Region 17: Chignik, Perryville

Summary of Resources and Uses in the Region

Region Boundary

Region 17 includes the uplands of a portion of the Alaska Peninsula on the eastern side of the Aleutian Mountain Range from Stepovak Bay to Chignik Lagoon as well as the coastal islands (Map 3-17). It includes the Black Lake-Chignik River-Chignik Lake system. The western boundary of the Region is the drainage divide between Bristol Bay and the Pacific Ocean. Communities include Chignik (pop. 89), Chignik Lake (113), Chignik Lagoon (92), Perryville (106), and Ivanof Bay (3).

Except for small tracts of land that are used for public purposes or that represent continuation of state land in the adjoining Region (18), there are no state uplands within this Region. Native entities or the federal government own the uplands. Federal land consists of uplands within the Alaska Peninsula NWR and the islands of the Chiachi and Mitrofania Islands group that are part of the Alaska Maritime NWR. The focus of state management in this Region is tidelands and submerged lands.

State Lands: Ownership and Acreage

There is but little state-owned land in Region 17 except for small management units at community airports at Perryville and the Chigniks as well as the navigable waterbodies. The majority of land is Federally-owned and within the Alaska Peninsula National Wildlife Refuge. Native-owned lands are a sizeable portion of the Region and dominate the land situation around the Ivanof Bay-Perryville area and around the Chigniks. The plan applies to 3,641 acres of state-owned and state-selected uplands and 848,249 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

Region 17 is within the Alaska Peninsula ecological province. Most of the Region is steep, rugged, and mountainous with headlands that jut into the ocean. Drainage flow is predominantly eastward towards the Pacific Ocean. Principal drainages include the Black Lake-Chignik River-Chignik Lake system and the Kametolook River. The Pacific Coast has multiple embayments such as Stepovak Bay, Ivanof Bay, Mitrofania Bay, Kuiukta Bay, Chignik Bay, and Kujulik Bay. By far, the most significant topographic feature is Mount Veniaminof, an active volcano, which rises from sea level to an elevation of 7,075 feet; it has a base with a diameter of thirty miles.

Climate

The maritime climate is characterized by cool summers, warm winters and rainy weather. Along the coast, summer temperatures range from 39° to 60° ; winter temperatures average 21° to 50° . Low clouds, rain squalls, fog and snow showers frequently limit visibility. Average annual precipitation is 127 inches, including 58 inches of snow.

Other

Region 17 is primarily within the Chignik and Stepovak Bay Quadrangles. It is within the boundaries of the Bristol Bay Regional Native Corporation, and the Lake and Peninsula Borough.

Access

Access to the major communities and the Region is primarily restricted to marine and air travel; ATV's and skiffs are the primary modes of local transportation. At Ivanof Bay, there is a private 1,500' gravel airstrip, and the bay is accessible by floatplane. Scheduled flights arrive to and from King Salmon. Bulk cargo goods are barged to Chignik Bay. There is no public dock or harbor, although it is a local priority to develop one.

Perryville is accessible by air and sea. There is a state-owned 2,467' long by 50' wide gravel runway and seaplane base, and scheduled and charter flights are available from King Salmon. Cargo barges deliver fuel and supplies each spring.

Chignik has a state-owned 2,600' long by 60' wide gravel runway and a seaplane base. Regular flights run from King Salmon and Port Heiden. There is also a 1,630' private gravel airstrip. Barge services arrive weekly from late spring through early fall, and monthly during the remainder of the year. The state ferry operates bi-monthly from Kodiak between May and October. A 600-foot privately-owned dock and a boat haulout are available. A breakwater, 110-slip small boat harbor and public dock are under development. There is a strong regional interest in constructing roads between Chignik, Chignik Lagoon, Chignik Lake and the City landfill.

Chignik Lagoon is primarily accessible by air and sea. There is a state-maintained 1,600' by 60' gravel airstrip and public small boat harbor and seaplane base. Regular and charter flights are available from King Salmon. A cargo ship brings supplies annually, and goods are lightered to shore. Boat haulouts are available.

At Chignik Lake, there is a state-owned 2,800' long by 60' gravel airstrip; seaplanes may land at Chignik Lagoon. Regularly scheduled and charter flights are provided. Goods are lightered to the Lake via Chignik Lagoon weekly during the summer and monthly during the winter, and

transported overland. The state ferry provides service to Chignik Lagoon four times per year. There is no harbor, dock, barge access or boat haulouts.

