



**PEBBLE PROJECT
ENVIRONMENTAL BASELINE DOCUMENT
2004 through 2008**

**CHAPTER 53.
RECREATION
Cook Inlet Drainages**

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ACRONYMS AND ABBREVIATIONS

ADF&G	Alaska Department of Fish and Game
ANCSA	Alaska Native Claims Settlement Act
DWC	Division of Wildlife Conservation
FDD	Fisheries Distribution Database
GMU	Game Management Unit
KAP	Kenai Area Plan
UCU	Uniform Coding Unit

53. RECREATION

53.1 Introduction

This chapter inventories, describes, and maps the outdoor recreational resources and activities in the Cook Inlet drainages study area.

53.2 Study Objectives

The study objectives were as follows:

- Describe the location, use, and management status of important recreational resources in the study area.
- Describe, quantify, and map important recreational activities and their locations.

53.3 Study Area

The regional study area for the recreation baseline description for Cook Inlet is defined, in concept, to encompass the resources in the Cook Inlet drainages study area.

The boundary between the Cook Inlet and Bristol Bay drainages defines the inland boundary of the Cook Inlet study area. For practical reasons, the study area's northern and southern boundaries were flexibly defined to fit a variety of recreational resources and activities and related resource databases. The public agencies that manage recreational resources and generate recreational data often define different geographic units for different resources in the same area. For example, the Alaska Department of Fish and Game (ADF&G) collects data for different geographic units for sportfishing and for big game hunting, while the State's Kenai Area Plan uses yet another set of unit boundaries. As a result, the study areas for land use, big game hunting, and sportfishing differ somewhat in extent (Figure 53-1), as described below:

- The land use study area includes the coastal strip of uplands bounded on the west by the Bristol Bay/Cook Inlet drainages boundary, on the east by Cook Inlet, on the north by Lake Clark National Park, and on the south by Katmai National Park. It does not include the parts of Lake Clark National Park or Katmai National Park that lie in the Cook Inlet drainages. (The parks straddle the drainages boundary; however, because most of their recreational use occurs west of the boundary, the parks are discussed in their entirety in Chapter 25, Recreation—Bristol Bay Drainages.) The study area includes the islands, tidelands, and submerged lands south of Redoubt Bay to Cape Douglas. In all, the land use study area includes 902 square miles (approximately 577,280 acres) of uplands and approximately 1,100 square miles (approximately 704,000 acres) of tidelands and submerged lands.

- The sportfishing study area is based on ADF&G sportfishing management areas. This study area includes the 3,044 square miles (approximately 1,948,160 acres) of uplands in management Area N (West Cook Inlet-West Susitna River drainages), parts of which are in the national parks. (This freshwater sportfishing study area coincides closely with the Tuxedni-Kamishak Bays drainage as defined by the U.S. Geological Survey [USGS and NRCS, n.d.] It also includes all of Area N's marine waters from the west coast of Cook Inlet to the middle of Cook Inlet and from the mouth of the Susitna River on the north to Cape Douglas, south of Kamishak Bay. (At the time the data for this chapter were compiled, the middle of Cook Inlet was the offshore boundary between Area N and Area P [Kenai Peninsula]. ADF&G later consolidated Area N and Area P.)
- The study area for big game hunting is based on ADF&G's game management units (GMUs). Some GMUs are subdivided into smaller Units. Units may be further subdivided into uniform coding units (UCU), which usually correspond with minor drainage areas. Each UCU is identified by a unique label that indicates GMU/Unit/UCU, for example, GMU 9/Unit A/UCU 0101 or, more simply, GMU 9A-0101. The study area includes all six UCUs in Unit 9A and three of 13 UCUs in Unit 9C, and covers a total of 4,305 square miles (approximately 2,755,200 acres). Parts of this study area are within national park boundaries.

Part of the recreation study area is within the Pebble Project central study area (Figure 53-1), which includes the local drainage areas in which possible Pebble project facilities (transportation and port facilities) may be situated.

53.4 Scope of Work

The scope of work for the recreation study was to inventory, describe, quantify and map the outdoor recreational resources and activities, mainly sportfishing, big game hunting and wildlife viewing in the Cook Inlet drainages study area. The work was conducted by Kevin Waring Associates.

53.5 Methods

This baseline description draws mainly on existing data sources. For land use, it uses the Kenai Area Plan (KAP), which describes the State of Alaska's plan for management of state-owned lands (including tidelands and submerged lands up to three miles offshore) and recreational resources and includes the study area. The KAP documents recreational resources on state lands and identifies state tracts that are to be managed primarily for recreational purposes. For sportfishing and big game hunting, this baseline description relies on ADF&G's published and online resource and management reports and documents, as well as unpublished data records. The State actively manages fish and wildlife resources, and regulates and monitors sportfishing and big game hunting. As a result, the database on sportfishing and big game hunting is comprehensive and geographically detailed. Other recreational uses of state and private lands in this wilderness region, for example, backcountry camping and hiking, wildlife viewing, and flightseeing, are not counted in any systematic way and may go unnoticed. Consequently, information about these recreational activities is more general in nature. Published information on recreational assets and uses on private lands is minimal.

As needed, these data sources were supplemented through interviews of people with relevant information about recreation in the study area. An inventory of recreational lodges was compiled from extensive web searches and other unpublished sources.

53.6 Results and Discussion

53.6.1 Introduction

Several circumstances constrain the opportunities for recreation in the study area. The study area is remote, unpopulated, and lacks transportation improvements. It is costly and time-consuming to access. The coastal uplands are rimmed by rugged mountains, with extensive tide flats and nearshore conditions that are, at some locations, hazardous for small boats. The scenery is dynamic and marine wildlife opportunities include otters, seals, and sea lions, as well as several species of birds. However, excepting local concentrations of brown bears, big game populations are low. The McNeil River State Game Sanctuary hosts the world's largest gathering of brown bears, but public access is tightly restricted for reasons of conservation management. Prime sportfishing sites are also scarce. The rugged terrain and the difficulty of access limit opportunities for backcountry recreation.

53.6.2 Recreation Lands

The regional study area for land use encompasses approximately 902 square miles (approximately 577,280 acres) of uplands (here defined as lands above the mean high water line and ordinary high water mark [ADNR, 2001]), which are under various ownership (Figures 53-1 and 53-2), and approximately 1,100 (approximately 704,000 acres) miles of tidelands and submerged lands (ADNR, 2001), all of which are state-owned. Briefly, the State of Alaska owns 573.1 square miles (approximately 366,784 acres) of uplands, mostly in or adjacent to the McNeil River State Game Refuge and Sanctuary. Several Alaska Native Claims Settlement Act (ANCSA) regional or village corporations hold patent or interim conveyances to approximately 259.7 square miles (approximately 166,208) acres) of uplands, and they have selected another 99.6 square miles (approximately 63,744 acres) whose final ownership remains to be determined. Alaska Native allotments and other small privately owned tracts account for the balance of private landholdings. Federal landholdings consist of a few small islands that are part of the Alaska Maritime National Wildlife Refuge. With the exception of the Williamsport barge landing and a few scattered homesites, recreational lodges, and native allotments, the study area is undeveloped wilderness. (See Chapter 46 for more details on existing land ownership and land uses in the study area.)

The KAP establishes primary land use designations for its planning units. The designations represent the primary uses and resources for which the units are to be managed. Some units may have more than one designated primary use. Generally, state lands are managed for multiple uses, and the primary use designation does not preclude other compatible uses.

The primary use designation for most state-owned uplands in the land use study area is for management as habitat (Table 53-1). No state uplands are designated to be managed primarily for recreation. Conversely, almost all tidelands and submerged lands are designated for primarily “public recreation and tourism—dispersed use” (Tables 53-1 and 53-2). The KAP characterizes this designation as follows (ADNR, 2001):

Areas that attract recreationists or tourists who range throughout the area. Also, areas that offer high potential for dispersed recreation or tourism because of desirable recreation conditions that are scattered or widespread rather than localized. Developed facilities are generally not necessary other than trails, trail signs, primitive campsites, and other minor improvements.

The region's uplands are relatively lightly used for sportfishing and big game hunting. Apart from a few recreational lodges, there are no developed recreational facilities in the region. Access to ANCSA corporate lands for recreational use is by permission of the landowners. The KAP notes that the coastal salt marshes in several planning units (in Tuxedni Bay and near Glacier Spit, and Chinitna River and Clearwater Creek in Chinitna Bay) are vital foraging habitat for large numbers of brown bears after den emergence in April until salmon and berries become available in late July. These areas are attracting increasing numbers of guided bear-viewing trips and photography trips and aerial bear-viewing flights. Their popularity is boosted by the limited number of permits made available for bear viewing at McNeil River.

The KAP overlaps three state-owned areas with habitat, wildlife, or recreation values that are governed by their own management plans (see Chapter 46). These special management areas are as follows:

- McNeil River State Game Refuge and Sanctuary—a world-renowned location for brown bear viewing and the study area's outstanding recreational asset.
- Kamishak Special Use Area—two state tracts adjacent to the south boundary of the McNeil River State Game Sanctuary
- Lake Clark Coastline Special Use Area—tidelands in and adjacent to Lake Clark National Park and Tuxedni National Wildlife Refuge and from Tuxedni Bay to Chinitna Bay.

53.6.3 Sportfishing

The study area supports minor freshwater and saltwater sport fisheries. ADF&G's Sport Fish Division manages and regulates Alaska's sport fisheries (ADF&G SFD, 2008a).

53.6.3.1 Freshwater Sportfishing

The freshwater sportfishing study area (Figure 53-1) consists of the western Cook Inlet drainage of ADF&G Management Area N. The upland study area extends south from Redoubt Bay to Cape Douglas and encompasses 3,044 square miles (approximately 1,948,160 acres). Because of the area's remoteness, almost all freshwater sportfishers travel to and from their fishing destination by small plane from the western Kenai Peninsula or from Anchorage.

ADF&G harvest-survey data were used to identify, measure, and map freshwater sportfishing activity and catch¹ for stream segments and waterbodies in the study area. The annual survey method aggregates

¹ "Catch" includes all fish caught, while "harvest" includes only fish caught and kept. This distinction is crucial in the study area, since most freshwater sportfishing there is "catch and release," wherein fish caught are returned alive to the waters in which they were caught. From 1999 through 2005, about 93 percent of freshwater sportfishing in the study area was catch and release.

individual survey reports for freshwater species by stream segments or waterbodies, not spot locations. (See Chapter 25 for details the data and their use in this study.)

ADF&G's *Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes—Southwestern Region, Effective June 1, 2007* (Johnson and Weiss, 2007) identifies all the waters identified by ADF&G as important for spawning, rearing, or migration of anadromous fish species. ADF&G's Fisheries Distribution Database (FDD) includes an atlas that maps the location of these waters and the species that occur there. (Examples of the maps are reproduced as Figures 53-3 and 53-4. Similar maps for the rest of the sportfishing study area can be found at the FDD website [ADF&G SFD, 2007].)

