

Region 5

Dillingham, Snake Lake, Nushagak Bay

Summary of Resources and Uses in the Region

Region Boundary

Region 5 encompasses a portion of the southeastern Wood River Mountains including the lake system of the Weary and Snake Rivers and much of the Wood River. The boundaries of the Region are defined by the drainage divide of the Wood River on the west, Wood-Tikchik State Park on the north, the divide of the Nushagak and the Kvichak Rivers on the east, and the shores of Kvichak and Nushagak Bays on the south (Map O-1 and O-2). Elevations range from sea level to slightly in excess of 2,800 feet. The Region includes the southern two lakes of the Wood River lake system and the lower portion of the Nushagak River. It is the most populous Region in the Bristol Bay Area Plan. This includes the major settlement of Dillingham (pop. 2,252) as well as Aleknagik (pop. 226); approximately 60% of the inhabitants are Natives. The total population of the Region is approximately 2,600, but this increases greatly during the summer fishing season. The boundary of Region 5 is virtually the same as that of the original (1984) Bristol Bay Area Plan.

State Lands: Ownership and Acreage

Most of the state-owned land in Region 5 is located in the northwest part, south of Wood-Tikchik State Park, and in the central northern part. The majority of land in Region 5 is Native owned. The plan applies to 409,552 acres of state-owned and state-selected uplands and 165,568 acres of state-owned tidelands in this region. The plan also applies to state-owned shorelands (acreages of shorelands have not been calculated).

Physical Geography

The northwestern portion of the Region lies within the Ahklun Mountains Physiographic Province and the remainder is in the Bristol Bay Lowlands. The northwest portion of the Region, especially the western part that encompasses the Wood River Mountains, is mostly mountainous and rugged. The drainage system in the northwest is dominated by the Snake and Wood Rivers and the high country displays the results of alpine glaciation which produced a series of east-west trending valleys and ridges having considerable relief (2,800 feet). Two large lakes, Lake Aleknagik and Nunavaugaluk Lake occupy major valleys. The Bristol Bay Lowlands portion of the Region is dominated by the meandering Nushagak River, which is

subject to tidal influences for forty miles upstream from its mouth at Kanakanak. Relief in the Bristol Bay lowlands is very modest – only a couple of hundred feet. In the Wood River Mountains portion of the Region the peaks are between two and three thousand feet high. The greatest relief is found south of Ice Creek where an unnamed peak has an elevation of 2,802 feet. Twelve miles southwest is Mable Mountain at 2,426 feet. Major drainages include the Weary River, a tributary to the Snake River, the Muklung and Little Muklung Rivers, the Wood River, and the Lower Nushagak River, which includes Portage Creek and Clark Slough.

The Region displays a variety of landscapes, including mountain crags, fast-flowing rivers, deep lakes, tundra, marshy lowlands, and ponds. The broad glacial valleys of the Ahklun Mountain Range cut the tundra uplands, opening into coastal plains. Forested areas occur only sparingly such as along the south shore of Aleknagik Lake and the upper reaches of the Snake River. Most of the uplands are vegetated with low to tall shrubs and low lying areas with low shrub and lichen tundra. The Nushagak valley is covered by low shrubs and lichen tundra.

Climate

The climate of Region 5 is transitional from the maritime influence of Bristol Bay to more continental weather to the northwest. As distance from the coast increases, temperature variations increase, whereas cloudiness, humidity, and precipitation tend to decrease. The weather is generally cool and moist with relatively persistent cloud cover and occasional periods of fog. At Dillingham, summer temperatures range from 37° to 66° and average winter temperatures range from 4° to 30°; annual precipitation is 26 inches with 65 inches of snow. Heavy fog is common in July and August. Winds of up to 60-70 miles per hour may occur between December and March. The Nushagak River is ice free from June through November. Aleknagik Lake and River are also ice-free from June through mid November. The Region is predominantly underlain by ground with isolated masses of permafrost; the northwest portion of the Region is underlain by discontinuous permafrost and the valley of the Nushagak River is generally free of ground ice. The areas with discontinuous permafrost are generally those with elevations greater than 1,000 feet. North facing slopes are more likely to be underlain by permafrost than south facing mountain slopes. Winds throughout the area are usually moderate, prevailing from the southwest in summer and from the north and east in winter.

Other

Region 5 is within the Goodnews, Dillingham, Naknek, and Nushagak Bay Quadrangles. It is entirely within the boundaries of the Bristol Bay Regional Native Corporation.

Access

Settlements in the Region include Dillingham, Aleknagik, Clarks Point, Ekuk, and Portage Creek. Access to Region 5 is predominantly through air transportation via Dillingham. There are eleven facilities that support air transport – two seaplane bases, a heliport, and eight airports. Dillingham has a state-owned airport that provides a 6,404-foot paved runway and has regular jet flights from Anchorage. A privately owned seaplane base is available three miles west of Dillingham at Shannon's Pond. A heliport is available at Kanakanak Hospital. Dillingham is also reached by sea. There is a City-operated small boat harbor with 320 slips, a dock, barge landing, two boat launches, and boat haulout facilities. The harbor is a tidal harbor and only

used seasonally. Two barge lines make scheduled trips from Seattle. The state Department of Transportation maintains a paved road that covers the 23 miles to Aleknagik. Winter trails extends west to Manokotak as well as east to Portage Creek and thence Naknek.

Resources and Uses

The Nushagak and Wood Rivers support a large salmon run that provides for commercial fishing and fish processing and subsistence use. The lakes and streams are intensively used for recreation. Good access throughout the Region adds to its high recreational resource potential. The Region has moderate potential for oil and gas development. Agricultural uses are primarily for small gardens around inhabited areas. An important forest resource occurs north and northeast of Dillingham. Community expansion potential is high due to the presence of services, infrastructure, and industry in the area surrounding Dillingham.

Cultural and Historic. Archaeological evidence indicates that areas within Region 5 have been continuously occupied for at least 2,000 years. Traditionally a Yup'ik Eskimo area, the area is now a highly mixed population of non-Natives and Natives. The outstanding commercial fishing opportunities in the Bristol Bay area are the focus of the local culture. The area was inhabited by both Eskimos and Athabascans and became a trade center when Russians erected the Alexandrovski Redoubt (Post) in 1818. Local Native groups and Natives from the Kuskokwim Region, the Alaska Peninsula, and Cook Inlet mixed together as they came to visit or live at the post. See footnote for additional details on community history.⁷ The state Office of History and Archaeology lists 108 sites in Region 5 – 10 prehistoric, 89 historic, and 9 of mixed origin. The majority of these sites are situated along the east shore of Nushagak Bay and along the Wood River. New sites are discovered periodically and added to the Alaska Heritage Resource Database when reported.

Economic. The Dillingham district is the economic, transportation, and public service center for western Bristol Bay. Commercial fishing, fish processing, cold storage and support of the fishing industry are the primary activities. Icicle, Peter Pan, Trident and Unisea operate fish processing plants. Many residents hold commercial fishing permits. During spring and summer, the population of Dillingham doubles; the city's role as the regional center for government and services helps to stabilize seasonal employment. Many residents depend on subsistence activities, and some trap beaver, otter, mink, lynx and fox to provide additional cash income. Salmon, grayling, pike, moose, bear, caribou, and berries are harvested. In the more remote Portage Creek area, everyone depends to some extent on subsistence activities for various food sources. Most Portage Creek families have fish camps at Ekuk or Lewis Point. Salmon, moose, caribou, duck, geese and berries are harvested. An exchange relationship exists

⁷ The community was known as Nushagak by 1837, when a Russian Orthodox mission was established. In 1881 the U.S. Signal Corps established a meteorological station at Nushagak. In 1884 the first salmon cannery in the Bristol Bay region was constructed by Arctic Packing Co., east of the site of modern-day Dillingham. Ten more were established within the next seventeen years. The post office at Snag Point and town were named after U.S. Senator Paul Dillingham in 1904, who had toured Alaska extensively with his Senate subcommittee during 1903. The 1918-19 influenza epidemic struck the region, and left no more than 500 survivors. A hospital and orphanage were established in Kanakanak after the epidemic, 6 miles from the present-day City Center. The Dillingham townsite was first surveyed in 1947 and the city was incorporated in 1963.

between Portage Creek and the coastal communities; walrus, seal, and herring roe are sought. The Portage Creek General Store and Lodge operate during the summer months. The Nushagak commercial fishery is one of the important fisheries in Bristol Bay. In 2002 the Nushagak fishery had an actual run of 4,538,000 sockeye salmon. The commercial harvest was 2,816,000 fish or approximately 26% of the Bristol Bay harvest; the 1982-2001 annual average harvest for the Nushagak fishery is 3,836,000 sockeye.