Resources and Uses

Cultural and Historic. The community of Perryville was founded in 1912 as a refuge for Alutiiq people driven away from their villages by the eruption of Mt. Katmai. The present population of Chignik Lake traces its roots from the Alutiiq near Ilnik and the old village of Kanatak near Becharof Lake. The community was the winter residence of a single family in 1903. Other families moved from surrounding communities in the early 1950s when a school was built. The communities are a mixture of non-Natives and Alutiiq.

The state Office of History and Archeology lists fifty-six sites in Region 17; seventeen of these are historic and thirty-nine are prehistoric. Most of the historic and archeological sites occur in the Chignik Lake-Chignik River drainage, in the vicinity of Cape Kumliun, and near Perryville.

Economic. Villages in the Region typically have an economy based upon commercial fishing and subsistence activities. Residents commonly hold commercial fishing permits. Two fish processing plants operate in Chignik. Salmon, herring roe, halibut, cod and crab are processed here; between 600 to 800 people come to Chignik to fish or work in the plants each summer. The people depend upon subsistence hunting and fishing, and use salmon, trout, crab, clams, moose, caribou, bear, porcupine and seals.

Recreation. The Region is not heavily used for tourism and commercial recreation although it has abundant fish and wildlife resources and high scenic values. Recreational activities are related to outdoor uses such as hunting, fishing, wildlife viewing, and river use. Several commercial recreation operators use Chignik as a base.

Minerals and Coal. Region 17 contains a large number of base and precious metal occurrences and prospects. It also includes the Chignik coal basin. The identified resources for the Chignik and Herendeen Bay coalfields range up to 200 million short tons; hypothetical and speculative resources range to three billion short tons. Coal occurs as Cretaceous bituminous and subbituminous coals of the Coal Valley Member of the Chignik Formation; the coal units are typically less than seven feet thick ranging from less than two to seventeen feet. At least fortynine base and precious metal occurrences are found in the Region. Most are porphyry or polymetallic deposits. One of the most significant porphyry copper deposits is Bee Creek, located on the north side of Chignik Bay. Disseminated chalcopyrite occurs in an arkosic sandstone near a late Tertiary dacite stock which displays zoned alteration patterns with a potassic-altered core.

Oil and Gas. The oil and gas potential of the Region is not known; part of an oil and gas basin lies in a small portion of the southwestern part of the Region and near Black Lake indicating potential in these areas. State and Native landowners 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 Boroughs 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).

Geothermal. There are no thermal springs in Region 17.

Materials. Materials sites along the beaches are used from time to time.

Forestry. There are no significant forestry resources in Region 17.

Fish and Wildlife. Salmon resources of the Black Lake, Chignik Lake, and Chignik River drainage support an important commercial and subsistence harvest as well as commercial fish processing. Wildlife resources include a large brown bear population, caribou, some moose, raptors, abundant marine mammals, and seabirds. Moose and caribou are harvested by subsistence users. The coastal portions of the region provide nesting areas for eagles and other raptors including peregrine falcons.

Management Considerations: Local and State Plans

A number of management plans were considered in development of this plan. These include: the Bristol Bay Area Plan; the Lake and Peninsula Coastal Zone Plan; the Southwest Alaska Comprehensive Economic Development Strategy 2003-2008; and the Southwest Area Transportation Plan. The management plans for the Alaska Peninsula and Alaska Maritime National Wildlife Refuges were also considered.

The Bristol Bay Area Plan (1984) affected all state lands in the Region until this revision. Region 17 was to be managed for fish and wildlife habitat and harvest. Mineral exploration and development and community expansion settlement were encouraged. This revision replaces and supersedes the original (1984) Area Plan.

Region 17 is within the Lake and Peninsula Borough. Both the Comprehensive Plan and the District Coastal Management Plan of the Borough apply to Region 17. The Comprehensive Plan focuses on economic and infrastructure development issues and does not contain specific land use standards or a land use map. The Enforceable Policies of the District Coastal Management Plan are extensive; policies affecting anadromous streams, bald eagle nests, oil and gas development, material extraction and mining can be applicable, under certain instances, to state lands. See <u>http://www.alaskacoast.state.ak.us/</u> for more information on enforceable policies. These policies should be consulted by DNR prior to issuing an authorization.

Region 17 is also within the area covered by the Southwest Alaska Comprehensive Economic Development Strategy 2003-2008, which was developed for the U.S. Department of Commerce Economic Development Administration by the Southwest Alaska Municipal Conference (July

2003). This document developed a number of goals, objectives, and strategies to facilitate and support efforts that retain and grow the region's wealth, including diversifying the economic base.