ADF&G harvest-survey data for 1999 through 2005 were compiled and analyzed. During those years, freshwater sportfishers made light use of the sportfishing study area. There were four locations in the study area for which there were reliable data on the level of sportfishing activity and catch. The four locations, in order by activity and catch (highest to lowest), were Silver Salmon Creek, Kamishak River, Polly Creek, and Crescent Lake (Table 53-3 and Figure 53-5). Sportfishers reported activity at several other locations, but the number of survey responses was too few for statistical reliability.

The average number of angler days per year (1999 through 2005) for the Cook Inlet sportfishing study area, comprising 3,044 square miles (approximately 1,948,160 acres), was 2,126 and the average annual catch for all species totaled 13,325 fish (Table 53-3), of which an average of 883 fish were retained as harvest. For comparison, the corresponding figures for the Bristol Bay drainages sportfishing study area, comprising 26,233 square miles (approximately 16,789,120 acres), were 68,991 angler days and 397,296 fish caught (Chapter 25). Once adjusted for area, the Bristol Bay study area's angler days and average annual catch were three to four times greater than the Cook Inlet study area's.

Silver Salmon Creek, near the head of Chinitna Bay, accounted for more than half of the angler days in the study area and for nearly half the total catch (Table 53-3 and Figure 53-5). The Kamishak River, located at the southern end of the study area, was a distant second in both respects. Polly Creek, Crescent Lake, and other scattered locations accounted for the balance of sportfishing activity and catch. No freshwater sportfishing activity or catch were reported for the vicinity of Iliamna Bay and the possible Pebble Project port site.

Coho salmon was the most-caught species, accounting for 58 percent of the total catch during 1999 through 2005 (Table 53-4 and Figures 53-6 and 53-7). Dolly Varden and chum salmon were the next two most-caught species. The reported catch of king salmon and rainbow trout, two of the most prized sportfishing species, was very minor.

The annual database contains insufficient data for the study area to support conclusions about trends in sportfishing activity and catch (Table 53-5). ADF&G regards 12 annual survey responses as the minimum number of responses needed to document trends. Silver Salmon Creek is the only location that surpassed that threshold, and its annual figures did not establish any clear trend from 1999 through 2005 other than the erratic return of salmon species.

53.6.3.2 Saltwater Sportfishing and Boating

The marine waters of Area N support a modest level of saltwater sportfishing activity. Several circumstances limit the appeal of West Cook Inlet waters for recreational boating and saltwater

sportfishing. The study area has no developed small-boat facilities. The nearest departure points for West Cook Inlet destinations would be boat landings and small-boat harbors on the western Kenai Peninsula. The distances and running times are substantial—it is 58 miles from Homer to Chinitna Bay, 72 miles to Iliamna Bay, and 95 miles to Kamishak Bay. From Ninilchik/Deep Creek, it is 32 miles to Tuxedni Bay, 50 miles to Chinitna Bay, and 78 miles to Iliamna Bay. Moreover, the West Cook Inlet coast can be inhospitable to small boats. The United States Coast Pilot (USDC, 2008) cites such local boating hazards as extensive shoals and tidal mudflats, reefs, wide tidal ranges, tidal rips, high winds, and floating debris. Also, there are few natural harbors offering secure anchorages (USDC, 2008):

Iniskin Bay is a secure harbor in any weather, although subject to some williwaws from the high sharp base peaks on the W shore. It is considered the only secure anchorage for medium-sized vessels on the W side of the Cook Inlet, and is used by fishing industry vessels up to 4,000 tons.

The Coast Pilot also reports there are protected anchorages in Cottonwood Bay off Iliamna Bay and in Tuxedni Channel inside Chisik Island south of Tuxedni Bay.

From 2000 through 2005, in lower Cook Inlet (in the part of Area N south of Chinitna Point to Point Douglas) the average annual number of angler days fished was 779, the number of anglers was 526, and the number of angler trips was 448 (Table 53-6). North of Chinitna Point to the Susitna River, the corresponding numbers were 947 angler days, 735 anglers, and 632 angler trips. As the eastern boundary of Area N is the middle of Cook Inlet, much of this fishing activity may have occurred well offshore of the western coast of Cook Inlet. The primary target sportfish species was Pacific halibut, which accounted for the bulk of the harvest. During 2000 through 2005, the average annual harvest of Pacific halibut south of Chinitna Point was 891 fish, while north of Chinitna Point it was 1,016 fish. For comparison, the 2004 halibut harvest in the saltwater area of Area P (Kenai Peninsula)—the state's most productive halibut sportfishing grounds—was 209,786 fish, and the statewide harvest was 482,550 fish (ADF&G SFD, n.d.).

West Cook Inlet is also one of two management areas that account for almost all the sport harvest of razor clams in Alaska (Area P, the Kenai Peninsula, is the other). Polly Creek Beach, north of Tuxedni Bay, accounted for the bulk of the West Cook Inlet razor clam harvest. The average annual harvest from 2000 through 2005 was 13,381 razor clams at Polly Creek Beach and 20,597 for the entire study area (Table 53-6). By comparison, the 2004 razor clam harvest in Area P was 525,629 razor clams (ADF&G SFD, n.d.). ADF&G also reports some harvest of hard-shell clams in Tuxedni, Iniskin, Iliamna, and Kamishak bays (Szarzi, pers. comm. 2008).

53.6.4 Big Game Hunting

ADF&G's Division of Wildlife Conservation manages and regulates big game hunting in Alaska (ADF&G, 2007). This baseline description uses ADF&G data on big game hunting. (The source of ADF&G's data on big game hunting is described in Chapter 25, as is the method by which the hunting data for this chapter were developed from unpublished ADF&G data.) ADF&G's regulatory year and related annual hunt data run from July 1 through June 30. For simplicity, in this chapter, the regulatory year for hunting is denoted by its beginning year. For example, the regulatory year beginning July 1, 2000, and ending June 30, 2001, is denoted as 2000. The study area for big game hunting is within GMU

9 and encompasses Unit 9A and a portion of Unit 9C (Figures 53-8 and 53-9). The primary target species for big game hunting are brown bear, moose, and caribou.

53.6.4.1 Brown Bear

GMU 9 on the Alaska Peninsula is rich with salmon streams and is prime habitat for brown bears (Butler, 2007a; ADF&G DWC, 2007b). The McNeil River State Game Refuge and Sanctuary, the state's premier bear-viewing site, is closed to bear hunting, but other state and private lands in the study area are open to hunting. For management purposes, the brown bear hunt is opened only in odd-numbered regulatory years. ADF&G's brown bear management report for 2004 and 2005 for GMU 9 tells how brown bear hunting is conducted in the study area (Butler, 2007a). Guided hunts account for 75 percent of the bear harvest. In 2005, hunters who were not residents of Alaska took 82 percent of the harvest. Most successful hunters used aircraft to reach their hunt locations.

In all, 164 brown bears were harvested in the study area from 2000 through 2005 (Table 53-7 and Figure 53-9). The most productive UCU was UCU 9A-0201. It includes the Iniskin Peninsula and Iniskin Bay which overlap the central study area and additional territory to the east and south. The harvest there for 2000 through 2005 was 132 brown bears or 80 percent of the total harvest in the study area. Several other UCUs supported smaller harvests, and several UCUs that were closed to brown bear hunting had no harvest. The annual harvest figures for 1997 through 2006 show a relatively stable harvest level, once account is taken of the alternate-year open season (Table 53-8).

53.6.4.2 Moose

In recent years, the study area has supported a small, but declining, moose population and a modest level of hunting (Butler, 2006). From 2000 through 2005, 105 moose hunters visited the area and 36 moose were harvested (Table 53-7). The hunting activity and harvest were concentrated in the same three UCUs that accounted for the bulk of the brown bear harvest. Over 90 percent of the activity and harvest took place in the three UCUs (9A-0102, 9A-0201, and 9A-0301) stretching from north of Tuxedni Bay to central Kamishak Bay (Table 53-7 and Figure 53-10). UCU 9A-0201, part of which is in the central study area, was the most hunted and productive unit; 47 hunters harvested 15 moose there. ADF&G's moose management report for 2003 and 2004 (Butler, 2006) found that over 90 percent of the hunting effort during those years occurred in September. Approximately two-thirds of hunters were not residents of Alaska and many employed guide services. The great majority traveled by aircraft. The annual harvest figures for 1997 through 2006 suggest that there was a downward trend in both hunting activity and harvest for moose during that period (Table 53-8).

53.6.4.3 Caribou

The study area is outside the main range of either the Mulchatna or the Northern Alaska Peninsula caribou herds. The ADF&G regularly surveys statewide caribou conditions and harvest activities. The caribou management report for 2004 and 2005 (Butler, 2007b) reports no information for Unit 9A and minimal information for Unit 9C.

Caribou hunters visit the study area occasionally, but the reported hunting effort is low—a total of 28 caribou hunters from 2000 through 2005 (Table 53-7). The reported harvest was even lower—a total of

13 caribou, 12 of which were harvested in UCUs 9A-0102 and 9A-0201 near Tuxedni and Chinitna bays in the northern part of the study area (Table 53-7 and Figure 53-11). The hunting activity was too low to permit analysis of any trend in harvest levels over time (Table 53-8).

53.6.5 Other Recreation

Several locations in the study area are popular destinations for brown-bear viewing and photography; the most important of these is the McNeil River State Game Sanctuary. Public access to the sanctuary is limited and is obtained through a lottery permit system administered by ADF&G. In 2006, 183 permittees spent 970 user days in the sanctuary (ADF&G DWC, 2007b). A few recreational lodges based in the Bristol Bay region have permits to bring clients (an estimated 300 in 2006) to the larger McNeil River area for sportfishing and incidental wildlife viewing. Several locations in Chinitna Bay (Glacier Spit, Clearwater Creek, and Chinitna River) and Tuxedni Bay also are notable for brown-bear viewing opportunities. The restricted access to McNeil River State Game Sanctuary is boosting their popularity (ADNR, 2001).

The rugged terrain in the study area limits opportunities for river sports such as rafting. With few trails and roads, access to the backcountry of the study area is limited. The Kenai Area Plan notes trails or roads at Glacier Creek, Polly Creek, Johnson River, and the Iniskin River. There also are gravel or dirt roads out of Williamsport and along Fitz Creek on the Iniskin Peninsula. Because of the study area's remoteness, sport hunting for waterfowl is not a popular activity there.