Recreation. Region five contains significant recreation resources, primarily for outdoor activities related to fishing, hunting, boating, camping, hiking, and wildlife viewing. The state manages the Lake Aleknagik State Recreation Site, located at the lower end of Lake Aleknagik, which boasts a boat launch, parking area, and ranger station. The management plan for the recreation site is found within the Wood-Tikchik State Park Management Plan (October 2002). In many respects, Dillingham is the gateway to Wood-Tikchik State Park, and many users travel to Dillingham to take charters to the interior of the Park.

At least half a dozen recreation lodges are located in the lake district northwest of Dillingham. By comparison, more than four times that many seasonal commercial sport fishing camps are located along the lower Nushagak River on Native lands. Many of these camps support fly-in day use. The Nushagak & Mulchatna Rivers Recreation Management Plan (2005) identifies five public use sites (no. 1-5) along the lower Nushagak River in Region 5. Caribou hunting is also an important component of the recreation scene. Current (1999-2000) estimates show that just over one half (56%) of the reporting hunters in the greater Bristol Bay area are nonresidents of Alaska. Alaska residents from outside the region comprise a little over one third (35%) of the hunters and residents are 8% of those reporting.

Minerals. Bedrock in the area is mostly interbedded, very fine- to very coarse-grained graywacke, calcareous graywacke, and siltstone. These rocks are probably correlative with Jurassic clastic sedimentary rocks like those in the southeast part of Hagemeister Island.

Region 5 contains at least five mineral prospects. Most of these are clustered in the Marsh Mountain area and are dominated by mercury occurrences and mines. These mercury deposits developed after Mesozoic clastic rocks of the area had been deformed and intruded by Cretaceous or Tertiary granitic plutons. The most significant of the mercury deposits is the Red Top Mine. The Red Top mercury mine is located on the top of the southern peak of Marsh Mountain 3.1 miles east of the village of Aleknagik. The mine has a small amount of production from veins which host cinnabar; production probably totals about 100 flasks of mercury. Mercury also occurs six miles west of the Red Top Mine; this location represents an area of occurrences on the southwest shore of Lake Aleknagik, including occurrences at the mouth of Yako Creek.

Minor placers are associated with the mercury deposits. The Iris placer gold prospect is located near the Red Top Mine on the flanks of Marsh Mountain. Mercury has also accumulated in placer deposits on the Wood River at the Wood River occurrence located approximately four miles below the confluence of the Wood and Muklung Rivers. Placer gold also occurs on the Nushagak River, notably near Portage Creek at a location known as Keffer's Bar.

Oil and Gas. Much of Region 5 is underlain by the Bristol Bay (Nushagak) Basin, which is one of two basins in the Bristol Bay Area (along with the North Aleutians-Alaska Peninsula basin). The Alaska Peninsula-Bristol Bay oil and gas basin form a region 500 miles long and up to 100 miles wide. In Region 5 (the northwestern part of the peninsula) the basin is underlain by up to 18,000 feet of Tertiary sediments that thicken to the south and thin to the north. The offshore Bristol Bay basin is a sediment-filled structural depression that underlies the northern continental shelf of the Alaska Peninsula. No oil and gas drilling has been conducted in Region 5. Oil seeps north of Dillingham are reported by local inhabitants.

On a regional basis, northern coastal plain hydrocarbon potential is moderate to locally high for gas and low to moderate for oil, in structural and stratigraphic traps. Oil and gas seeps occur along the Alaska Peninsula's southeastern flank, some along large anticlinal crests. Source rock data indicate that the Tertiary organic shales are prone to carry gas. Oil may be derived from deeper Mesozoic strata. Tertiary and Mesozoic sandstone reservoir characteristics are locally conducive to hydrocarbon production.

State and Native land owners are currently pursuing a new hydrocarbon exploration licensing and leasing program. The Alaska Department of Natural Resources, Lake and Peninsula, Bristol Bay, and Aleutians East Borough have signed a memorandum of understanding (MOU) in support of oil and gas lease sales and licensing of state land in the Bristol Bay and Alaska Peninsula region (March 17, 2004). Similar MOUs are in effect between the DNR and The Aleut Regional Native Corporation (December 18, 2003) and the DNR and Bristol Bay Native Corporation (July 10, 2003).

Materials. There are at least thirty active and inactive materials sites located in the Region, principally along the Dillingham-Aleknagik road.

Forestry. Only a minor percentage of the Region is forested. However, local forestry resources north and northeast of Dillingham are an important source of house logs, saw logs, and fuel. Region 5 contains three types of forest resources – 1) bottomland spruce-poplar (along the Nushagak River); 2) upland spruce-hardwood (mostly north of Dillingham); and 3) lowland spruce-hardwood (northeast of Dillingham at elevations above the Nushagak River floodplain).

Upland mixed forests occur to the north of Aleknagik. These mixed forests are primarily open spruce and birch forests with numerous interspersed bogs. The most valuable of these forest resources for local use are located between Dillingham and Aleknagik.

Fish and Wildlife. All five species of Pacific salmon – chinook (king), sockeye (red), coho (silver), pink (humpy), and chum (dog) – spawn in the Wood River and Tikchik systems. Sockeye are the most important commercially. Freshwater sport fish are generally prolific throughout the area. Rainbow trout, Arctic grayling, lake trout, Arctic char, Dolly Varden, and northern pike abound. Whitefish are an important subsistence species in the area.

Caribou are an important resource in the area. The Mulchatna Caribou Herd has been increasing in size and expanding its range since the 1930's. Serious efforts to conduct a census of the herd have taken place since 1973; between 1981 and 1996, the Mulchatna Caribou Herd increased from 19,000 to 200,000. The herd is presently estimated at approximately 150,000 individuals (<http://www.wildlife.alaska.gov/pubs/techpubs/mgt.cfm>).

Moose are relatively new to the Bristol Bay area, possibly moving into the area from the middle Kuskokwim drainages during the last 100 years. During the previous twenty years, moose numbers have increased and moose are now common along the Nushagak/Mulchatna Rivers and all of their major tributaries. They also occur throughout the Wood/Tikchik Lake area and have extended their range westward.

Brown bears are common throughout the north Bristol Bay area and are seasonally abundant along salmon spawning areas in the Nushagak, Mulchatna River drainages as well as long the Wood River Lakes. These bears are also observed near aggregations of the Mulchatna Caribou Herd.

Birds nesting in the area include a wide variety of waterfowl, gulls, bald eagle, golden eagle, Arctic tern, various loons, spotted and least sandpipers, semi-palmated plover, willow ptarmigan, and spruce grouse. Numerous transients pass through as well.

Trapping has been an important part of the culture and economy of the northern Bristol Bay area and provided a ready means to acquire cash prior to development of the commercial fishing industry. Until recently, large numbers of trappers from around the area would come to Dillingham to tag and sell pelts at the annual "Beaver Roundup" in March. Fur buyers purchased thousands of pelts during the weeklong rendezvous and celebration. Historically beaver have been the most important furbearer in the Region. Population trends of furbearers in the Region are favorable – either stable or increasing. Reported harvests in recent years are only a fraction of the past, largely due to less harvest activity than in earlier years.

Management Considerations: Local and State Plans and Special Use Area

A number of local, state, and federal management plans were considered in development of this plan. Local plans include the Bristol Bay Coastal Zone Management Plan, the Nushagak & Mulchatna Rivers Recreation Management Plan, the Southwest Alaska Comprehensive Economic Development Strategy 2003-2008, and the City of Dillingham Comprehensive Plan. State plans include the Bristol Bay Area Plan, the Wood-Tikchik State Park Management Plan, the Lake Aleknagik State Recreation Site Plan, the Nushagak & Mulchatna Rivers Recreation Management Plan, the Southwest Alaska Transportation Plan, and a state Special Use Area for the Togiak NWR. Federal plans include the Togiak National Wildlife Refuge Comprehensive Conservation Plan.

Region 5 is within the Bristol Bay CRSA Coastal Management Plan. Most state-owned land falls within the CRSA but is outside the coastal zone. The Enforceable and Administrative Policies of these Coastal Management Plans are extensive; policies affecting anadromous fish streams, bald eagle nests, oil and gas development, material extraction, and mining can be applicable, under certain circumstances, to state land. Please see the web site www.alaskacoast.state.ak.us/ for more information on enforceable policies. These policies should be consulted by the DNR prior to issuing an authorization.