The Southwest Alaska Transportation Plan (ADOT/PF, November 2002) identified an Alaska Peninsula Transportation Corridor, which in general extends from South Naknek to the Chigniks connecting with the communities of Egegik, Pilot Point, Ugashik, and Port Heiden. The Alaska Peninsula Corridor is an overland route linking the communities of the Alaska Peninsula from Ivanof Bay to Naknek. The key facility in this corridor is the port at Chignik, from which fuel and supplies can be disbursed to other communities via road connections. From Chignik the corridor extends west along the Gulf of Alaska coast to Perryville and Ivanof Bay. It also extends from Chignik to Chignik Lake and Chignik Lagoon, then crosses the Alaska Peninsula to Port Heiden. From Port Heiden the corridor extends north, connecting Pilot Point, Ugashik, Egegik and South Naknek, and tying into the Cook Inlet to Bristol Bay Corridor at Naknek.

The Comprehensive Conservation Plans of the Alaska Peninsula and Alaska Maritime National Wildlife Refuges guide the management of federal uplands within these Refuges. See the section on Local and Federal Plans in Chapter 3 for a description of these plans and how they apply to federal lands.

Municipal Selections

The Lake and Peninsula Borough has no outstanding municipal selections in Region 17.

Management Summary: Uplands

The small amount of state land within this Region is associated with state public facilities (primarily airports), small tracts of land on the western boundary of the Region, and one small management unit at Black Lake west of Chignik. Tracts used for public facilities are to be retained by the state. The isolated areas of state uplands are to be managed for multiple uses; no development is expected within these management units during the planning period, except possible isolated and site-specific development locations, as may occur with oil and gas or mineral exploration and development.

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. 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). Land that contains one or more resource values, none of which is of sufficiently high value to merit designation as a primary 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. Land designated General Use may be considered for conveyance to municipalities, subject to a Best Interest Finding. There are currently no municipal selections in this Region, however. Land with this designation is to be retained in state ownership during the planning period.
- Public Facilities-Retain (Pr). These sites are reserved for a specific infrastructure to serve state interests. They are to be retained by the state and managed under for public purposes, usually as airports.
- Habitat (Ha). Generally, this designation applies to areas of varied 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 the permanent loss of a population or sustained yield of a species. In Region 17 this designation is applied to streams and shorelands cataloged by the Alaska Department of Fish and Game as anadromous

(<u>http://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?adfg=maps.interactive</u>). Land with this designation is to be retained in state ownership.

• 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).

Specific Management Considerations

- Generally Allowed Uses. The Generally Allowed Uses in 11 AAC 96.020 can occur on state-owned land 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 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.
- Mineral Closing and Opening Orders. No mineral closing or opening orders affect this Region. No new MCOs are recommended.

- Retained lands and Lands suitable for Disposal. Except for the several small management units allocated to Public Facilities-Retain, there are no state lands that are designated to be retained by the state. However, see the paragraph above on Proposed Transportation Corridors.
- 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, Public Recreation and Tourism-Dispersed, a co-designation of Habitat and Public Recreation and Tourism-Dispersed, and, sometimes, General Use. Authorizations issued by DNR are to maintain the habitat and public recreation values of these waterbodies.

Management Summary: Tidelands and Submerged Lands

Tidelands represent the majority of state lands within this Region, and are the focus of management within the Region. Most of the tidelands adjoin federal National Wildlife Refuges (Alaska Peninsula and Alaska Maritime) or Native-owned tracts. Those adjacent to the coastal islands are particularly important. The tidelands adjacent to the Chiachi and Mitrofania Island groups provide valuable habitats for numerous seabird colonies. There are also several harbor seal and sea lion haulouts. Tidelands adjacent to the Alaska Peninsula coast frequently contain eel grass beds, but are hardly used by harbor seals or sea lions and are unpopulated by sea otters except for the established populations at Kupreanof Point and Chignik Bay. The Chiachi Islands are also unpopulated by sea otter.

The community of Chignik, where there are two operating canneries, is the commercial fishing hub for this area, servicing primarily Chignik Lagoon, Chignik Lake and Perryville. Salmon, herring roe, halibut, cod and crab are processed here.

A commercial herring sac roe harvest occurs primarily in Kujulik Bay, Castle Bay and Chignik Bay, and herring sac roe (food/bait) occurs in Stepovak Bay. Pacific herring trawl occurs in the vicinity of Sutwik Island and the Mitrofania Islands. Purse Seine harvest of pink, sockeye, chinook, chum and coho salmon occurs extensively in Chignik Bay and Chignik Lagoon. Purse seine harvest for pink and chum salmon also occurs along the coast of this region, most especially in Kuiukta, Mitrofania, Ivanof, Humpback, and Stepovak Bays. Substantial harvests of pink, sockeye, chum, and coho salmon occur along the capes between Castle Bay and Kupreanof Point and in Stepovak Bay. Red king, tanner, and dungeness crab are harvested all along the southern coast of this region in bays and lagoons, with the highest concentrations of harvest being in the Chignik Bay and Lagoon areas. Shrimp are harvested in Chignik, Castle, and Mitrofania Bays.