53.6.6 Recreational Lodges

There are five remote recreational lodges in the study area (Figure 53-5). All are reached by small wheeled or float fixed-wing planes, usually originating from the western Kenai Peninsula. Four lodges are currently active. None of them are near Iliamna or Iniskin Bays. Two active lodges (Alaska Homestead Lodge and Horn Mountain Lodge) are situated by Silver Salmon Creek near the head of Chinitna Bay. Two others are on inholdings in Lake Clark National Park: Silver Salmon Creek Lodge on the coast between Chinitna Bay and Tuxedni Bay and Redoubt Mountain Lodge inland on Crescent Lake. All four active lodges are near popular freshwater sportfishing locations. The other lodge, King of Kings Lodge near Seal Point on the south shore of Chinitna Bay, was not operating in 2007. (Two other lodges are located south of the study area on the western Cook Inlet coast of Katmai National Park on Hallo Bay and Kukak Bay, respectively. Those lodges feature primarily wildlife viewing, especially brown-bear viewing.)

53.7 Summary

For practical reasons, within the Cook Inlet regional study area the component study areas for land use, sportfishing, and hunting resources were each defined differently. The land use study area covers the coastal strip of uplands bounded on the west by the Bristol Bay/Cook Inlet drainages boundary, on the east by Cook Inlet, on the north by Lake Clark National Park, and on the south by Katmai National Park. This study area totals approximately 902 square miles (approximately 577,280 acres) of coastal uplands and 1,100 square miles (approximately 704,000) of tidelands and submerged lands. The sportfishing study area is based on ADF&G sportfishing management areas and includes the 3,044 square miles (approximately 1,948,160 acres) of uplands in management Area N (West Cook Inlet-West Susitna River

drainages), parts of which are in the national parks. It also includes all of Area N's marine waters from the west coast of Cook Inlet to the middle of Cook Inlet and from the mouth of the Susitna River on the north to Cape Douglas, south of Kamishak Bay. The study area for big game hunting is based on ADF&G's game management units. It includes the six uniform coding units in GMU 9A and three of 13 uniform coding units in GMU 9C, and covers a total of 4,305 square miles (approximately 2,755,200 acres).

The State of Alaska owns most uplands and all tidelands and submerged lands up to three miles offshore. ANCSA Native corporations own or have pending selections on almost all the rest of the uplands. Federal landholdings are limited to a few small islands in the Alaska National Maritime Refuge. There are no settlements in the study area and only a few scattered seasonal residents who occupy remote homesites or Native allotments. In 2007, the regional study area contained four active remote recreational lodges whose primary attractions were sportfishing and wildlife viewing.

The terrain in the study area is rugged with few roads or trails, and the coastal waters pose some small boating hazards. The remoteness and lack of transportation improvements make recreational access to the area difficult, costly, and time-consuming. Generally, there is little backcountry recreation.

In 2000 through 2005, freshwater sportfishing in the study area showed an annual average of around 2,130 angler days, and saltwater sportfishing and clamming accounted for approximately 3,340 angler days. Coho salmon comprised the largest proportion of the freshwater catch. Razor clams, especially from around the Polly Creek beach, and Pacific halibut accounted for most of the saltwater harvest. The portion of study area from Chinitna Bay south to Kamishak Bay (UCU 09A-0201) yielded a harvest of over 130 brown bears during 200 through 2005. The hunting effort and harvest for moose and caribou in the study area is very low or, in some years, nonexistent.

The McNeil River State Game Sanctuary supports the world's largest concentration of brown bears. The sanctuary is closed to hunting, and public access for bear viewing and wildlife photography is tightly controlled by a lottery permit system. In 2006, 183 permittees spent 970 user days in the sanctuary. A few recreational lodges based in the Bristol Bay region have permits to bring clients (an estimated 300 in 2006) to the larger McNeil River area for sportfishing and incidental wildlife viewing. Several other locations that support seasonal forage habitat for brown bears also are becoming popular destinations for brown-bear viewing.

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TABLES

TABLE 53-1
Primary Use Designations for Kenai Area Plan Region 12: West Side of Cook Inlet—South of Redoubt Bay^a

Primary Use Designation^b	Uplands (acres)	Tidelands (acres)
Forestry	2,560	0
General Use	25,689	0
Habitat (fish and wildlife)	376,972	265,972
Harvest (fish and wildlife)	0	6,997
Heritage (cultural resources)	22,035	0
Public Recreation and Tourism, Dispersed Use	0	590,696
Resource Management, High Value	0	1,141
Waterfront Development	0	1,989

Notes:

- a. See Kenai Area Plan maps in Chapter 46 for locations of the KAP planning units and their use designations.
- b. Some planning units have multiple designated uses.
- c. Six hundred forty acres equal one square mile.

Source: ADNR, 2001.

TABLE 53-2
Management Intent for Management Units with Recreation-related Land Use Designations, Kenai Area Plan

Unit # / Name, Land Use Designation, Number of Acres	Designated Resource or Use for Unit/Management Intent	Other Resources or Uses
522A / General use tidelands, recreation and tourism — dispersed, 512,715 acres	Much of this area is adjacent to Lake Clark National Park. See Appendix D for management intent for the Special Use Land Designation that applies to part of this unit.	Beaches used by aircraft for landing. Herring spawning habitat, herring/salmon migration corridor, juvenile fish/shellfish-rearing habitat, commercial fishing activity. Anadromous stream mouths. Beluga whale habitat. Cultural sites. Herring spawn along coast, north of Unit 596, south of the mouth of Amakdedori Creek.
522B / Cape Douglas tidelands, habitat and recreation and tourism — dispersed, 68,039 acres	Waterfowl concentration area on tidelands, small seabird colonies by Cape Douglas. A Special Land Use Designation applies to the southern portion of his unit. Also see the “Management Intent for Multiple Units” section for additional management intent for his unit.	
598 / Augustine Island tidelands, habitat and recreation and tourism — dispersed, 8,106 acres	Eelgrass beds along west and north coast of island. Important anchorage for commercial fishing fleet. Commercial fishing activity.	
747 / Shaw Island tidelands, habitat and recreation and tourism — dispersed, 1,836 acres	Large seabird colony on Shaw Island. Also a harbor seal haulout. Consult with National Marine Fisheries Service before authorizing development in this unit because of harbor seal concentrations. A Special Use Lands Designation applies to this unit. Also see the “Specific Management Intent for Units” section for additional management intent for this unit.	Uplands on island are in federal ownership.

Note:

a. Six hundred forty acres equal one square mile.

Source: Excerpted from ADNR, 2001.

TABLE 53-3
Freshwater Sportfishing Average Annual Effort and Catch by Location, 1999-2005

Location	Average Annual Angler Days ^a		Average Annual Catch ^b	
	Number	Percent	Number	Percent
Crescent Lake	118	5.6%	595	4.5%
Kamishak River	391	18.4%	3,383	25.4%
Polly Creek	177	8.3%	715	5.4%
Silver Salmon Creek	1,117	52.5%	6,206	46.6%
Other locations ^c	322	15.2%	2,426	18.2%
Total	2,125		13,325	

Notes:

- ADF&G regards “angler days,” which take into account the number of anglers and sportfishing trips, as the best single overall measure of sportfishing activity.
- “Catch” includes all fish caught, whereas “harvest” includes only fish caught and kept. This distinction is crucial in the study area where, from 1999 through 2005, about 93 percent of freshwater sportfishing was catch and release.
- Locations with 12 or fewer survey responses for 1999 through 2005: Amakdedori Creek, Chenik Lake, Chinitna Bay streams, Clearwater Creek, Crescent River, Douglas River, Little Kamishak River, McNeil River, Mikfik Creek Red Creek, Shelter Creek, and Wadell Lake.

Sources: ADF&G SFD, 2008b, 2006, 2005.

TABLE 53-4
Freshwater Sportfishing Average Annual Catch by Location and Species, 1999-2005

Location	Coho Salmon	Dolly Varden	Chum Salmon	Pink Salmon	Sockeye Salmon	Grayling	Other Species ^a	All Species
Crescent Lake	114	242	0	33	106	66	34	595
Kamishak River	1,500	899	506	224	15	163	77	3,383
Polly Creek	236	75	365	0	38	0	0	715
Silver Salmon Creek	5,069	437	149	395	99	3	53	6,206
Other Locations ^b	847	611	591	220	89	0	67	2,426
All Locations	7,766	2,264	1,612	872	347	233	231	13,325
Percent	58.3%	17.0%	12.1%	6.5%	2.6%	1.7%	1.7%	

Notes:

- a. Includes king salmon, rainbow trout, and lake trout.
- b. Locations with 12 or fewer survey responses for 1999 through 2005: Amakdedori Creek, Chenik Lake, Chinitna Bay streams, Clearwater Creek, Crescent River, Douglas River, Little Kamishak River, McNeil River, Mikfik Creek Red Creek, Shelter Creek, and Wadell Lake.

Source: ADF&G SFD, 2008b, 2006, 2005.

TABLE 53-5
Freshwater Sportfishing Annual Angler Days and Catch by Species and Location, 1999-2005

Location/Year	Responses ^a	Angler Days	Catch (Number of Fish)							Total Catch
			Coho Salmon	Dolly Varden	Chum Salmon	Pink Salmon	Sockeye Salmon	Grayling	Other Species ^b	
Crescent Lake										
1999	3	180	37	110	0	0	32	79	12	270
2000	3	67	0	52	0	0	117	0	59	228
2001	6	275	322	484	0	230	0	385	67	1,488
2002	4	80	42	434	0	0	54	0	55	585
2003	3	86	23	169	0	0	537	0	24	753
2004	2	41	39	379	0	0	0	0	0	418
2005	3	100	335	67	0	0	0	0	21	423
Annual average		118	114	242	0	33	106	66	34	595
Kamishak River										
1999	8	177	575	296	63	200	0	777	0	1,911
2000	10	220	1,323	817	1,228	605	35	0	0	4,008
2001	9	185	721	585	541	344	0	260	0	2,451
2002	17	956	2,258	785	223	335	0	7	0	3,608
2003	14	427	1,488	1,275	624	0	0	0	60	3,447
2004	14	416	3,564	986	504	81	68	65	0	5,268
2005	11	357	570	1,549	361	0	0	33	478	2,991
Annual average		391	1,500	899	506	224	15	163	77	3,383

Location/Year	Responses ^a	Angler Days	Catch (Number of Fish)							Total Catch
			Coho Salmon	Dolly Varden	Chum Salmon	Pink Salmon	Sockeye Salmon	Grayling	Other Species ^b	
Polly Creek										
1999	7	326	447	242	126	0	162	0	0	977
2000	4	103	63	0	77	0	0	0	0	140
2001	9	318	455	11	945	0	0	0	0	1,411
2002	6	129	86	93	101	0	82	0	0	362
2003	7	129	341	27	332	0	0	0	0	700
2004	6	233	261	152	977	0	23	0	0	1,413
2005	0	0	0	0	0	0	0	0	0	0
Annual average		177	236	75	365	0	38	0	0	715
Silver Salmon Creek										
1999	22	1,408	2,082	1,184	329	859	43	0	0	4,497
2000	28	904	2,293	44	50	82	165	0	335	2,969
2001	15	517	3,178	264	0	172	195	0	0	3,809
2002	22	612	2,598	99	17	175	0	24	0	2,913
2003	25	1,522	7,377	457	388	87	12	0	24	8,345
2004	27	1,203	10,902	349	16	1,116	113	0	0	12,496
2005	24	1,653	7,053	662	243	277	168	0	9	8,412
Annual average		1,117	5,069	437	149	395	99	3	53	6,206
Other locations^c										
1999	9	391	600	1,337	2,949	1,173	0	0	155	6,214
2000	7	359	536	259	64	0	117	0	70	1,046
2001	3	74	126	121	202	0	24	0	12	485
2002	8	205	1,689	204	297	314	0	0	168	2,672
2003	7	625	1,165	921	347	10	351	0	26	2,820
2004	3	150	679	728	0	0	0	0	26	1,433
2005	8	451	1,132	709	279	46	130	0	15	2,311
Annual average		322	847	611	591	220	89	0	67	2,426