The Bristol Bay Area Plan (1984) affected all state lands in the Region; this plan was amended in 1990 by adoption of the Nushagak & Mulchatna Rivers Recreation Management Plan. The 1984 Area Plan stated that Region 5 was to be managed to accommodate increased development while maintaining fish and wildlife habitats. The other DNR plan affecting this Region is the Nushagak & Mulchatna Rivers Recreation Management Plan (RRMP) (2005), which manages recreational uses and identifies a number of public use sites. In this (current) revision of the Bristol Bay Area Plan, the requirements of the RRMP continue to apply in Region 5. This revision (2005) supercedes the original (1984) Bristol Bay Area Plan.

The State of Alaska has designated a Special Use Area for the Togiak National Wildlife Refuge and the Lower Goodnews River (May 10, 1991; ADL 226851). It applies to those lands generally described as shorelands within Togiak National Wildlife Refuge and lower Goodnews River as described in the Togiak National Wildlife Refuge Public Use Management Plan and Environmental Assessment. Setting up and using a camp is allowed, as provided in 11 AAC 96.020 (a)(4)(A), except that the period of use is limited to three consecutive days at any one site. The period of use may be extended by permit.

The Southwest Alaska Transportation Plan (ADOT/PF, November 2002) identified a Dillingham/Bristol Bay Area Transportation Corridor, which in general extends from Levelock to Dillingham, connecting with the communities of Ekwok and Aleknagik. It includes a crossing of the Wood River at Aleknagik and a major crossing of the Nushagak River. There are several possible tie-in locations to the Bristol Bay to Cook Inlet corridor. The plan also considers a corridor from Aleknagik to Igiugig via Levelock.

The western portion of Region 5 encompasses part of the Togiak National Wildlife Refuge. The refuge has a Comprehensive Conservation Plan, which is in the process of revision.

Management Summary: Uplands

State land in Region 5 is to be managed for a variety of multiple uses, including settlement, materials extraction, public facilities development, dispersed public recreation, mineral exploration and development, and maintenance of sensitive wildlife habitats. Oil and gas exploration and development, although only of moderate potential, is also appropriate within the Region. The majority of lands are designated General Use (Gu) and Settlement (Se). Because of the generally good topographic conditions and relatively good accessibility of certain of these lands, large tracts of state land have been designated Settlement (Se). Much of this Settlement

land is intended to facilitate the expansion of the Dillingham community. Other, more remote and generally less desirable areas, are designated General Use (Gu). Areas near the Wood-Tikchik State Park, and Lake Aleknagik State Recreation Site are designated Public Recreation and Tourism-Dispersed. Public Use Sites, used for recreation, have been designated Public Recreation and Tourism-Public Use Sites (Rp). A large number of small management units associated with facilities are designated Public Facilities-Retain (Pr). A management unit adjacent to the Togiak NWR is designated Habitat (Ha). Active materials sites are designated Materials (Ma).

Plan Designations and Management

The plan designations that are used within this Region have the following management intent. The policies and management intent guidelines described in Chapter 2 affect all DNR authorizations. Refer especially to those guidelines relating to Fish and Wildlife Habitat and Harvest Areas, and Settlement. See also the descriptions of the plan designations in the first part of this Chapter; this section indicates which lands can be conveyed out of state ownership and those that must be retained.

- **General Use (Gu).** Within this Region, lands that contain one or more resource values, none of which is of sufficiently high value to merit designation as a primary use, and areas that are unlikely to be developed during the planning period are designated General Use. The land is to be managed for a variety of uses including protection of fish and wildlife habitat and harvest, dispersed public recreation, minerals, oil and gas exploration and development, and protection of heritage resources. It is expected that little development will occur in these areas during the planning period, and it is not intended as a matter of policy that intensive forms of development occur in these areas other than occasionally and at specific sites. These lands may be appropriate for conveyance to a Borough should one be formed in the Region.
- **Habitat (Ha).** Generally, this designation applies to areas of various size that are important for fish and wildlife species during a sensitive life-history stage where alteration of the habitat or human disturbance could result in a permanent loss of a population or sustained yield of a species. In Region 5 this designation is applied to streams and shorelands cataloged by the Alaska Department of Fish and Game as anadromous (http://gis.sf.adfg.state.ak.us/AWC_IMS/viewer.htm). Lands with this designation should be retained.
- **Materials (Ma).** Lands designated materials are those where active or inactive materials sites are present. These can include common varieties of sand, gravel, and stone or are sites associated with materials extraction that contain conveyors, crushing, sizing, and other processing equipment. Until the materials have been exhausted, material sites are to be retained in state ownership; thereafter, other forms of authorizations or disposals may be appropriate. Authorizations or disposals should be done in consultation with the Department of Transportation and Public Facilities.
- **Public Recreation and Tourism-Dispersed (Rd).** Lands with the designation of Public Recreation and Tourism-Dispersed are to be managed so that their public recreation values are protected and maintained. Within these areas the primary surface uses are

intended to be those related to hiking, hunting, fishing, wildlife viewing, and the like. A small tract of state land adjoining the Wood-Tikchik State Park is recommended for inclusion in this Park and is designated Rd (Wood-Tikchik State Park Management Plan, October 2002, p. 11-3 and Map 11-1).

- **Public Recreation and Tourism-Dispersed and Habitat (Co-designation).** Certain navigable waterbodies (lakes and streams) are co-designated Habitat (Ha) and Public Recreation and Tourism-Dispersed (Rd). Authorizations within these waterbodies should not interfere with important habitat or public recreation values. See Table 3.1 in the Navigability section of this Chapter for a listing of these streams. Note: Certain waterbodies may only be designated Public Recreation and Tourism-Dispersed, (Rd), Habitat (Ha), or General Use (Gu). This co-designation is applied to the river corridors within the Nushagak & Mulchatna Rivers Recreation Management Plan. In Region 5 this includes a portion of the corridor of the Iowithla River.
- **Public Facilities-Retain (Pr).** This designation applies to sites that are reserved for a specific public infrastructure requirement. They are to be retained in state or public ownership. In this Region, this designation applies to lands containing public facilities, commonly airports or schools. Only a small amount of acreage is affected by this designation.
- **Public Recreation and Tourism-Public Use Site (Rp).** This designation applies to areas with a concentration of recreational users or tourists or that are likely to have such concentrations. Within this Region this designation applies to specific recreation sites – the Aleknagik State Recreation Site and the public use sites identified in the Nushagak & Mulchatna Rivers Recreation Management Plan. Unless otherwise indicated in the Resource Allocation Table, these sites are to be retained by the state. In some instances they may be conveyed to the Bristol Bay Borough, subject to the Borough retaining them in public ownership and ensuring that they remain available for public use.
- **Settlement (Se).** This designation applies to state uplands suitable for sale, leasing, or permitting to allow private recreational or residential use. Within this Region four large areas of state land are considered appropriate for settlement and have been designated as such. These occur between the Nushagak River and Iowithla Creek, in the vicinity of Etolin Point, in an area along and east of the Wood River, and in the vicinity of Snake Lake and the Snake River. These areas are intended for Community Settlement; see Chapter 2 for specific requirements for this form of settlement. Settlement lands are appropriate for conveyance to a Borough should one be formed in the Region.

Specific Management Considerations

- **Generally Allowed Uses.** The Generally Allowed Uses in 11 AAC 96.020 can occur throughout the Region.
- **Proposed Transportation Corridor.** The area identified on the Region Map as a “Potential Transportation Corridor” should be retained by the state during the planning period. Authorizations granted by DNR within or adjacent to this corridor should not preclude the future development of transportation access. Authorizations or disposals

within and adjacent to this corridor should only be allowed after consultation with ADOT/PF.

- Addition to State Park. State land adjacent to Wood-Tikchik State Park (R05-01) is recommended for inclusion in Wood-Tikchik State Park. Until included within the Park, this land is to be managed for dispersed public recreation and is designated Public Recreation and Tourism-Dispersed (Rd).
- Except for areas closed to mineral entry under existing Mineral Closing Orders, all state lands within Region 5 are open to mineral entry. No additional MCOs are recommended; the only exception applies to the areas to be disposed of by DNR for purposes of Community Settlement. Closure to mineral entry is recommended at or before plat adoption. No leasehold location orders are recommended. See the Subsurface section in Chapter 2 for more detail on subsurface management requirements.
- Mineral Closing and Opening Orders. This revision of the Bristol Bay Area Plan retains the mineral closing and opening orders largely implemented by DNR at the time of original plan adoption. These MCOs either close a proposed settlement area or close a number of major streams to mineral location. These include the following:
 - MCO 304 – Snake Lake Settlement Area
 - MCO 305 – Weary River Settlement Area
 - MCO 196 – Warehouse Mountain Settlement Area
 - MCO 443 – Wood River-Aleknagik Road
 - MOO 702 – Warehouse Mountain Settlement Area (Mineral Opening Order)
- Mineral Order. Mineral Order No. 791 is retained by this revision as an interim order (as of July 11, 2003) that precludes shallow natural gas leasing and oil and gas exploration licensing. This order has no effect on locatable minerals or leaseable minerals other than shallow natural gas leasing and oil and gas exploration licensing. The order affects portions of the Nushagak Peninsula and the vicinity of Etolin Point.
- Retained Lands. Lands within this Region that are designated to be retained are those that are recommended for inclusion in the Wood-Tikchik State Park, those reserved as a ‘Potential Transportation Corridor’, and those designated Public Facilities-Retain (Pr) or Public Recreation and Tourism-Dispersed (Rd). Note: Certain management units that are designated Rd may be conveyed out of state ownership to a borough, should one be formed, as part of the Municipal Entitlement Act - providing the land conveyed remains public land and the public retains access to the public use site.
- Navigable Waters. Shorelands (rivers and lakes) that are believed to be navigable are listed in Table 3.1 in the Navigability section of this Chapter. Authorizations in these waters must ensure the continued use of a waterway by the public for purposes of trade, travel, and commerce. Note: These waterbodies are assigned a plan designation of Habitat or a co-designation of Habitat and Public Recreation and Tourism-Dispersed. Authorizations issued by DNR are to maintain the habitat and public recreation values of these waterbodies.

