostly of state-owned land except for state-selected land in a far northwestern part and in the extension south of the two rivers.<br><br>This area is important to the WACH during the summer migration period; parts of the unit are used for insect relief. Anadromous fish streams and their tributaries are present in the unit. The following subsistence resources are present in this unit: bear, caribou, furbearer, moose, small game, and vegetation. Portions of the unit are within the BLM Red-throated loon area and Cape Thompson muskox high use area. Although this area is not |

| Unit # | Designation(s) / Acres | Map(s) / MTR | Management Intent | Resources and Uses |
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| | | | | considered to have high mineral potential and there are no known ARDF occurrences, it has known coal potential. Public access is minimal and primarily occurs through snowmachine use from Point Hope. |
| L-07 | Ha<br>21,663 | 11<br>Various | These parcels have been selected by the North Slope Borough under their Municipal Entitlement. A recent plan amendment (2007) designated these parcels as Habitat unless future municipal entitlement adjudication determines that these parcels are appropriate for conveyance. The 2008 Revision continues this approach. Should this occur, the parcels are re-designated Public Recreation and reclassified Public Recreation Land. The purpose of the redesignation is to convey the parcels to the Borough. If, however, the entitlement decision determines that their conveyance is inappropriate or the selection is relinquished, the Department intends to lower their priority for conveyance to the state so that the likelihood of state acquisition is low or nil. The designation of Habitat, under these conditions, continues. | This unit consists of four separate parcels along the Kukpuk River east of the Sigrikpak Ridge. Their topography is generally flat to moderately sloping and the vegetation within the stream valleys is high brush. The following subsistence resources are present in this unit: bear, caribou, furbearer, and small game. |
| L-08 | Ha, Hv<br>407,745 | 11<br>Various | Manage unit to protect sensitive habitats and species. Particular importance is to be given to the maintenance of travel corridors and the protection of insect relief areas.<br><br>Uses may be authorized in this unit but consideration must be given to the impact upon the caribou herd by potential uses. Consult ADF&G prior to issuing an authorization involving a long-term or permanent use that may impact this population. Maintain harvest opportunities. | This very large parcel extends from L-04 in the north to parcel K-02/K-03 in the south, which is contained in the Kotzebue Sound region. It also extends eastward to the boundary with the Noatak National Preserve and Wilderness. Depending on location this parcel is characterized by hilly to mountainous topography, the latter part being orographically part of the Baird Mountains. Vegetation similarly varies, from high brush in lowland riverine valleys, to wet and moist tundra at intermediate elevations, to alpine tundra in mountainous environments.<br><br>Caribou are present during summer periods and parts of the unit provide areas of insect relief. Brown bears are also seasonally present, coinciding with the presence of the caribou. The following subsistence resources are present in this unit: bear, caribou, furbearer, moose, sheep, small game, and vegetation. This unit is not believed to have a high mineral potential, although there are several ARDF occurrences in the central, mountainous parts of the unit. This area is seasonally important for harvest, coinciding with the presence of caribou.<br><br>Access is limited although there is limited ATV and snowmachine use. There are several airstrips. Most of the unit consists of state land, although there are several large concentrations of state-selected land. |

Total state uplands within region = 2,016,815 acres (8 units)