Location/Year	Responses ^a	Angler Days	Catch (Number of Fish)							Total Catch
			Coho Salmon	Dolly Varden	Chum Salmon	Pink Salmon	Sockeye Salmon	Grayling	Other Species ^b	
All locations										
1999	49	2,482	3,741	3,169	3,467	2,232	237	856	167	13,869
2000	52	1,653	4,215	1,172	1,419	687	434	0	464	8,391
2001	42	1,369	4,802	1,465	1,688	746	219	645	79	9,644
2002	57	1,982	6,673	1,615	638	824	136	31	223	10,140
2003	56	2,789	10,394	2,849	1,691	97	900	0	134	16,065
2004	52	2,043	15,445	2,594	1,497	1,197	204	65	26	21,028
2005	46	2,561	9,090	2,987	883	323	298	33	523	14,137
Annual average		2,126	7,766	2,264	1,612	872	347	233	231	13,325

Notes:

- a. ADF&G regards estimates based on fewer than 12 annual responses as unreliable for trend analysis.
- b. Includes king salmon, rainbow trout, and lake trout.
- c. Locations with 12 or fewer survey responses annually for 1999 through 2005: Amakdedori Creek, Chenik Lake, Chinitna Bay streams, Clearwater Creek, Crescent River, Douglas River, Little Kamishak River, McNeil River, Mikfik Creek Red Creek, Shelter Creek, and Wadell Lake.

Sources: ADF&G SFD, 2008b, 2006, 2005.

TABLE 53-6
Saltwater Sportfishing Annual Effort and Harvest by Species and Location, 2000-2005

Location ^b /Year	Angler Days	No. of Anglers ^c	No. of Trips	Harvest ^a (Number of Fish)							Total
				Razor Clams	Pacific Halibut	Coho Salmon	Sockeye Salmon	King Salmon	Dolly Varden	Other Species	
Lower Cook Inlet (Boat Sites South of Chinitna Point)											
2000	1,529	998	745	1,316	1,789	82	0	43	0	21	3,251
2001	536	389	380	0	687	114	38	0	0	53	892
2002	539	353	349	0	377	165	0	0	0	0	542
2003	402	396	266	0	513	81	0	0	0	25	619
2004	896	439	410	0	966	104	0	13	0	0	1,083
2005	773	578	538	0	1,013	153	0	0	0	18	1,184
Annual average	779	526	448	219	891	117	6	9	0	20	1,262
Upper Cook Inlet (Boat Sites North of Chinitna Point)											
2000	1,603	1,284	1,113	1,524	1,573	380	206	50	0	112	3,845
2001	1,271	892	846	3,065	1,156	260	0	66	0	11	4,558
2002	912	648	564	0	1,053	240	195	0	0	0	1,488
2003	449	344	351	0	448	69	72	24	0	0	613
2004	632	513	339	0	855	52	0	0	0	42	949
2005	814	728	579	0	1,012	58	24	31	0	0	1,125
Annual average	947	735	632	765	1,016	177	83	29	0	28	2,096
Polly Creek Beach/Crescent River Bar (razor clams only)											
2000	987	575	479	21,000	0	0	0	0	0	0	21,000
2001	398	398	175	7,621	0	0	0	0	0	0	7,621
2002	499	363	366	6,228	0	0	0	0	0	0	6,228
2003	386	381	256	10,326	0	0	0	0	0	0	10,326
2004	608	491	321	17,639	0	0	0	0	0	0	17,639
2005	2,000	486	365	17,471	0	0	0	0	0	0	17,471
Annual average	813	449	327	13,381	0	0	0	0	0	0	13,381

Location ^b /Year	Angler Days	No. of Anglers ^c	No. of Trips	Harvest ^a (Number of Fish)							Total
				Razor Clams	Pacific Halibut	Coho Salmon	Sockeye Salmon	King Salmon	Dolly Varden	Other Species	
Other locations											
2000	569	341	400	4,896	22	10	0	11	0	0	4,939
2001	1,315	613	503	13,466	76	639	201	0	110	13	14,505
2002	781	447	526	6,526	188	445	96	28	9	11	7,303
2003	568	385	323	3,589	71	299	0	48	0	0	4,007
2004	793	347	440	6,637	95	254	0	0	60	0	7,046
2005	764	333	521	2,280	314	48	0	15	12	0	2,669
Annual average	798	411	452	6,232	128	283	50	17	32	4	6,745
Total, all locations											
2000	4,688	3,146	2,737	28,736	3,384	472	206	104	33	133	33,068
2001	3,520	2,105	1,904	24,152	1,919	1,013	239	66	110	77	27,576
2002	2,731	1,777	1,805	12,754	1,618	850	291	28	9	11	15,561
2003	1,805	0	1,196	13,915	1,032	449	72	72	0	25	15,565
2004	2,929	1,697	1,510	24,276	1,916	410	0	13	60	42	26,717
2005	4,351	1,922	2,003	19,751	2,339	259	24	46	12	18	22,449
Annual average	3,337	1,775	1,859	20,597	2,035	576	139	55	37	51	23,489

Notes:

- a. Note that figures are for harvest, not catch.
- b. Includes all Area N waters, including some that are north of the study area. Included are West Side Cook Inlet waters southward to and including Cape Douglas and all west side drainages of both the Chulitna River and the Susitna River below its confluence with the Chulitna River. Fish taken from the west banks of the Chulitna and Susitna rivers are included in this area.
- c. Number of anglers for each location may not add up to the total for all locations since some anglers fish at more than one site.

Source: ADF&G SFD, n.d.

TABLE 53-7
Number of Hunters and Harvest for Brown Bear, Moose, and Caribou, by Uniform Coding Unit, 2000-2005

GMU-UCU	Brown Bear ^a	Moose		Caribou	
	Harvest	Hunters	Harvest	Hunters	Harvest
09A-0101	0	2	1	0	0
09A-0102	14	34	9	12	6
09A-0201	132	47	15	8	6
09A-0301	14	16	9	0	0
09A-0401	2	0	0	0	0
09A-0501	0	0	0	0	0
09C-0101	0	0	0	0	0
09C-0201	0	2	1	0	0
09C-0301	2	4	1	8	1
Total	164	105	36	28	13

Notes:

a. The number of hunters is not available for brown bears.

Source: ADF&G DWC, 2007a, 2006, 2004.

TABLE 53-8
Number of Hunters and Harvest for Brown Bear, Moose, and Caribou, by Year, 1997-2006

Year	Brown Bear ^a	Moose		Caribou	
	Harvest	Hunters	Harvest	Hunters	Harvest
1997	40	19	8	N/A	N/A
1998	0	23	8	4	2
1999	62	20	4	10	7
2000	2	19	7	7	3
2001	56	21	8	5	0
2002	1	20	8	1	1
2003	57	15	4	11	7
2004	0	18	4	3	2
2005	48	12	5	1	0
2006	0	11	2	1	1
Total	266	178	58	43	23

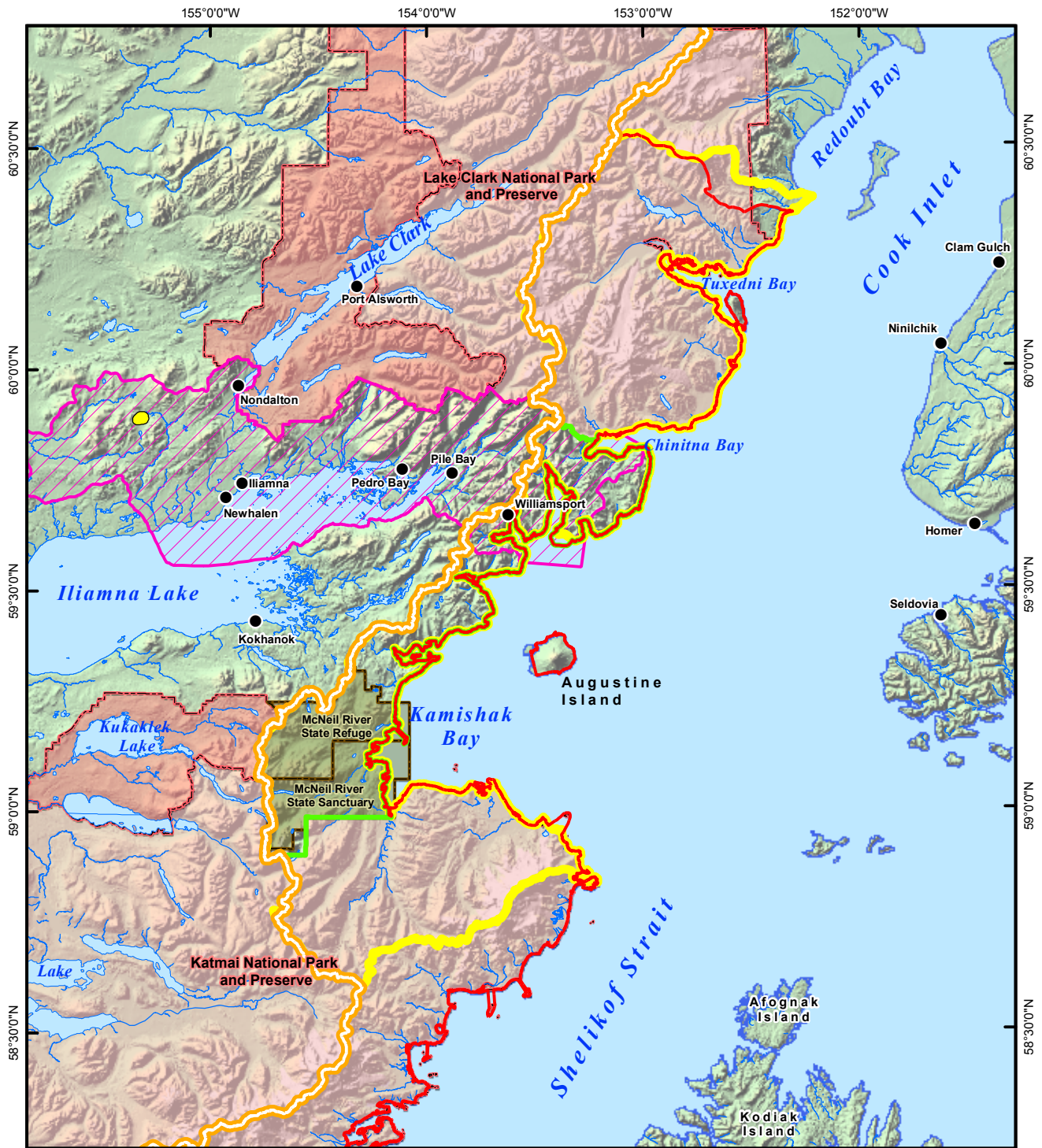
Notes:

a. The number of hunters is not available for brown bears.