See the Resource Allocation Table for more detail on the upland management units.

Management Summary: Tidelands and Submerged Lands

Tidelands in this Region are extensive, extending from the Snake River on the east side of Nushagak Bay to the Kvichak River, situated at the head of Kvichak Bay. The community of Dillingham is situated at the head of Nushagak Bay, a little more than six miles from the mouth of the Nushagak River. Although not part of a tideland area proper, the Nushagak River is tidally influenced at the location of Dillingham and normally this area would be treated, in terms of designation and management intent, in this section. However, the Dillingham community is fronted by privately owned tidelands and additional tideland designations are not required. Natives own, for the most part, the uplands that adjoin the coast. Small portions of the uplands are owned by the state.

Marshes are common on the east side of Nushagak Bay, while mixed sand and gravel beaches are typical between Nushagak Bay and Kvichak Bay. Eroding peat scarps, sheltered tidal flats (high biomass content) and marshes are common along the west side of Kvichak Bay. Waterfowl and shorebirds are common as are whales (beluga) and other marine mammals. These other marine mammals are almost entirely harbor seals, although there are some spotted seals as well. There are no major sea bird colonies, sea otter concentrations, or either walrus or sea lion haulouts in this Region. A small harbor seal haulout occurs in a portion of Kvichak Bay and the central portion of Nushagak Bay is a harbor seal/spotted seal haulout concentration area. Both Kvichak and Nushagak Bays are known beluga whale calving areas. The Bristol Bay Fisheries Reserve affects Nushagak and Kvichak Bays.

The commercial harvest of pink, sockeye, chinook, chum and coho salmon occurs throughout Nushagak Bay (purse seine and drift net). Offshore leases for set net harvesting form an almost continuous line along both the east and west coastlines of Nushagak Bay, concentrating south of Dillingham and around Clarks Point and Ekuk, and continuing south of Ekuk on the eastern side of the bay. Drift (gill) net harvest occurs throughout the bay for pink, chum, sockeye, coho and chinook salmon. Chinook salmon are harvested (drift net) at Etolin Point. Subsistence harvest of fish around Dillingham consists primarily of salmon, but grayling and pike are harvested to a lesser extent. Clarks Point residents range long distances, if necessary, for subsistence harvest which includes salmon smelt and some waterfowl. A number of Bristol Bay residents migrate to Ekuk during the summer for subsistence harvest of salmon.

The commercial harvest of pink, sockeye, chinook, chum and coho salmon occurs throughout Kvichak Bay (purse seine and drift net). Set net permits occur all along the upper Kvichak Bay, on both the east and west coastlines. The densest concentrations of set net permits occur along the eastern coastline near the mouth of the Naknek River and south of Naknek. The subsistence harvest of red salmon as a food staple in Kvichak Bay is intensive.

Plan Designations and Management Intent

Coastal Tidelands. These tidelands⁸ are designated General Use. Development authorizations are considered appropriate subject to the protection of sensitive resources and areas.

Nushagak Bay (R05T-01). This tideland management unit is designated Habitat. Beluga whale feeding and calving occur throughout most of Nushagak Bay (R05T-01). The Habitat designation also includes the areas of harbor seal haulout concentration at the mouth of Nushagak Bay around Nichols Spit and Protection Point. Development authorizations may be appropriate in this tideland management unit, but must avoid or minimize impacts to the beluga whale population during the calving life-cycle stage and to the harbor seal/spotted seal haulout concentration areas.

Kvichak Bay, (R05T-02)⁹. Kvichak Bay borders on both Region 5 and Region 11, but is being addressed as one management unit (R05T-02) so it can be managed as one unit. Both the Kvichak and the Naknek Rivers flow into this bay at its head. The area around the river mouths consists of extensive shallow and exposed tidal flats having high biomass content. Large areas of exposed tidal flats are also common south of the Naknek River. This bay provides feeding concentration areas for Beluga whales, and is also an important beluga whale calving habitat. Harbor seals are common at Graveyard Point near the mouth of the Kvichak River. Shorebirds occur near the mouths of the Kvichak and Naknek Rivers, and both shorebirds and waterfowl are present along the coast south of the Naknek River. The headwaters of the Naknek River support particularly high densities of staging swans and geese during the spring. Development authorizations may be considered appropriate, but must avoid or minimize impacts to the beluga whale population during that part of their life-cycle involving calving and to the area of the harbor seal haulout at 'Deadman Sands'. See also, *Region 11*.

See the Resource Allocation Table for more detail on the tideland management units.

⁸ Tidelands along the coast not included in R05T-01 or R05T-02.

⁹ The tideland unit for Kvichak Bay consists of only one management unit (R05T-02) but the description of the eastern portion of this tideland unit is provided again in Region 11 to ensure that the tideland resources of Kvichak Bay are properly understood.

Resource Allocation Table for Upland Units - Region 5

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-01 Upper Aleknagik Lake	10,523 Rd -- Public Recreation and Tourism-Dispersed	Map O-1 S9S58W Sec. 2-13	This unit is designated Rd and is to be managed, generally, for the purposes of dispersed recreation and the protection of fish and wildlife. It is to be retained by the state and is recommended for eventual inclusion in the Wood-Tikchik State Park. DNR authorizations should be limited to those that are consistent with the eventual use of this area as part of the State Park. The management of this unit should be similar to that of the adjoining area in the State Park. Consult the management requirements of Management Unit 7 (Lake Nerka) in the State Park Plan for specific guidance. Refer also to the specific management requirements for calving areas in the Fish and Wildlife Habitat and Harvest Areas section of Chapter 2.	This unit of approximately 12 sections of state land is situated south of Wood-Tikchik State Park, along the southwest shores of Lake Aleknagik, and is bisected by Youth Creek. It is an area vegetated in tall shrub. This unit has been recommended for inclusion into Wood-Tikchik State Park by the Wood-Tikchik State Park Management Plan. The unit includes moose calving areas, bear denning sites, and anadromous fish streams and areas utilized for recreation. The unit is affected in part by MCO 718.
R05-02 Nunavaugaluk Lake	61,466 Gu -- General Use	Map O-1	This unit is General Use and is to be managed for a variety of resources, including dispersed recreation, fish and wildlife protection, and habitat protection. Development authorizations may be appropriate subject to the protection of these resources and the requirements of Chapter 2. Because of its somewhat remote location and lack of accessibility, it is not intended that intensive development occur within this unit during the planning period except occasionally and at specific locations. The unit is not considered suitable for settlement. Instead, settlement should be directed to nearby areas designated Settlement or in areas already conveyed to private individuals or Native corporations.	This unit is a large noncontiguous area of land that includes Ice Creek and Nunvak Mountain in its northern extent, the Weary River along the western and southern extents, and Lake Aleknagik and Nunavaugaluk Lake on the eastern side. The area is vegetated mostly in tall shrubs. The unit contains several anadromous fish streams, which are utilized by bear during the spawning season, and is used by moose for calving. Parts of the unit are affected by MCO 305.
R05-03 Table Mountain	20,421 Gu -- General Use	Map O-1	This unit is designated General Use (Gu). These lands should be managed for a variety of uses including the protection of fish and wildlife and their associated habitat, anadromous fish streams, and dispersed recreation and tourism. Development authorizations may be appropriate subject to the protection of these resources and the requirements of Chapter 2. Intensive development is not expected within this unit during the planning period except occasionally and at specific locations. The unit is not considered suitable for settlement.	This is a unit comprised of state land and state-selected land. It is a fairly mountainous area with tall and low shrub vegetation. Jackknife Mountain makes up the very western extent of the unit with Table Mountain to the south, Lake Nerka and Wood-Tikchik State Park to the north, and the Muklung river on the eastern boundary. The unit contains anadromous fish streams and supports moose calving areas. The eastern part of the unit is affected by MCO 393.