Plan Designations and Management Intent

Coastal Tidelands. Tidelands adjacent to Native or private land are designated General Use. Tideland authorizations in these areas are considered appropriate but such authorizations shall minimize disturbance to sensitive marine resources.

Tidelands adjacent to Alaska Maritime and Alaska Peninsula NWRs (R17T-01). Both refuges are affected by a Tideland Resource Management Zone. Tidelands within this Zone are designated Public Recreation and Tourism-Dispersed and Habitat and are to be managed to protect habitat values and maintain the public recreation value of these areas. For a detailed description of this Tideland Resource Management Zone, see Tidelands Summary in Chapter 3.

See the Resource Allocation Table for more details on this tideland management unit.

Resource Allocation Table for Upland Management Units - Region 17

Unit # / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R17-01	3,236	Map 3-17	This unit is designated General Use (Gu). It is to be managed for a variety	
Black	Gu - General Use		of uses including minerals or oil and gas exploration and development, the protection of fish and wildlife resources and their associated habitat, and dispersed recreation. See Chapter 2 guidelines for anadromous fish and caribou calving areas. Intensive development is not expected within this unit during the planning period except occasionally and at specific locations related to oil and gas or recreation. It is intended that this unit be retained in state ownership during the planning period.	
R17-02	29.47	Map 3-17	The unit is to be managed by the ADOT/PF in accordance with FAA and	This unit (ADL 224035; LSH 263 and OSL 263) consists of land e encompassing the public airport facilities at Chignik Lagoon. It is managed by the ADOT/PF.
Chignik Lagoon Airport	Pr - Public Facilities- Retain	S045S059W	ADOT/PF guidelines for public airports, in accordance with the management right and with the stipulations of the conveyance. The unit is to be retained in state ownership.	
R17-03	123	Map 3-17	The unit is to be managed by the ADOT/PF in accordance with FAA and	The unit (ADL 64601, ADL 220384, and OSL 640) consists of land t encompassing the airport associated facilities at Chignik. It is managed by the ADOT/PF.
Chignik Airport	Pr - Public Facilities- Retain	S045S058W	ADOT/PF guidelines for public airports, in accordance with the management right and with the stipulations of the conveyance document. The unit is to be retained in state ownership.	
R17-04	18.58	Map 3-17	The unit is designated General Use (Gu). It is to be managed for a variety of	
Chignik Lake Vicinity	Gu - General Use	S045S060W	uses including minerals, protection of fish and wildlife resources and their habitat, and dispersed recreation. Intensive development is not expected within this unit during the planning period except occasionally and at specific locations. It is intended that this unit be retained in state ownership during the planning period.	
R17-05	5.35	Map 3-17	The unit is designated as Public Facilities-Retain (Pr) and is to be managed	conditions of contiguous tracts of land (ADL 228432 and LSH 522) administered by the
Chignik Lake ADF&G Admin Site	Pr - Public Facilities- Retain	S045S060W Sec, 19,30	in accordance with the terms of the management right and the conditions of the limited state holding (LSH 522). The unit is to be retained in state ownership.	
R17-06	2.72	Map 3-17	The unit is to be managed by the ADOT/PF under the terms of the	This small unit (ADL 224227 and OSL 973) consists of land managed by the ADOT/PF near the Chignik Lake public airport.
Chignik Lake DOT Admin Site	Pr - Public Facilities- Retain	S045S061W	management right. The unit is to be retained in state ownership.	
R17-07	102	Map 3-17	The unit is to be managed by the ADOT/PF according to guidelines	The unit consists of land (ADL 224226 and LSH 264) encompassing the Chignik Lake public airport and associated facilities; it is managed by the ADOT/PF.
Chignik Lake Airport	Pr - Public Facilities- Retain	S045S061W	established by the FAA and ADOT/PF for public airport facilities, in accordance with the management right, and terms of the limited state holding. The unit is to be retained in state ownership.	
R17-08	76	Map 3-17	The unit is to be managed by the ADOT/PF in accordance with guidelines	The unit consists of lands (ADLs 224246 and 221514) which encompass the Perryville public airport and are administered by the ADOT/PF.
Perryville Airport	Pr - Public Facilities- Retain	S049S064W	established by the FAA and ADOT/PF for public airports and in accordance with the management rights. The unit is to be retained in state ownership.	