N/A = not available.

Source: ADF&G DWC, 2008.

FIGURES



Scale 1:1,500,000
 Alaska State Plane Zone 5 (units feet)
 1983 North American Datum

Legend

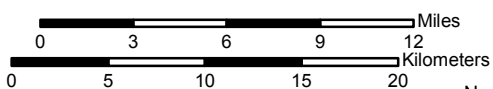
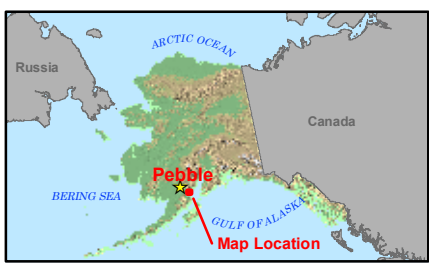
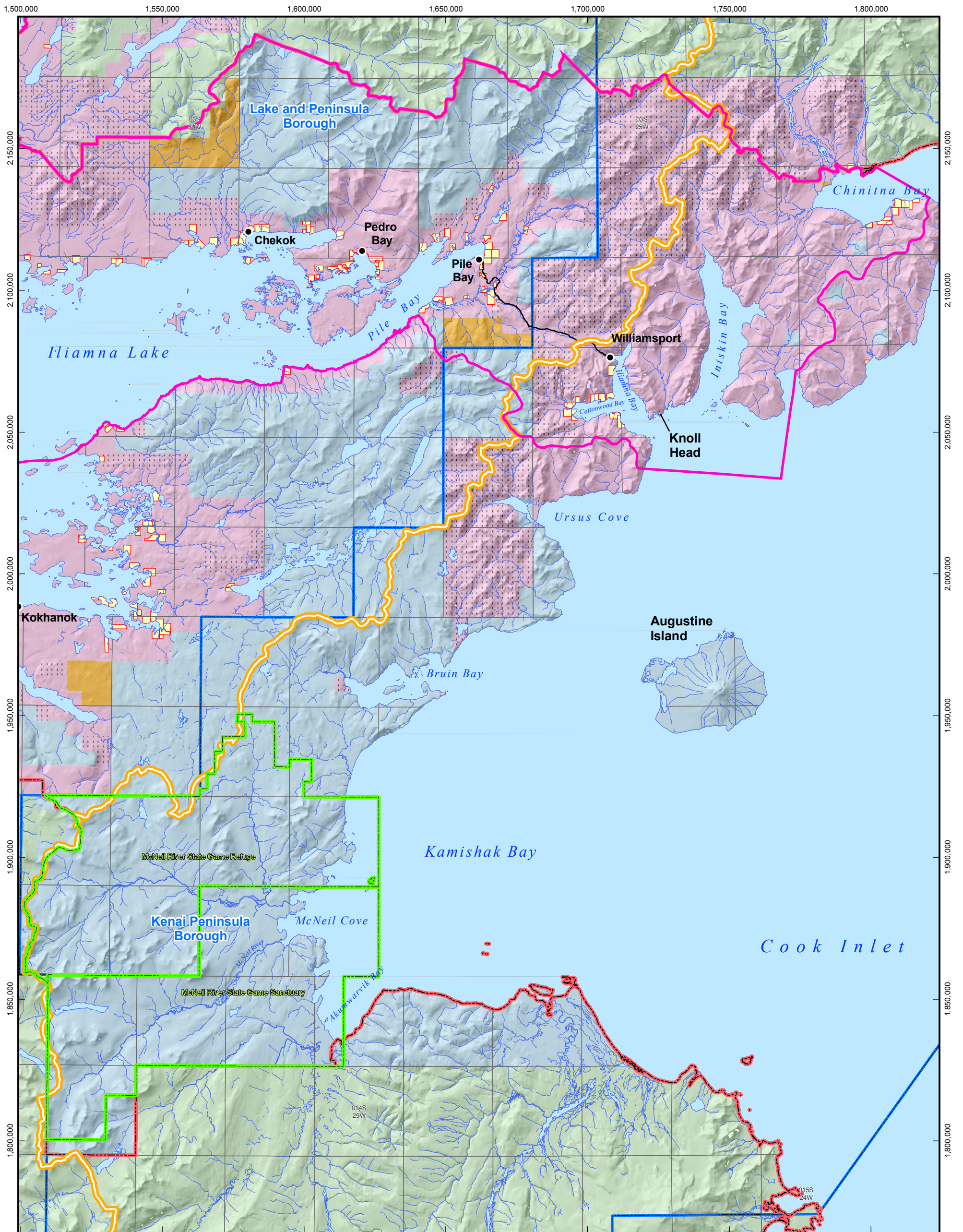
- Bristol Bay/Cook Inlet Drainages Boundary
- Land Use Study Boundary
- Sportfishing Study Boundary
- Big Game Hunting Study Boundary
- Anadromous Streams
- Central Study Area
- National Park
- National Preserve
- McNeil River State Refuge and Sanctuary
- General Deposit Location
- Communities

Note: The Bristol Bay/Cook Inlet Drainage Boundary is the western boundary for all study boundaries depicted on this map.

THE pebble PARTNERSHIP

Figure 53-1
Recreation Regional Study Area
Cook Inlet Drainages
Study Boundaries for Land Use,
Big Game Hunting, and Sportfishing

File: RDI_KW_CI_Rec_Fig53_1_8x11P_1of1_V03.mxd	Date: August 30, 2010
Version: 3	Author: RDI-LS



Scale 1:390,000
 Alaska State Plane Zone 5 (units feet)
 1983 North American Datum

Legend

- Bristol Bay/Cook Inlet Drainages Boundary
- Central Study Area
- McNeil River State Game Refuge/Sanctuary
- National Park or Preserve
- Borough Boundary
- Existing Roads
- General Land Status (BLM, 2006) Native Patent or Interim Conveyance
- Native Selected
- State Patent or Tentative Approval
- State Selected
- National Park Service
- Bureau of Land Management
- Native Allotments/Private Lands (based on BLM, various)



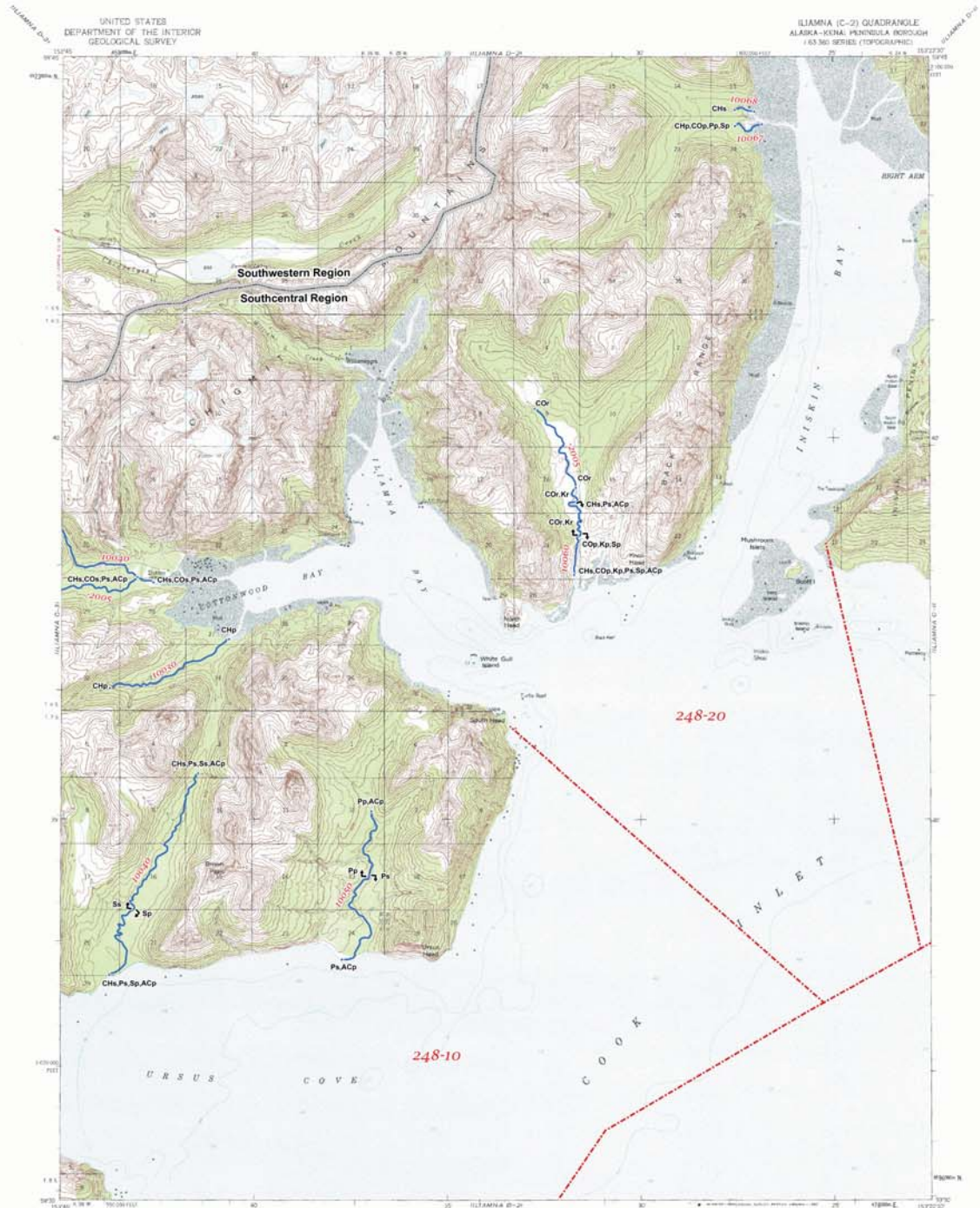
Figure 53-2
Cook Inlet Drainages
General Land Ownership

File: RDI_KW_CI_Fig53-2_11x17P_1of1_D05.mxd Date: August 24, 2010

Version: 5 Author: RDI-LS



Figure 53-3, Example Map, Fish Distribution Database Atlas, 1:250,000 Scale (ADF&G SFD, 2007)



Maped, edited and published by the Geological Survey
 based on 1:50,000 and 1:250,000 scale
 Topographic to photogrammetric, based on aerial photographs
 taken 1953 and 1967, and processed 1958. Not yet fully checked
 Selected hydrographic data compiled from NOS Chart 15640
 (1954 and 1942). This information is not intended
 for navigational purposes.
 Population and 100-meter grid ticks shown in blue
 compiled from Census Bureau, 1960.
 25,000-foot grid ticks shown on Alaska coastlines
 from U.S. 1:50,000 North American edition.
 To align on the principal North American datum (NAD 83), minor
 adjustments have been made to the 1:250,000 map.
 Spot and line heights uncorrected and uncorrected locations
 controlled by the Bureau of Land Management.
 Spot and line heights uncorrected and uncorrected locations
 controlled by the Bureau of Land Management.
 Spot and line heights uncorrected and uncorrected locations
 controlled by the Bureau of Land Management.
 Spot and line heights uncorrected and uncorrected locations
 controlled by the Bureau of Land Management.
 Spot and line heights uncorrected and uncorrected locations
 controlled by the Bureau of Land Management.