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-04 Snake Lake	28,339 Se -- Settlement	Map O-1	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Development is to conform to the Management Guideline pertaining to Remote Settlement in the Settlement section and to those of the Caribou and Moose Rutting and Calving Area Management Guideline in the Fish and Wildlife Habitat and Harvest Areas section, both of which are found within Chapter 2.	This unit mostly surrounds Nunavaugaluk Lake and is in turn encompassed by unit R05-02. The area includes hills and lowlands vegetated in tall shrub types. The state has offered and patented various land units in this area through the land sales program. The area is used for recreation, hunting and fishing, and contains anadromous fish streams, bear denning sites, and moose. Portions of this unit, along Nunavaugaluk Lake are affected by MCO 304.
R05-05 Lake Aleknagik	1,284 Se -- Settlement	Map O-1 S1S56W Sec. 18,28, 29	If conveyed by the Federal government, these lands are considered suitable for Settlement and are appropriate for disposal during the planning period. Disposals should conform to the requirements of a Community Settlement Area in the Settlement section of Chapter 2. Buffers along anadromous fish streams should conform to the management guidelines in Chapter 2. This is considered a high priority selection.	This unit is comprised of two noncontiguous portions of state-selected land on the southwest shore of Lake Aleknagik. One unit is situated east of Mable Mountain and the other, northeast of Mable Mountain. Both occupy areas of level terrain with tall shrubs, and are considered suitable for settlement. The northern unit has lake front access and is close to Aleknagik. Anadromous fish streams, Bear Creek and Yake Creek, exist between and south of the units. Bears use these streams when salmon are spawning.
R05-06 Lake Aleknagik 2	554 Rp -- Public Recreation and Tourism-Public Use Site	Map O-1 S1S56W Sec. 25,36	If these lands are conveyed by the Federal government they are to be managed for public recreation and tourism. Authorizations related to commercial recreation uses may be appropriate subject to the protection of these resources and the requirements of Chapter 2. Intensive development is not intended during the planning period except occasionally and at specific locations. If conveyed, the unit is to be retained in state ownership. This is considered a high priority selection.	This unit is comprised of two noncontiguous portions of state-selected land along the eastern shore of the lower end of Lake Aleknagik. It is an area of level terrain and tall shrub vegetation. The area is utilized for public recreation, hunting, and fishing and is adjacent to the Aleknagik State Recreation Site. The Alaska Heritage Resources Survey (AHRS) reports several heritage sites in or near this unit.
R05-07 Aleknagik Airport	67.90 Pr -- Public Facilities- Retain	Map O-1 S1S55W Sec. 19,30	This unit is to be managed by ADOT/PF consistent with FAA standards and the conditions of the Management Agreements (ADLs 220386 and 220387) and limited state holdings (LSHs 178 and 179).	This unit contains airport facilities situated near the community of Aleknagik. It is managed by ADOT/PF under Management Agreement (ADLs 220386 and 220387) and limited state holding stipulations (LSHs 178 and 179).

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-08 Lake Aleknagik	1.02 Rp -- Public Recreation and Tourism-Public Use Site	Map O-1 S1S55W Sec. 31	This small unit is adjacent to the Aleknagik Lake State Recreation Area and is to be managed consistent with the management plan for the recreation area as provided for in the Wood-Tikchik State Park Management Plan (2002). The unit is to be retained in public ownership. See also the Management Guideline for "Public Use Sites" in the Recreation, Tourism, and Scenic Resources section of Chapter 2.	This land (OSL 1170) is located on the south shore of the east end of Lake Aleknagik adjacent to Aleknagik Lake State Recreation Area. It is an area of tall shrub vegetation and level terrain. The area has important recreational values.
R05-08a Aleknagik State Recreation Site	5.75 Rp -- Public Recreation and Tourism-Public Use Site	Map O-1 S1S56W Sec. 36	This unit is to be managed as Lake Aleknagik State Recreation Area by DPOR under the stipulations of the ILMA (ADL 227395) and in accordance with provisions in the Wood-Tikchik State Park Management Plan (2002). The unit is to be retained in public ownership. See also the Management Guideline for "Public Use Sites" in the Recreation, Tourism, and Scenic Resources section of Chapter 2.	This land (OSL 1112) is located on the south shore of the east end of Lake Aleknagik. Along with the shorelands of the lake, it forms Aleknagik Lake State Recreation Area under an ILMA issued to DPOR (ADL 227395). It is an area of level terrain and tall shrub vegetation.
R05-09 Aleknagik Research Station	5.61 Pr -- Public Facilities- Retain	Map O-1 S1S55W Sec. 32	This unit is to be retained in state ownership and managed to accommodate a field research station. Public access to the river is to be maintained by way of a 50-foot stream access buffer and a building set back of 150 feet is to be maintained.	This state-selected unit is located at the east end of Lake Aleknagik situated on the south bank of the Wood River, an anadromous fish stream. There is an ANILCA 906(k) concurrence (ADL 17883) issued to ADF&G for the site to be utilized as a Bristol Bay Fisheries field research station. The Alaska Heritage Resources Survey (AHRs) reports several heritage sites in or near this unit.
R05-10 Weary River	16,054 Se -- Settlement	Map O-1	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Development is to conform to the requirements of Remote Settlement and those for the Caribou and Moose Rutting and Calving Area, both of which are described in the Settlement and Fish and Wildlife sections, respectively, of Chapter 2. Buffers along anadromous fish streams must also conform to the management guidelines in Chapter 2.	This unit occupies an area of rolling hills and lowlands between the Weary River on the west and Nunavaugaluk Lake to the east. This area is considered suitable for settlement and the state has offered and patented portions of the unit through the land sales program. The area is utilized for recreation including hunting and fishing. The unit includes anadromous portions of Eagle Creek and is close to the anadromous Weary and Snake Rivers. The area contains wintering areas for moose; bear utilize the anadromous fish streams during the salmon runs. Much of this unit is affected by MCO 305; also see MCO 304.

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-11 Nuyakuk	1,270 Se -- Settlement	Map O-1 S11S56W Sec. 19,20	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Development shall conform to the requirements of Chapter 2, particularly those found in the Settlement section.	This unit consists of two sections of land immediately east of the Otter Creek drainage and two to four miles east of Nunavagaluk Lake. The terrain is vegetated primarily in tall shrub-type plants. The land contains both level and steep components. Otter Creek is cataloged as anadromous downstream from the unit.
R05-11a Silver Salmon Creek	3,840 Se -- Settlement	Map O-1 S11S56W Sec. 1,2,15, 23,34,35	If conveyed by the Federal government, the unit is appropriate for settlement and should be considered for disposal during the planning period. Development is to conform to the requirements of Remote Settlement in Chapter 2. Buffers along anadromous fish streams must also conform to the management guidelines in Chapter 2. This is considered a high priority selection.	This unit is made up of several portions of state-selected land located south of Silver Salmon Creek and north of Otter Creek. The Aleknagik-Dillingham road passes through the east part of the unit. It is an area of fairly level terrain, low and tall shrub, and moist tundra vegetation that is considered suitable for settlement.
R05-12 Wood River- Aleknagik Road	34,481 Se -- Settlement	Map O-1	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Disposals should conform with the Management Guideline Community Settlement Area in Chapter 2. The Bristol Bay transportation corridor transects the unit; the actual position of the road alignment has yet to be determined. No authorizations or disposals should be considered that are within or near the corridor until the road alignment is known or without consultation with the ADOT/PF.	This is a large unit of state-owned and state-selected land situated east of the Dillingham-Aleknagik Road. It is a level lowland area vegetated in low shrub and moist tundra types along the Wood and Muklung Rivers that is suitable for settlement. The City of Dillingham has been conveyed land by the state and established a landfill (ADL 227310) adjacent to the lower southwest corner of this unit. The Wood and Muklung Rivers are cataloged as anadromous fish streams. They are utilized by bear when the salmon are spawning. The unit has good access along the rivers, is near the road system, and has high recreation values. The Alaska Heritage Resources Survey (AHRs) reports several heritage sites in or near this unit. The unit is affected in part by MCO 443 and in part by MCO 393.