Resource Allocation Table for Tideland Management Units - Region 17

Unit # / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
R17T-01 Tidelands adjacent to NWRs	147,243 Ha - Habitat Rd - Public Recreation and Tourism- Dispersed	Map 3-17	Tidelands adjacent to the Alaska Maritime and Alaska Peninsula National Wildlife Refuges are to be managed to protect sensitive habitat values, fisheries and wildlife resources, and the public recreation resources of the National Refuges. A Tideland Resource Management Zone (TRMZ) affects these tidelands. See "Management Summary, Tidelands" in Chapter 3 for a more detailed description of TRMZs and the management intent and requirements for such zones. As appropriate, consult with Alaska Maritime and Alaska Peninsula NWRs, USFWS, and NMFS prior to issuing authorizations.	This tideland Unit adjoins the Alaska Peninsula NWR and the islands of the Chiachi and Mitrofania Islands group that are part of the Alaska Maritime NWR. Resources associated with the tidelands adjoining the Alaska Peninsula NWR include occasional sea bird colonies, a fairly heavy concentration of bald eagle nests, and scattered areas of kelp. The tidelands adjacent to the Chiachi and Mitrofania Island groups are particularly valuable as habitats for numerous seabird colonies. Tidelands are little used by sea lions or harbor seals with the exception of established harbor seal haulout areas on the eastern coastline of Unavikshak Island and the northern coastline on Cape Kumliun in Kujulik Bay. Kujulik Bay is the only sea otter concentration area with the exception of established populations in Chignik Bay and Kupreanof Point. Kujulik Bay is also the site of shrimp egg hatching and rearing concentrations. Herring spawning areas occur near the head of Kujulik Bay at Bear Creek and in Hook Bay south of Cape Kumliun. The Chiachi Islands are not populated by sea otter, but there are several harbor seal and sea lion haulouts and occasional areas with kelp beds.
				Harvest: Commercial herring sac roe harvest occurs in the tidelands of this region, primarily in Kujulik, Castle, and Chignik Bays and further west in Stepovak Bay. Pacific herring trawl occurs around the Mitrofania Island group. Purse seine harvest of pink, sockeye, chinook and chum salmon occurs along the coast of this region, but is concentrated in the vicinity of Chignik Bay and Chignik Lagoon. Purse seine harvest of salmon extends westerly along the Alaska Peninsula concentrating in Kuiukta, Mitrofania, and Stepovak Bays and in the vicinity of the Mitrofania and Chiachi Island groups. Pacific herring trawl also occurs around the Mitrofania Island group. Sport fishing is prevalent in the tidelands along the coastline in this region.
				The community of Chignik is a commercial fishing hub for the area. Private tideland facilities support the fish processing industry at Chignik and provide commercial docking facilities for the State Ferry which docks at Chignik bimonthly. The villages of Chignik Lagoon and Perryville are heavily dependent on commercial fishing. Red king, tanner and dungeness crab are harvested in bays and lagoons in this region, with the highest concentrations of harvest being in the Chignik and Chignik Lagoon area. Shrimp are also harvested in Chignik, Castle and Mitrofania Bays.
				Subsistence harvest only occurs in the Chignik Bay and Chignik Lagoon area and consists of salmon and other fish, crab, clams, occasional marine mammals and waterfowl (birds and eggs).
R17T-02 Tidelands and Offshore Submerged Lands	848,249 Gu - General Use	Map 3-17	Manage for a variety of uses and resources. Protect sea bird colonies and eel grass concentration area. Maintain opportunities for commercial, sport, and subsistence harvest.	This unit consists of the tide and submerged lands adjoining privately owned uplands (including Native corporation land) and the submerged lands offshore of the Tideland Resource Management Zone (TRMZ) of this Region (R17T-01). See R17T-01 for a description of the resources and

Unit # / Name	Acres / Designation(s)	MTRS	Management Intent	Resources, Uses, Additional Info
				management guidelines for the TRMZ.
				The majority of the sensitive biological resources within this Region are included within the TRMZ. Outside of the TRMZ there are a few eel grass locations and sea bird colonies.
				Some commercial herring sac roe harvest occurs in the tidelands of the Region, although it primarily concentrates at Kujulik, Castle, and Chignik Bays, and further west in Stepovak Bay. Purse seine harvest of pink, sockeye, chinook, and chum salmon occurs along the coast, concentrating in the vicinity of Chignik Bay and Chignik Lagoon. Sport fishing is prevalent in the tidelands along the coastline.