SCALE 1:63,360

FOR SALE BY U.S. GEOLOGICAL SURVEY
 FAIRBANKS, ALASKA 99701, DENVER, COLORADO 80202, RESTON, VIRGINIA 20192
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SPREADS IS AVAILABLE ON REQUEST

ILIAMNA (C-2) ALASKA
 NAD83-RTM22.5/15025
 1998
 11/20/2007

<ul style="list-style-type: none"> • Lower/Upper Point of Stream ▲ Midstream Species Begin/End Point ★ Short Stream (Under 666 feet) ■ Lake ▲ Barrier 	<ul style="list-style-type: none"> — Anadromous Streams ▨ Anadromous Areas — AWC Stat Area — Regional Boundary 	<p>SPECIES CODES</p> <p>CO coho salmon CH chinook salmon K Chinook salmon (king) P pink salmon S sockeye salmon</p> <p>LIFESTAGE CODES</p> <p>p Present m Migration r Rearing s Known Spawning</p>	<p>AC Arctic char AL Arctic lamprey AW Arctic cisco BC broad whitefish BW Bering cisco CT cutthroat trout DV Dolly Varden HW humpback whitefish LC least cisco LP lamprey, undifferentiated</p>	<p>LV river lamprey OL longfin smelt OM rainbow smelt OU outchuck PC Pacific lamprey SF inconnu (sheefish) SH steelhead trout SM smelt, undifferentiated ST sturgeon, undifferentiated W whitefish, undifferentiated</p>
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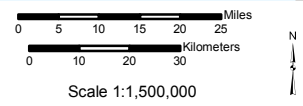
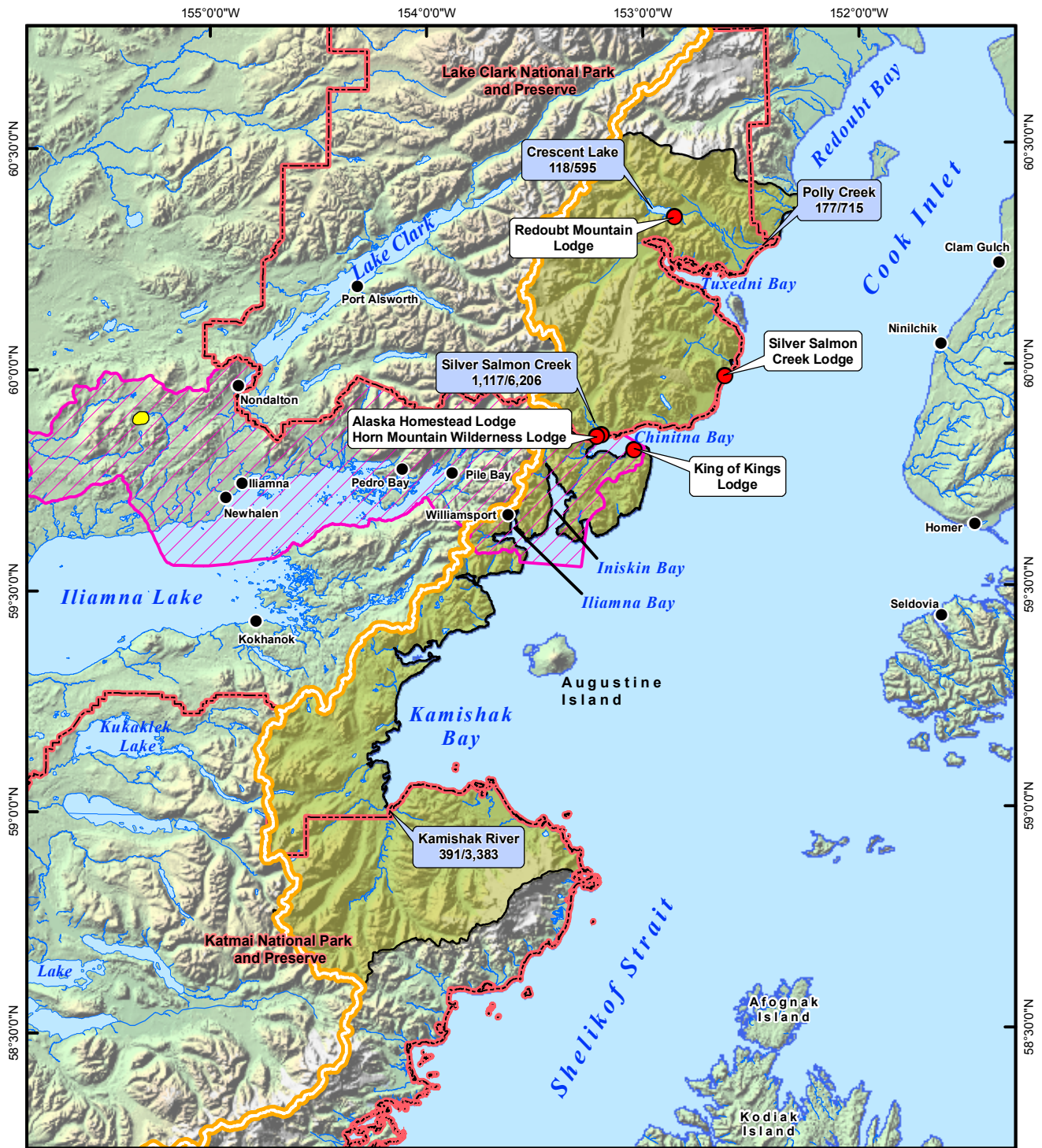
Fish Distribution Database Atlas
 Quad No. 068

Iliamna
C-2

Produced By
 State of Alaska
 Department of
 Fish and Game

Revision Date 11/20/2007

Figure 53-4, Example Map, Fish Distribution Database Atlas, 1:63,360 Scale (ADF&G SFD, 2007)



Alaska State Plane Zone 5 (units feet)
1983 North American Datum

Legend

- Bristol Bay/Cook Inlet Drainages Boundary
- Lodge Locations
- Central Study Area
- National Park and Preserve Boundary
- General Deposit Location
- Communities
- Onshore Sportfishing Study Area

Stream/Lake Name
Average Annual Angler Days/Catch,
All Species, 1999-2005
(ADF&G SFD, 2008b, 2006, 2005)

Text
Number/Number



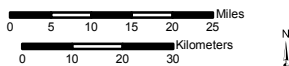
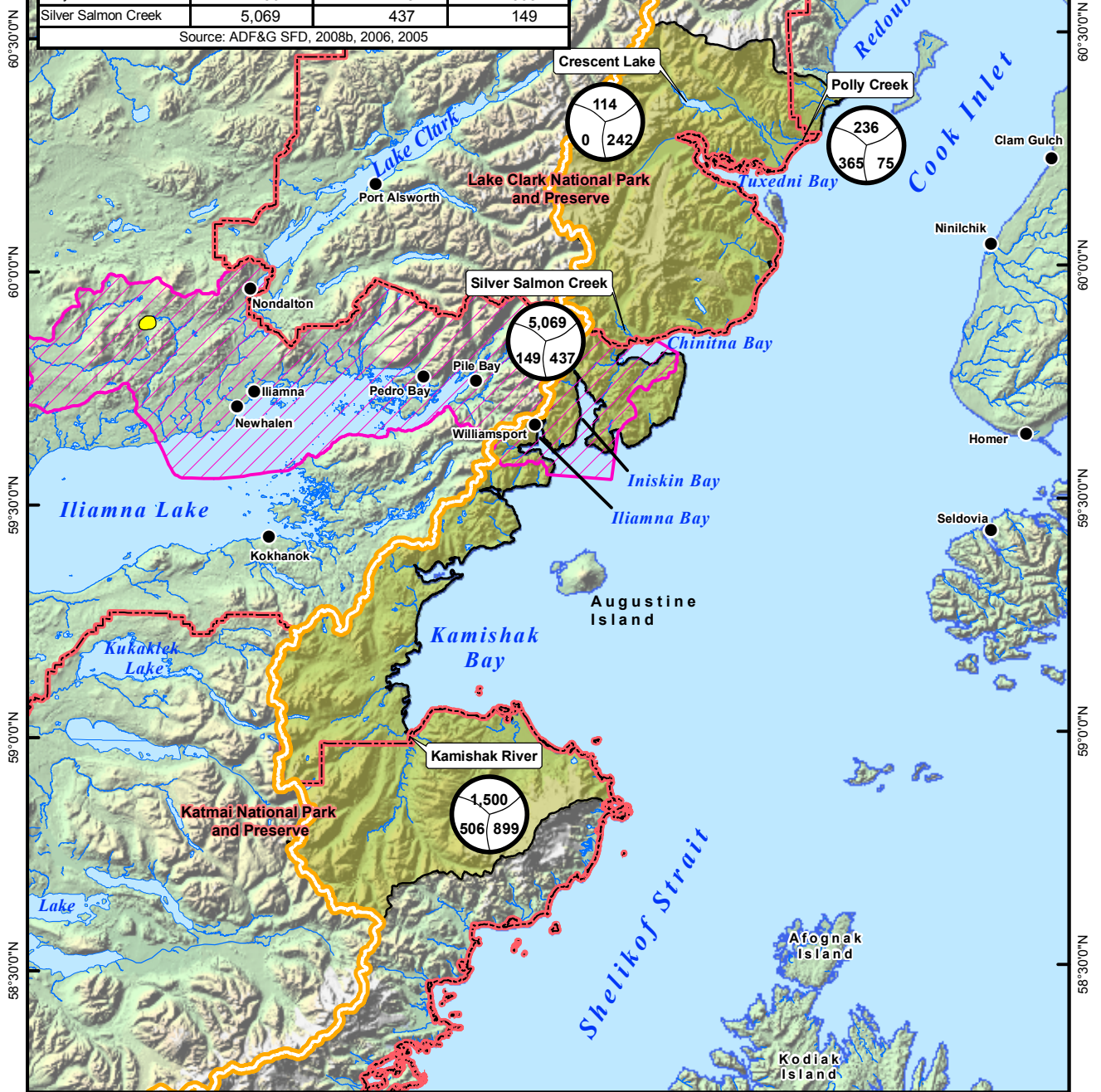
Figure 53-5
Average Annual Angler Days and Catch, All Species by Waterbody, and Recreational Lodge Locations, Cook Inlet Drainages, Recreation Study Area