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-13 Muklung Hills	6,385 Gu -- General Use	Map O-1 S11S54W Sec. 11,15, 24,25,36; S12S54W Sec. 1,12, 13,14,23	This unit is designated General Use (Gu). These lands should be managed for a variety of uses including protection of fish and wildlife, protection of fish and wildlife habitat, minerals exploration and development, and dispersed recreation and tourism. The unit is not suitable for Settlement. Development authorizations may be appropriate subject to the protection of these resources and the requirements of Chapter 2. Intensive development is not intended within this unit during the planning period except occasionally and at specific locations. The Bristol Bay transportation corridor transects the unit; the actual position of the road alignment has yet to be determined. No authorizations or disposals should be considered that are within or near the corridor until the road alignment is known or without consultation with the ADOT/PF.	This unit is made up of state-owned and state-selected land along the border with Region 6, one to four miles west of the Little Muklung River. It is a lowland area of wet tundra along the edge of the Muklung Hills. The Little Muklung River is not cataloged as anadromous and few fish and wildlife resources are identified on the unit. The unit has low scenic and recreational values. The area is utilized for caribou and moose hunting.
R05-14 Dillingham Road	840 Se -- Settlement	Map O-1 S12S56W portions of Sec. 1,12, 13,24,25	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Because of its proximity to the Dillingham-Aleknagik Road the unit may have potential for a variety of uses. The potential for other uses than residential should be evaluated prior to creating a land disposal. Disposals should conform to the requirements for Community Settlement Area in the Settlement section of Chapter 2.	This unit is comprised of three noncontiguous areas located along the west side of the Dillingham-Aleknagik road. This area of rolling lowlands is vegetated primarily in shrub tundra types. It is considered suitable for settlement. This unit has relatively good access and portions may be of high value and are potentially suitable for commercial property or subdivision. It contains a materials potential, and could be developed for a variety of uses, including commercial, industrial, and/or residential. The Alaska Heritage Resources Survey (AHRS) reports a heritage site in or near this unit.
R05-15 Snake River	15,963 Se -- Settlement	Map O-1	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Development is to conform to the requirements of Remote Settlement and those for Caribou and Moose Rutting and Calving Area, both of which are described in the Settlement, and Fish and Wildlife Habitat and Harvest Areas sections, respectively, of Chapter 2. Buffers along anadromous fish streams must also conform to the management guidelines in Chapter 2.	This land is located generally south of Nunavaugaluk Lake with the Snake River flowing through the northeastern portion of the unit and the Weary River flowing through the very southwestern corner of the unit. The area is vegetated in tall and low shrubs and considered suitable for settlement. Both the Weary and Snake Rivers are cataloged as anadromous and bears utilize these streams during the salmon runs. Moose over winter in the Snake River drainage and near the outlet to Nunavaugaluk (Snake) Lake.

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-16 Warehouse Mountain	16,061 Se -- Settlement	Map O-1	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Development is to conform to the requirements of Remote Settlement and those for Caribou and Moose Rutting and Calving Area, both of which are described in the Settlement, and Fish and Wildlife Habitat and Harvest Areas sections, respectively, of Chapter 2. Buffers along anadromous fish streams must also conform to the management guidelines in Chapter 2.	This land is located generally between the Snake River and the Dillingham-Aleknagik road in terrain drained by Otter Creek. The unit, vegetated in tall and low shrub types, is comprised of state land and state-selected lands. Because of its topography and proximity to the road system and river, it is considered suitable for settlement. The state has offered and patented many areas within the unit through the land sales program. The Snake River is cataloged as an anadromous fish stream, and the area is utilized by both bear and moose. This unit is affected by MCO 196 and by MOO 702.
R05-17 Lower Wood River/Dillingham	2,517 Gu -- General Use	Map O-1 S13S55W Sec 7,15,16; S13S56W Sec. 13	This unit is designated General Use (Gu). If these lands are conveyed by the Federal government they are to be managed for a variety of uses including mineral exploration and development, the protection of anadromous fish and other fish and wildlife resources, and dispersed recreation and tourism. Intensive development is not intended during the planning period except occasionally and at specific locations related to minerals or commercial recreation. This is considered to be a high value selection.	This unit consists of several areas of state-selected land near the City of Dillingham. They are approximately one mile northwest and east of the Dillingham airport. The areas are flat to rolling terrain dotted with small lakes and creeks with low shrub and moist tundra vegetation. The Alaska Heritage Resources Survey (AHRS) reports several heritage sites in or near this unit. The unit is affected in part by MCO 393.
R05-18 Dillingham Airport	84 Pr -- Public Facilities- Retain	Map O-1 S13S55W Sec. 17,18, 19	Unit is to be managed by ADOT/PF consistent with FAA standards and the conditions given in the Management Agreement (ADL 17963), conveyance documents (OSL 36), and limited state holdings (LSH 46). Unit is to be retained in state ownership.	This unit of land contains airport facilities situated adjacent to the City of Dillingham. It is comprised of a limited state holding (LSH 46) and state land (OSL 36) managed by ADOT/PF under ILMT (ADL 17963) and the stipulations of the LSH and OSL.
R05-19 Downtown Dillingham	9.92 Pr -- Public Facilities- Retain	Map O-1 S13S55W Sec. 16,21	This land is designated as Public Facilities-Retain (Pr). A portion of this unit is to be managed by ADF&G under a Management Agreement (ADL 224662). Another portion is to be managed by ADOT/PF under an ILMT (ADL 61051) for a maintenance camp site. The remainder of the unit is to be managed by DNR as commercial property for lease or rent. A portion of this unit may be transferred to the City of Dillingham under title 38.05.810 without reclassification. A portion of lands covered by ADL 61051 and ADL 224662 are considered appropriate for conveyance to another governmental entity for public purposes.	This unit is comprised of state land (OSLs 72, 165, 115 and 312) located in Dillingham. A portion of the unit has an ILMT (ADL 61051) issued to ADOT/PF for the purposes of a maintenance camp site. A portion of this unit is to be managed by ADF&G under management agreement (ADL 224662).

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-20 Nushagak River	23,326 Gu -- General Use	Map O-1 S13S54W; and S13S53W Sec. 18,19, 20,25	The unit is designated General Use (Gu) and is to be managed for a variety of uses, including the protection of fish and wildlife resources and their associated habitats, mineral exploration and development, and dispersed recreation. Some forms of recreation use, including commercial recreation, may be appropriate if these recreational uses are found to be compatible with the management intent for adjacent river corridors designated Ha-Rd or Rd in the Area Plan. Development authorizations may be appropriate subject to the protection of these resources, consistency with the recreation uses specified in the RRMP, and the specific requirements of Chapter 2; see particularly the requirements for Management Guideline J, "Nushagak & Mulchatna Rivers Recreation Management Plan", in the Recreation, Tourism and Scenic Resources section of Chapter 2. For convenience, Table 2.2 contains a listing of allowed, prohibited, and conditional (recreational) uses by RRMP Management Unit. Management Guideline J in the Recreation, Tourism and Scenic Resources section of Chapter 2 specifically defines the relationship between the RRMP and the BBAP, and must be consulted in adjudication decisions. Intensive development is not expected within this unit during the planning period, except occasionally and at specific locations associated with recreation uses and mineral exploration and development. Settlement is not considered an appropriate use.	This unit is made up of areas of state-owned and state-selected land straddling the Nushagak River east of Dillingham. The area north of the Nushagak River is drained by the Little Muklung River and by Black Slough. It is a flat wetland area vegetated in low shrub and lichen tundra types. The unit is affected by MCO 393 which closes the Nushagak River to mineral location. The unit can be accessed by the Dillingham-Lewis Point trail which extends across the unit from west to east. The Togiak-Nushagak trail also extends into the unit.
R05-21 Scandinavian Slough	59,979 Se -- Settlement	Map O-1	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Development is to conform to the requirements of Remote Settlement and those for the Caribou and Moose Rutting and Calving Area, both of which are described in the Settlement, and Fish and Wildlife Habitat and Harvest Areas sections of Chapter 2. Buffers along anadromous fish streams must also conform to the management guidelines in Chapter 2.	This unit of state-owned and state-selected land located north of the Nushagak River and Scandinavian Slough and south of the Iowithla River occupies an area of fairly flat to rolling terrain vegetated in low shrub and moist tundra that is suitable for settlement. Trails extend to the unit from Dillingham, and a number of lakes are navigable. Lands not part of the unit, along the Nushagak and Iowithla Rivers are used by moose for calving; both rivers are anadromous.