# Resource Allocation Table for Tideland Units – Lisburne Region

| Unit # | Designation(s) / Acres | Map(s) / MTR | Management Intent | Resources and Uses |
|---|---|---|---|---|
| LT-01 | Ha, Hv<br>142,619 | 12<br>Various | Manage for sensitive species and habitat protection.<br>Authorizations within this unit may be appropriate but must consider the impacts of the proposed use on the resources that occur within this unit. Particular concern is to be given to the protection of the waterfowl, pinnipeds and whales. See management guidelines in the *Fish and Wildlife Habitat and Harvest Areas* section in Chapter 2 for more detailed management requirements. | This large tideland unit comprises the entirety of Kasegaluk Lagoon, an exceptionally large lagoon, stretching from Naokak in the south to Icy Cape in the north, a distance of over 80 lineal miles. (The lagoon actually extends further to the east, but this area is outside the plan boundary.) This lagoon supports an extremely productive and varied biosystem. Present within the lagoon are concentrations of shorebirds and waterfowl, beluga whale (summer months), and pinnipeds (ringed seal). Waterfowl concentrations occur during the spring and fall and large areas are occupied during molting. Beluga whale occupy large portions of the lagoon during the summer months and concentration areas occur directly offshore at lagoon entrances (Icy Cape, Utukok Pass, Akumik Pass, Kukpowruk Pass, and Naokok Pass). This lagoon also supports at least 10 fairly significant sea bird colonies of approximately 10,000 birds each. A number of large anadromous streams discharge into the lagoon. Point Lay, the only settlement within the immediate area of the lagoon, has minor port facilities. This unit is identified as a 'Most Sensitive Area' by ADF&G. |
| LT-02 | Ha, Hv<br>86,498 | 11, 12<br>Various | Manage for sensitive species and habitat protection.<br>Authorizations within this unit may be appropriate but must consider the impacts of the proposed use on the resources that occur within this unit. Particular concern is to be given to the protection of the pinnipeds and whales. See management guidelines in the *Fish and Wildlife Habitat and Harvest Areas* section in Chapter 2 for more detailed management requirements. | Stretching from Cape Lisburne in the north to Point Hope in the south, this tideland unit contains a variety of significant species and habitats, but not of the same level of importance as those associated with LT-01 (Kasegaluk Lagoon). Nonetheless, it is also identified by ADF&G as a 'Most Sensitive Area'. Present in this unit are waterfowl, shorebirds, pennipids (ringed seal) and beluga whale. A large number of seabird colonies are present along the coast. Both the ringed seals and the Beluga use this area primarily for migration, which occurs during the March-May period for the ringed seals and March-July period for the beluga whales. Pacific walrus and bowhead whales are also known to use this unit for migration, which occurs during the May-June period for the walrus and March-May period for the bowhead whales. The northern portion of this unit is a migratory near shore pinch point for beluga and other whale species migration. The uplands immediately adjacent to this unit are considered to be important coastal denning areas of Polar Bears. There are at eight seabird colonies, two of which are considered large, of at least 10,000-100,000 or more birds. These occur at rocky promontories. |
| LT-03 | Ha<br>14,275 | 11<br>Various | Manage for sensitive species and habitat protection. | This tideland unit consists of the Marryat Lagoon, adjacent to the community of Point Hope. It is a shorebird and seabird concentration area. Anadromous fish are also present. |

| Unit # | Designation(s) / Acres | Map(s) / MTR | Management Intent | Resources and Uses |
|---|---|---|---|---|
| LT-04 | Ha/Hv<br>323,998 | 11, 12<br>Various | Manage for sensitive species and habitat protection.<br>Authorizations within this unit may be appropriate but must consider the impacts of the proposed use on the resources that occur within the unit. Particular concern is to be given to the protection of pennipeds, whales, the threatened Spectacled Eider, and seabird colonies. See management guidelines in the *Fish and Wildlife Habitat and Harvest Areas* section in Chapter 2 for more detailed management requirements. Prior to issuing an authorization consult reference sources mentioned in 'Resources and Uses' and consult ADF&G, NMFS, or USFWS, as appropriate. It is also important to consult with ADF&G and federal agencies on marine haulout locations and walrus use areas.<br>Note: Not included within this tideland unit are the patented tidelands to the City of Kotzebue. | This tideland unit includes all areas of the coast not otherwise included in a tideland polygon or identified as a pinniped haulout or seabird colony on the plan maps. A variety of species occur within this large area, often associated with migratory patterns. Present in coastal waters and/or on ice are shorebirds, seabirds, and waterfowl. Also present in the area are pinnipeds and whales. A generally similar distribution occurs in leads, except for the absence of pinnipeds. Migration patterns are characterized by ring seal migration during March-May and by whale migration March-July (northbound) and September-October (southbound). Bowhead and beluga whales are both present in off-shore waters. The southern portion of this unit is a migratory near shore pinch point for beluga and other whale species migration. For more information, see alaskacoast.state.ak.us/District/FinalFinalPlans/NorthSlope.htm<br>The US FWS reports that, presumably because of the loss of ice in the region, walruses have begun hauling out in numerous places along the coast between Icy Cape and Cape Lisburne. Concentrations were observed in several places including Cape Lisburne, Corwin Bluff, and along the barrier islands north of this unit (LT-01).<br>Ledyard Bay, in general, is considered a sensitive habitat area and is a federally designated critical habitat area for the threatened Spectacled Eider. Most of the Spectacled Eiders that breed on the Arctic Coastal Plain molt in Ledyard Bay. |
| LT-05 | Gu<br>89,512acres | 11<br>Various | Manage for multiple uses.<br>Prior to issuing an authorization consult reference sources mentioned in 'Resources and Uses' and consult ADF&G or USFWS, as appropriate. See Management Guideline O in the *Fish and Wildlife Habitat and Harvest Areas* section of Chapter 2. | This tideland unit includes the off-shore area south of Point Hope to Point Thompson. Sea bird colonies are present within this unit, with concentrations at Point Thompson. See alaskacoast.state.ak.us/District/FinalFinalPlans/NorthWestArctic.htm<br>The following subsistence resources are present in this unit: beluga, bowhead whale, furbearers, marine mammal, polar bear, seal, walrus, and wood. |

Total state tidelands within region = 656,903 (5 units)