File: RDI_KW_CI_Fig53_5_8x11P_1of1_V03.mxd	Date: September 8, 2010
Version: 3	Author: RDI-LS

155°0'0"W 154°0'0"W 153°0'0"W 152°0'0"W

Location	Coho Salmon	Dolly Varden	Chum Salmon
Crescent Lake	114	242	0
Kamishak River	1,500	899	506
Polly Creek	236	75	365
Silver Salmon Creek	5,069	437	149

Source: ADF&G SFD, 2008b, 2006, 2005



Scale 1:1,500,000
Alaska State Plane Zone 5 (units feet)
1983 North American Datum

Legend

- Bristol Bay/Cook Inlet Drainages Boundary
- Central Study Area
- National Park and Preserve Boundary
- General Deposit Location
- Communities
- Onshore Sportfishing Study Area
- Average Annual Catch, 1999-2005
- Stream/Lake Name



Figure 53-6
Average Annual Catch, Coho Salmon, Dolly Varden, and Chum Salmon by Waterbody, Cook Inlet Drainages, Recreation Study Area

File: RDI_KW_CI_Fish_Fig53_6_8x11P_1of1_V03.mxd

Date: September 8, 2010

Version: 3

Author: RDI-LS

155°0'0"W 154°0'0"W 153°0'0"W 152°0'0"W

Location	Pink Salmon	Sockeye Salmon	Grayling
Crescent Lake	33	106	66
Kamishak River	224	15	163
Polly Creek	0	38	0
Silver Salmon Creek	395	99	3

Source: ADF&G SFD, 2008b, 2006, 2005

60°30'0"N

60°0'0"N

59°30'0"N

59°0'0"N

58°30'0"N

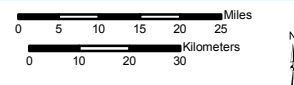
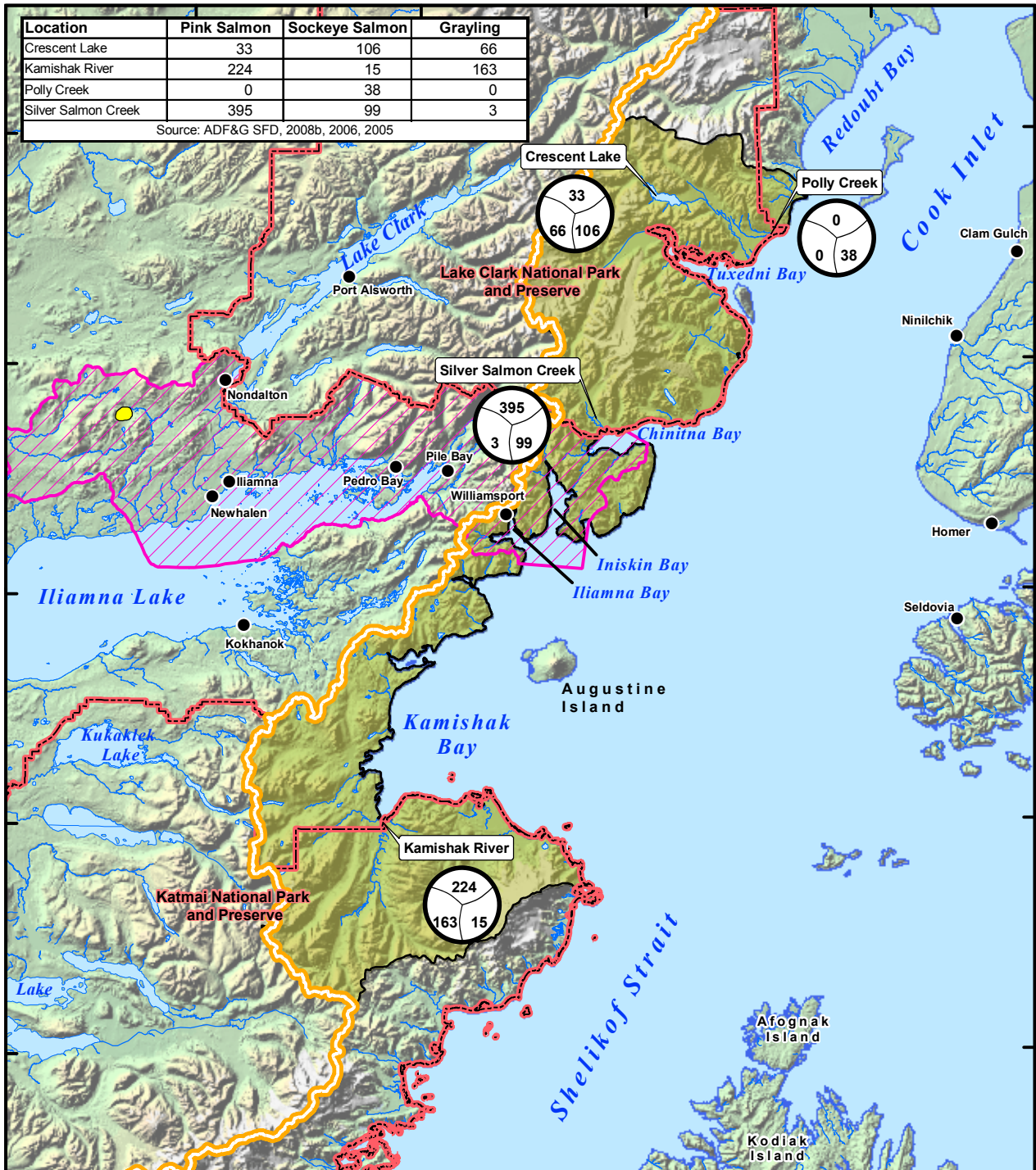
60°30'0"N

60°0'0"N

59°30'0"N

59°0'0"N

58°30'0"N



Scale 1:1,500,000
Alaska State Plane Zone 5 (units feet)
1983 North American Datum

Legend

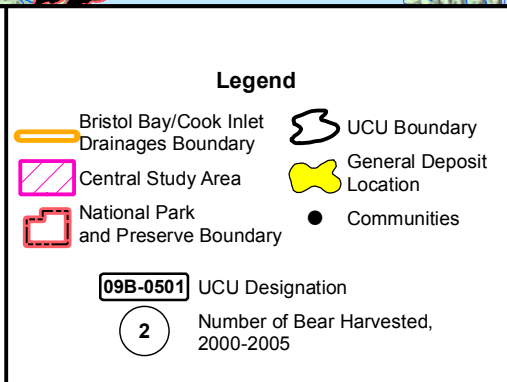
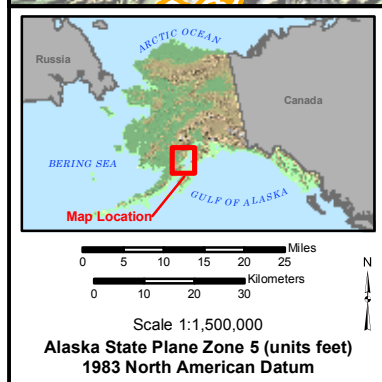
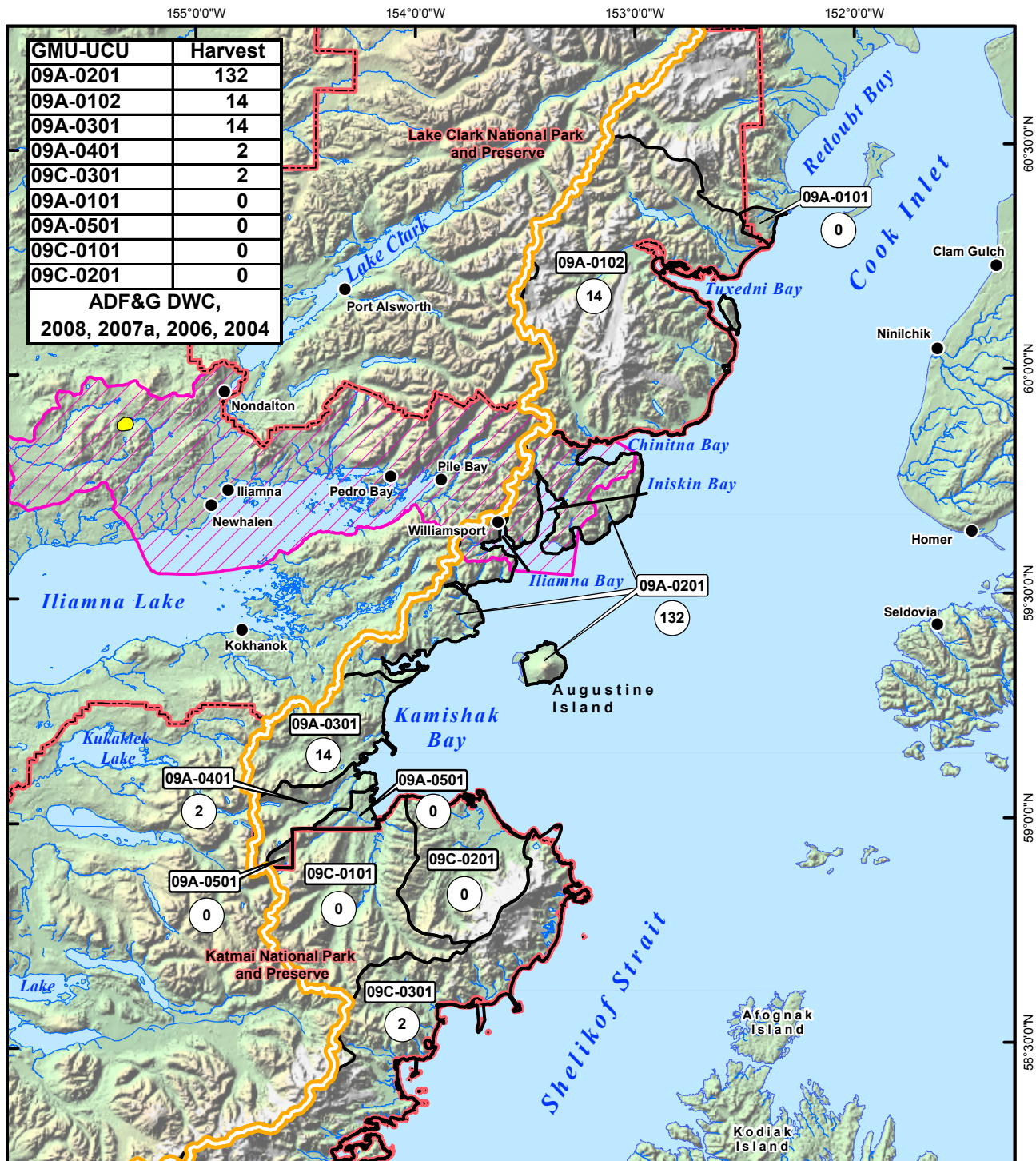
- Bristol Bay/Cook Inlet Drainages Boundary
- Central Study Area
- National Park and Preserve Boundary
- General Deposit Location
- Communities
- Onshore Sportfishing Study Area
- Average Annual Catch, 1999-2005
- Stream/Lake Name