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-22 Corridor of the Iowithla River	4,949 Rd and Ha -- Public Recreation and Tourism-Dispersed, and Habitat	Map O-1	<p>This unit, which consists of the navigable portions of the Iowithla River and its adjoining uplands as depicted in Map O-1, is co-designated Public Recreation and Tourism-Dispersed (Rd) and Habitat (Ha). Unit is to be retained by the state and managed to maintain the recreational uses of the Iowithla River and the adjoining upland corridor, its fish and wildlife resources, and public recreation values. The management requirements of the Nushagak & Mulchatna Rivers Recreation Management Plan (RRMP) are to be followed by DNR in the granting of authorizations related to certain types of recreational uses and structures. See the Management Intent and Management Guidelines in the RRMP for Management Unit 2. For convenience, Table 2.2 contains a listing of allowed, prohibited, and conditional uses by RRMP management unit. Management Guideline J in the Recreation, Tourism and Scenic Resources section of Chapter 2, which more specifically defines the relationship between the RRMP and the BBAP, also applies and should be consulted in adjudication decisions.</p> <p>In general, authorizations should not be issued for non-recreational uses that are incompatible with the management intent of this unit and the management objectives of the RRMP. Oil, gas, and mineral exploration and development are considered appropriate uses if compatible with the management intent for this unit or if in the best interest of the state.</p>	<p>The unit is the corridor of the Iowithla River as depicted in the Nushagak & Mulchatna Rivers Recreation Management Plan (RRMP). The unit consists of that portion of RRMP Management Unit 2 within state-owned lands in Region 5. The width of the corridor varies, and may be up to four miles wide, measured from each side of the river system. Vegetation consists of lichen tundra and low shrub. The Iowithla River is cataloged as an anadromous fish stream and is utilized by brown bear, especially during the salmon spawning season. The river corridor is used as a calving area by moose. Note: This corridor is continued in Region 6.</p>

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-23 Portage Creek	42,561 Gu -- General Use	Map O-1	The unit is designated General Use (Gu) and is to be managed for a variety of uses, including the protection of fish and wildlife resources and their associated habitats, mineral exploration and development, and dispersed recreation. Some forms of recreation use, including commercial recreation, may be appropriate if these recreational uses are found to be compatible with the management intent for adjacent river corridors designated Ha-Rd or Rd in the Area Plan. Development authorizations may be appropriate subject to the protection of these resources, consistency with the recreation uses specified in the RRMP, and the specific requirements of Chapter 2; see particularly the requirements for Management Guideline J, "Nushagak & Mulchatna Rivers Recreation Management Plan", in the Recreation, Tourism and Scenic Resources section of Chapter 2. For convenience, Table 2.2 contains a listing of allowed, prohibited, and conditional (recreational) uses by RRMP Management Unit. Management Guideline J in the Recreation, Tourism, and Scenic Resources section of Chapter 2 specifically defines the relationship between the RRMP and the BBAP, and must be consulted in adjudication decisions. Intensive development is not expected within this unit during the planning period except occasionally and at specific locations associated with recreation uses and mineral exploration and development. Settlement is not considered an appropriate use.	This unit, comprised of several noncontiguous pieces of state-owned and state-selected land, occupies an area from Keefer Cutoff and the Nushagak River to the west, north to the southern boundary of Region 6 and south beyond Portage Creek. It is flat to rolling terrain vegetated in low shrub and moist tundra types with a winter trail that passes through the unit just north of Portage Creek.
R05-24 Kvichak River	16,765 Gu -- General Use	Map O-2	This unit is designated General Use (Gu). If conveyed by the Federal government, this unit is to be managed for a variety of uses including mineral exploration and development, the protection of fish and wildlife resources and their associated habitat, and dispersed recreation and tourism. Intensive development is not expected within this unit during the planning period except occasionally and at specific locations related to minerals or recreation. This is considered a high priority selection.	This unit of state-selected land is located west of the Kvichak River on the eastern margin of planning Region 5 on level terrain vegetated primarily in low shrub and lichen tundra. There is a winter trail that bisects the unit at its southern end near Squaw Creek and King Salmon Creek. The unit has been utilized as a rutting area by moose. The Lewis Point-Naknek trail extends across the southern part of the unit.

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-25 Togiak NWR	3,076 Ha -- Habitat	Map O-1 S14S56W Sec. 6,7,18, 19,30	If conveyed by the Federal government, this unit is to be managed for the protection of fish and wildlife habitat and the maintenance of dispersed recreation. It is designated Habitat and is to be retained in state ownership. Development authorizations may be appropriate but only if the resources and values of the unit are maintained. Consult with the Togiak NWR prior to issuing any authorization. This is considered to be a low-priority selection.	This state-selected land is situated between the Nushagak Bay and the Snake River, and borders the Togiak National Wildlife Refuge. It is an area of low-lying, flat poorly-drained terrain with low shrub vegetation. Because of its remote and isolated location, development of the unit is considered difficult. Since it adjoins the Togiak NWR, the management of this unit should focus on habitat protection and the maintenance of dispersed recreation.
R05-26 PU1/ Blood Beach	230 Rp -- Public Recreation and Tourism-Public Use Site	Map O-1 S14S52W Sec. 27,34	This unit is designated Public Recreation and Tourism-Public Use Site (Rp) and is to be managed for public recreation and tourism. The unit is to be retained in state ownership. See also the Management Guideline for "Public Use Sites" in the Recreation, Tourism, and Scenic Resources section of Chapter 2.	This unit is located along the southern shore of the Nushagak River just west of the Scandinavian Slough and is primarily used for angling. It is identified in the Nushagak & Mulchatna Rivers Recreation Management Plan, April 2005, as a public use site (PU1).
R05-27 PU5/Keefer Cutoff	80 Rp -- Public Recreation and Tourism-Public Use Site	Map O-1 S14S51W Sec. 25	This unit is designated Public Recreation and Tourism-Public Use Site (Rp) and is to be managed for public recreation and tourism. The unit is to be retained in public ownership. See also the Management Guideline for "Public Use Sites" in the Recreation, Tourism, and Scenic Resources section of Chapter 2.	This is a shoreland area on Keefer Cutoff and the Nushagak River north of Portage Creek used for camping and angling. It is identified in the Nushagak & Mulchatna Rivers Recreation Management Plan, April 2005, as a public use site (PU5).
R05-28 PU3/Keefer Cutoff	41 Rp -- Public Recreation and Tourism-Public Use Site	Map O-1 S14S51W Sec. 25	This unit is designated Public Recreation and Tourism-Public Use Site (Rp) and is to be managed for public recreation and tourism. The unit is to be retained in public ownership. See also the Management Guideline for "Public Use Sites" in the Recreation, Tourism, and Scenic Resources section of Chapter 2.	This is a shoreland area on Keefer Cutoff and the Nushagak River north of Portage Creek. It is identified in the Nushagak & Mulchatna Rivers Recreation Management Plan, April 2005, as a public use site (PU3).

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-29 PU4/N. Portage Creek	41 Rp -- Public Recreation and Tourism-Public Use Site	Map O-1 S14S51W Sec. 25	This unit is designated Public Recreation and Tourism-Public Use Site (Rp) and is to be managed for public recreation and tourism. The unit is to be retained in public ownership. See also the Management Guideline for "Public Use Sites" in the Recreation, Tourism, and Scenic Resources section of Chapter 2.	This is a shoreland area adjacent to an upland site designated by Choggiung Ltd as a public camping site. It lies north of Portage Creek on Keefer Cutoff and the Nushagak River. It is identified in the Nushagak & Mulchatna Rivers Recreation Management Plan, April 2005, as a public use site (PU4).
R05-30 PU2/ Keefer Cutoff	117 Rp -- Public Recreation and Tourism-Public Use Site	Map O-1 S15S51W Sec. 2	This unit is designated Public Recreation and Tourism-Public Use Site (Rp) and is to be managed for public recreation and tourism. The unit is to be retained in public ownership. See also the Management Guideline for "Public Use Sites" in the Recreation, Tourism, and Scenic Resources section of Chapter 2.	This unit is located along the Nushagak River in a braided section west of the Portage Creek airport, primarily used for angling. It is identified in the Nushagak & Mulchatna Rivers Recreation Management Plan, April 2005, as a public use site (PU2).
R05-31 Portage Creek Airport	85 Pr -- Public Facilities- Retain	Map O-1 S15S51W Sec. 1	This unit is to be managed by ADOT/PF consistent with FAA standards and the conditions given in Management Agreements (ADLs 221494, 221495 and 224242) and limited state holdings (LSHs 231, 234 and 309). The land is to be retained in state ownership.	This unit of land hosts the airport facilities located near the community of Portage Creek. The unit is located on land managed by ADOT/PF under the stipulations of limited state holdings (LSHs 231, 234 and 309) and management agreements (ADLs 221494, 221495 and 224242).