Figure 53-7
Average Annual Catch, Pink Salmon, Sockeye Salmon, and Grayling by Waterbody, Cook Inlet Drainages, Recreation Study Area

File: RDI_KW_CI_Fig53_7_8x11P_1of1_V03.mxd	Date: September 2, 2010
Version: 3	Author: RDI-LS



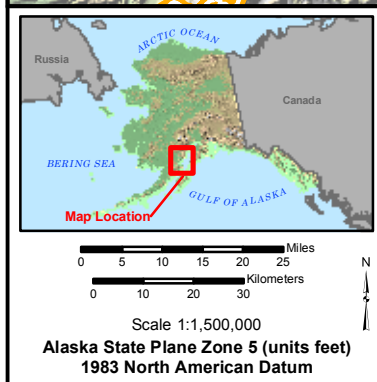
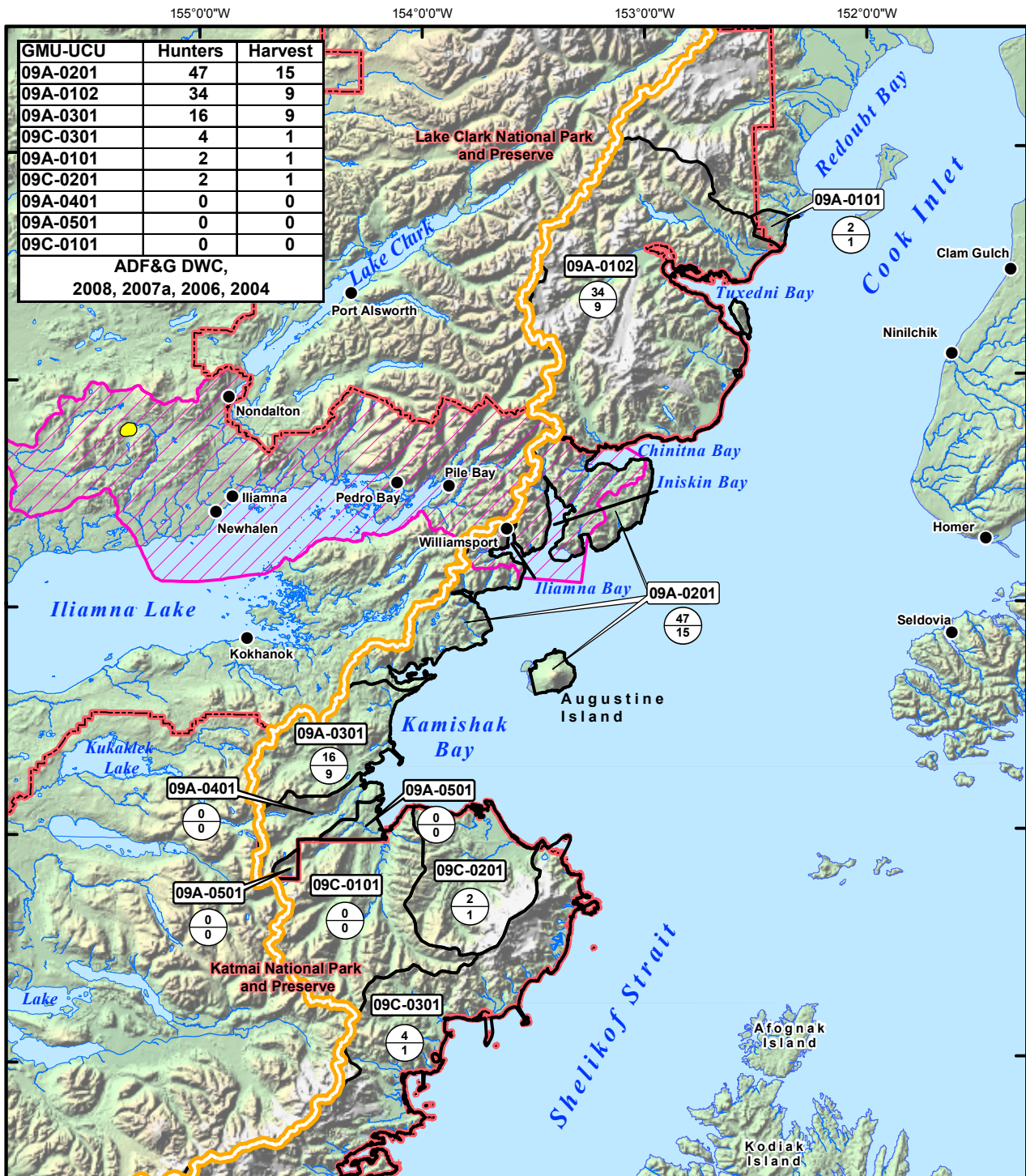
Figure 53-8, Game Management Unit 9 (ADF&G DWC, n.d.)



THE pebble
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Figure 53-9
Brown Bear Harvest by ADF&G
Uniform Coding Unit,
Cook Inlet Drainages,
Recreation Study Area

File: RDI_KW_CI_Fig53_9_8x11P_1of1_V03.mxd	Date: September 13, 2010
Version: 3	Author: RDI-LS



Legend

- Bristol Bay/Cook Inlet Drainages Boundary
- Central Study Area
- National Park and Preserve Boundary
- UCU Boundary
- General Deposit Location
- Communities

09B-0501 UCU Designation

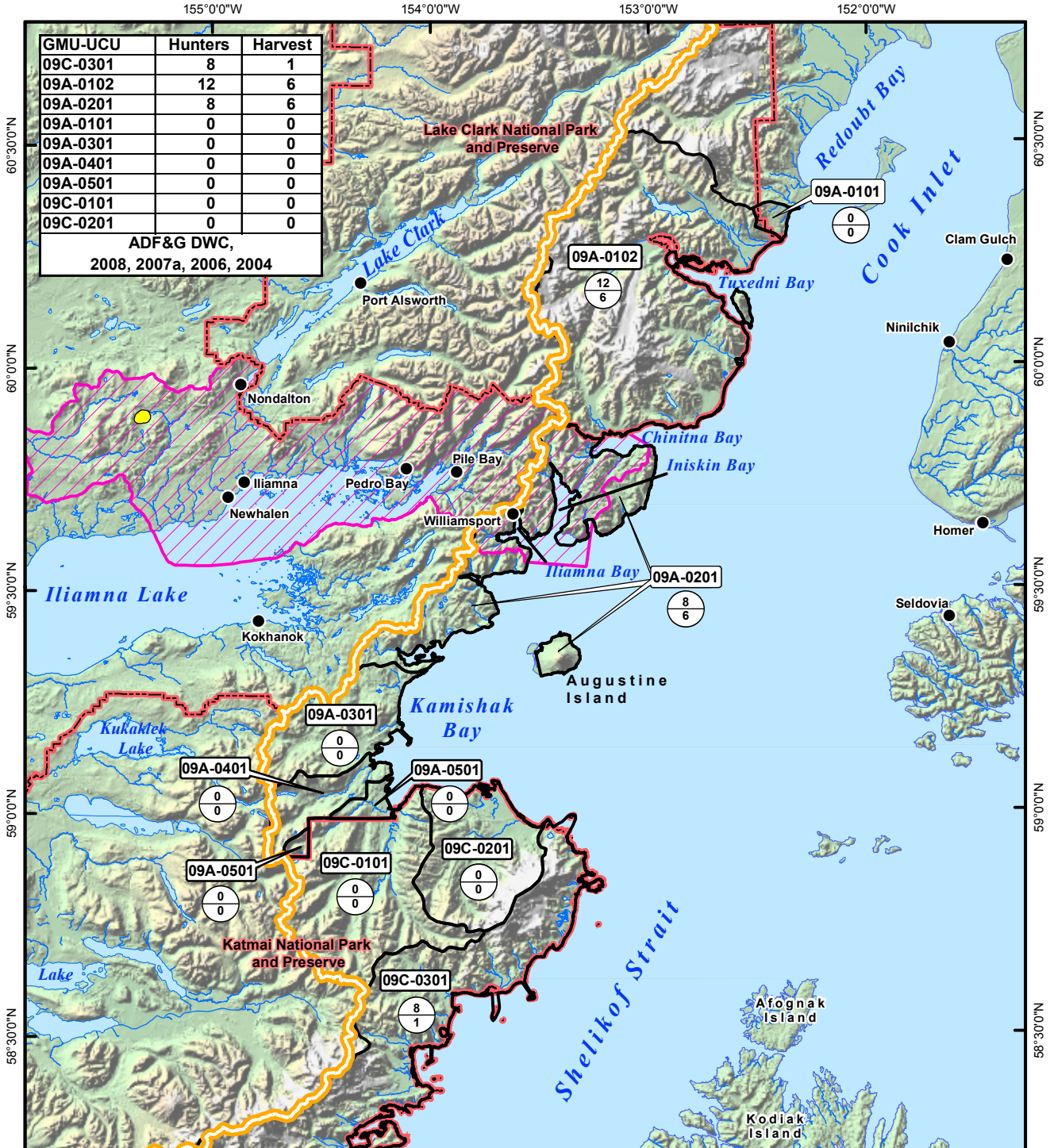
Number of Moose Hunters, 2000-2005
 Number of Moose Harvested, 2000-2005

THE pebble PARTNERSHIP

**Figure 53-10
Moose Harvest by ADF&G
Uniform Coding Unit,
Cook Inlet Drainages,
Recreation Study Areat**

File: RDI_KW_CI_Fig53_10_8x11P_1of1_V03.mxd	Date: September 2, 2010
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GMU-UCU	Hunters	Harvest
09C-0301	8	1
09A-0102	12	6
09A-0201	8	6
09A-0101	0	0
09A-0301	0	0
09A-0401	0	0
09A-0501	0	0
09C-0101	0	0
09C-0201	0	0
ADF&G DWC, 2008, 2007a, 2006, 2004		



Scale 1:1,500,000
Alaska State Plane Zone 5 (units feet)
1983 North American Datum

Legend

- Bristol Bay/Cook Inlet Drainages Boundary
- Central Study Area
- National Park and Preserve Boundary
- UCU Boundary
- General Deposit Location
- Communities

09B-0501 UCU Designation

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1

Number of Caribou Hunters, 2000-2005
Number of Caribou Harvested, 2000-2005

THE pebble PARTNERSHIP

Figure 53-11
Caribou Harvest by ADF&G
Uniform Coding Unit,
Cook Inlet Drainages Study Area

File: RDI_KW_CI_Fig53_11_8x11P_1of1_V03.mxd
Version: 3

Date: September 2, 2010
Author: RDI-LS