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-32 Scandinavian Slough	1,920 Gu -- General Use	Map O-1 S15S52W Sec. 23,24, 25	The unit is designated General Use (Gu) and is to be managed for a variety of uses, including the protection of fish and wildlife resources and their associated habitats, mineral exploration and development, and dispersed recreation. Some forms of recreation use, including commercial recreation, may be appropriate if these recreational uses are found to be compatible with the management intent for adjacent river corridors designated Ha-Rd or Rd in the Area Plan. Development authorizations may be appropriate subject to the protection of these resources, consistency with the recreation uses specified in the RRMP, and the specific requirements of Chapter 2; see particularly the requirements for Management Guideline K, "Caribou and Moose Calving and Rutting Areas", in the Fish and Wildlife Habitat and Harvest Areas section and with Management Guideline J, "Nushagak & Mulchatna Rivers Recreation Management Plan", in the Recreation, Tourism, and Scenic Resources section of Chapter 2. For convenience, Table 2.2 contains a listing of allowed, prohibited, and conditional (recreational) uses by RRMP Management Unit. Management Guideline J in the Recreation, Tourism, and Scenic Resources section of Chapter 2 specifically defines the relationship between the RRMP and the BBAP, and must be consulted in adjudication decisions. Intensive development is not expected within this unit during the planning period except occasionally and at specific locations associated with recreation uses and mineral exploration and development. Settlement is not considered an appropriate use.	This land consists of three sections of state-selected lands south of the Nushagak River and southeast of Portage Creek. The unit occupies an area of level terrain and low shrub and lichen tundra vegetation. The unit is in an area used by moose for calving.
R05-33 Clarks Point Airport	70 Pr -- Public Facilities- Retain	Map O-1 S15S55W Sec. 25,26, 36	This unit is to be managed consistent with the stipulations of the limited state holding (LSH 265) and is to be retained in state ownership.	This unit of land contains the public airport facilities adjacent to the community of Clarks Point. It is to be managed by ADOT/PF under the stipulations of a limited state holding (LSH 265) for the purposes of administering an airport facility. The Alaska Heritage Resources Survey (AHRs) reports several heritage sites in or near this unit.

Unit #: / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05-34 Etolin Point	36,139 Se -- Settlement	Map O-1 S17S54W; S18S54W; S18W53W	The unit is designated Settlement (Se) and is considered appropriate for disposal during the planning period. Development is to conform to the requirements of Remote Settlement and those for the Caribou and Moose Rutting and Calving Area, both of which are described in the Settlement, and Fish and Wildlife Habitat and Harvest Areas sections, respectively, of Chapter 2. Buffers along anadromous fish streams must also conform to the management guidelines in Chapter 2.	This unit extends north from the shores of Nushagak and Kvichak Bays and includes Etolin Point to the west. It is an area of fairly flat terrain and low shrubs that is suitable for settlement. The unit contains several large navigable lakes and opens onto Nushagak and Kvichak Bay. The area is largely surrounded by Native-owned lands; some of these are 12b village pool lands that have been designated for development purposes by the Bristol Bay Native Association.

Resource Allocation Table for Tideland Units - Region 5

Unit # / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05T-01 Nushagak Bay	82,480 Ha and Hv -- Habitat and Harvest	Map O-1 S14S56W, S16S56W, S17S55W-58W, S18S55W-58W	Nushagak Bay, with its numerous and varied marine and fishery resources, is designated Habitat. Management intent: Tideland development authorizations are considered appropriate, but must avoid or minimize impacts to the beluga whale population during the calving life-cycle stage. Consult with NMFS before issuing authorizations. Ensure that any authorizations are consistent with the requirements of the Bristol Bay Fisheries Reserve.	<p>This large bay includes calving areas for beluga whales and is used by waterfowl as a concentration area.</p> <p>Commercial harvest of pink, sockeye, chinook, chum and coho salmon occurs throughout Nushagak Bay (purse seine and drift net). Offshore leases for set net harvesting are continuous along both the east and west coastlines of Nushagak Bay, concentrating south of Dillingham, around Clarks Point to Ekuk and extending south of Ekuk on the eastern side of the bay. Drift net harvest occurs throughout the bay for pink, chum, sockeye, coho and chinook salmon. Chinook salmon are harvested (drift net) at Etolin Point. Subsistence harvest of fish around Dillingham consists of primarily salmon, but grayling and pike are harvested to a lesser extent. Clarks Point residents range long distances, if necessary, for subsistence harvest which includes salmon, smelt and some waterfowl. A number of Bristol Bay residents migrate to Ekuk for subsistence harvest of salmon. The western coastal tidelands of Nushagak Bay are adjacent to the Togiak NWR and are affected by a TRMZ (See R02T-01). All of Nushagak Bay is affected by the Bristol Bay Fisheries Reserve.</p>

Unit # / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05T-02 Kvichak Bay	26,920 Ha and Hv -- Habitat and Harvest	Map O-1 S16S47W, S17S47W- 50W, S18S48W- 53W	<p>Kvichak Bay is designated Habitat. Although the eastern part of Kvichak Bay contains extensive areas of sheltered tidal flats and is only considered moderately productive biologically, the remainder of the bay is a sensitive habitat area. Tideland development authorizations may be appropriate but must avoid or minimize impacts to the beluga whale population during the calving life cycle stage and to harbor seal haulout concentration areas. Consult with the NMFS and USFWS before issuing authorizations.</p> <p>Management Intent: Protect beluga whale population, harbor seal haulout concentrations, anadromous streams, areas of estuarine wetlands, and areas of waterfowl concentration. Ensure that any authorizations are consistent with the requirements of the Bristol Bay Fisheries Reserve.</p>	<p>Habitat: Kvichak Bay fronts on both Regions 5 and 11. Eroding peat scarps, sheltered tidal flats, and marshes are common along the west side of the Bay. The eastern part, extending from its mouth to the mouth of the Naknek River, consists of extensive shallow areas of exposed tidal flats having high biomass content. Large areas of exposed tidal flats are also common south of the Naknek River, but are considered to be of only moderate biomass. Both the Kvichak and Naknek Rivers empty into the Bay; the communities of King Salmon and Naknek are situated on the Naknek River. See Region 11 for descriptions of these communities.</p> <p>The Kvichak River is an important anadromous stream, provides habitat for waterfowl during the spring and fall, is used by belugas for both feeding and calving, and contains numerous harbor seal haulout concentrations. Kvichak Bay merges imperceptibly into this river. The bay provides somewhat similar habitat to Kvichak River and is important as a beluga whale feeding and calving concentration area, the belugas arriving in the bay in May. While in this area, some feed in shallow tidal flats while others ascend the rivers, traveling as far as 10-20 miles inland. They depart Kvichak Bay in August. This bay also contains areas important for harbor seal haulouts and spring waterfowl concentrations. The area of 'Deadman Sands', situated in the central part of Kvichak Bay generally within or near sections 1, 2, 11, 12, 13, 14, 23, and 24 of T17SR50W, is especially important as a harbor seal haulout concentration. Another harbor seal haulout concentration area occurs west of Graveyard Point on the east side of the bay. The highest density of shorebirds and diving and dabbling ducks on the north coast of the Alaska Peninsula occurs in this bay. Kvichak Bay is affected by the Bristol Bay Fisheries Reserve.</p> <p>Harvest: Commercial harvest of pink, sockeye, chinook, chum and coho salmon occurs throughout Kvichak Bay (purse seine and drift net). Set net permits occur all along the upper Kvichak Bay, on both the east and west coastlines. The densest concentration of set net permits exist along the eastern coastline near the mouth of the Naknek River and south of Naknek. There is intense subsistence harvest of red salmon as a food staple in Kvichak Bay.</p>

Unit # / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R05T-03 Tidelands and Offshore Submerged Lands	165,569 Gu -- General Use	Map O-1	Manage for a variety of uses and resources. Protect areas with concentrations of seabirds and waterfowl. Consult with NMFS to determine if whales or other marine mammals are present prior to issuing an authorization. Maintain opportunities for personal and commercial harvest. This unit is included within the Bristol Bay Fisheries Reserve.	<p>This tideland unit occupies the area between Nushagak and Kvichak Bays. The more sensitive resources within this Region are associated with these bays and are to be managed according to the requirements listed for tideland units R05T-01 (Nushagak Bay) and R05T-02 (Kvichak Bay). The tidelands in this units as well as R05T-01 and -02 are governed by the restrictions of the Bristol Bay Fisheries Reserve.</p> <p>The area encompassed by this tideland unit is characterized by mixed sand and gravel beaches. Eroding peat scarps, some sheltered tidal flats, and marshes occur near Kvichak Bay, and marshes occur near Nushagak Bay. Waterfowl and shorebirds are common throughout the unit, and both whales and marine mammals are known to be present, but not at the concentration levels experienced in either R05T-01 and R05T-02.</p> <p>The commercial harvest of pink, sockeye, and chinook, chum, and coho salmon occurs within parts of this unit by purse seine and drift net. Set nets are present as well. There is also some subsistence harvest of salmon and herring in this unit.</p>