

**Cook Inlet Basin
Ecoregion
DATA MAP BOOK**

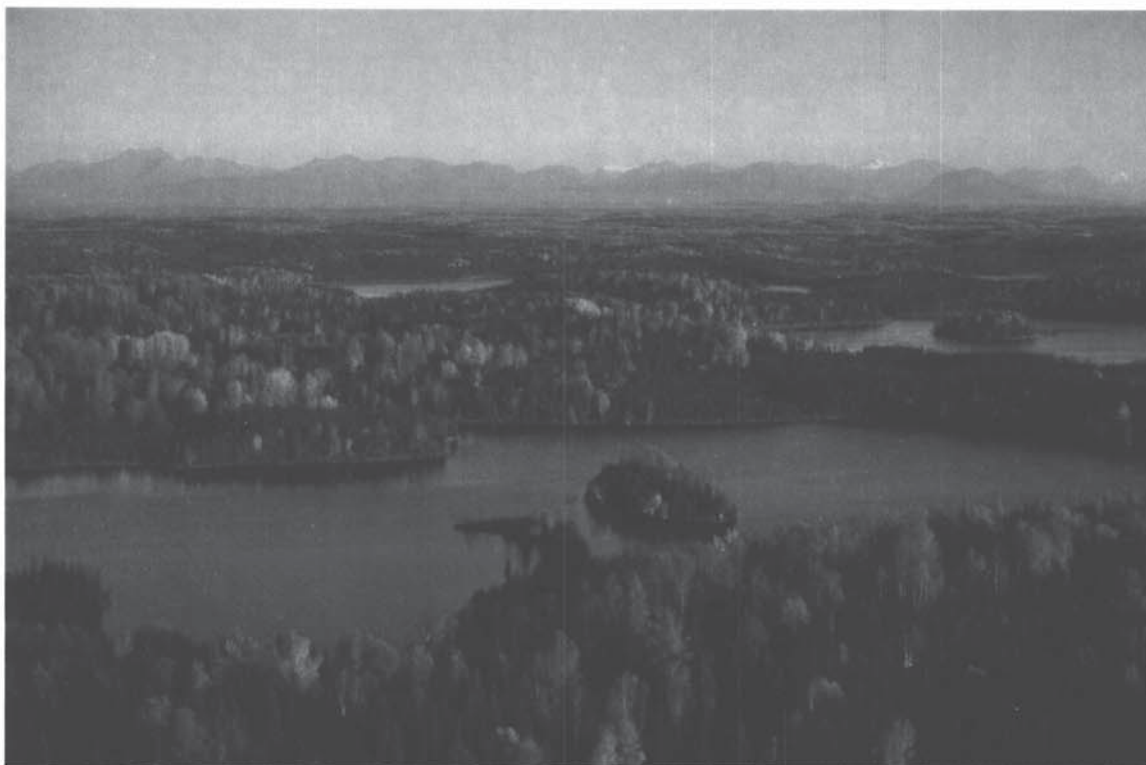
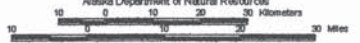
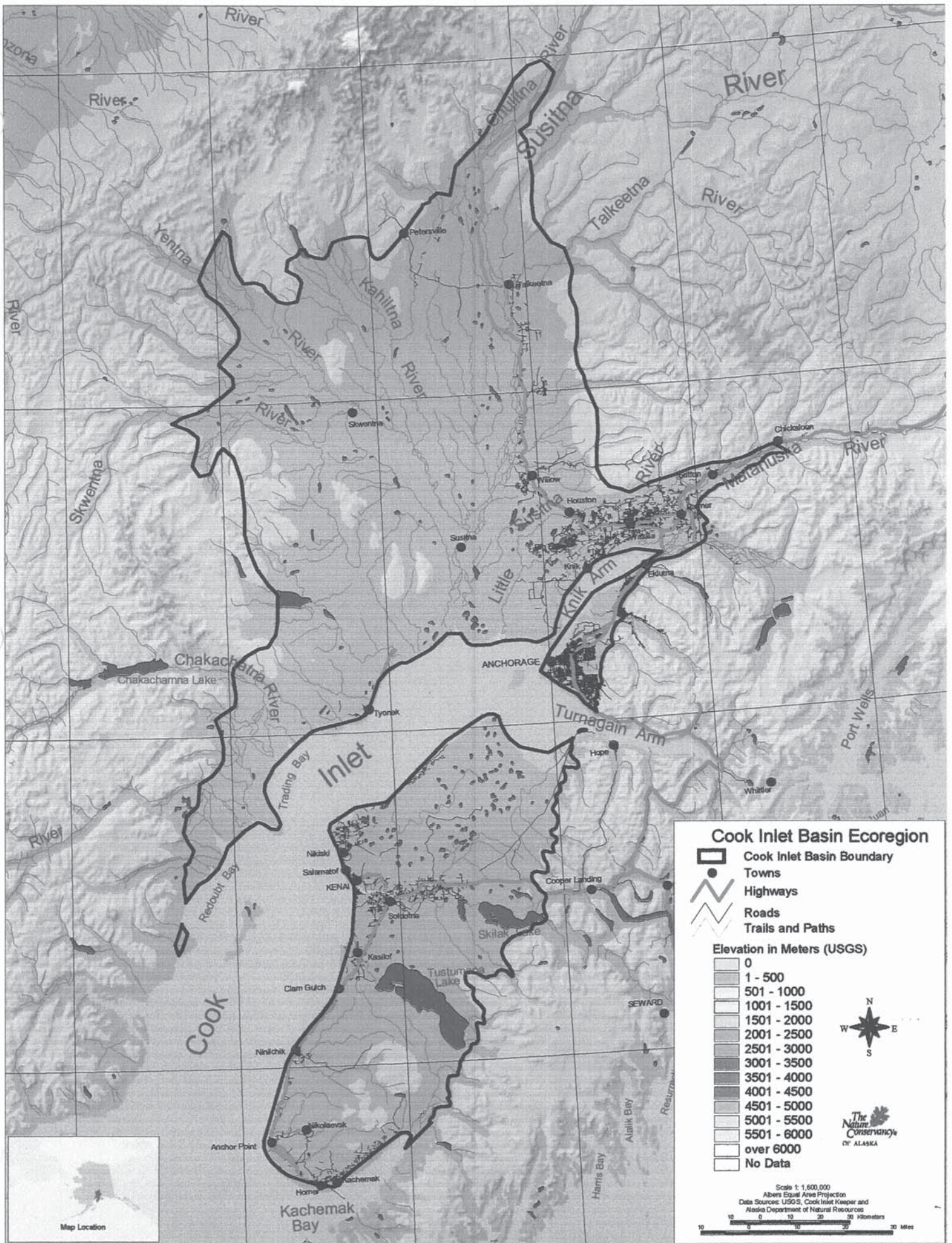


Photo courtesy of U.S Fish and Wildlife Images Gallery

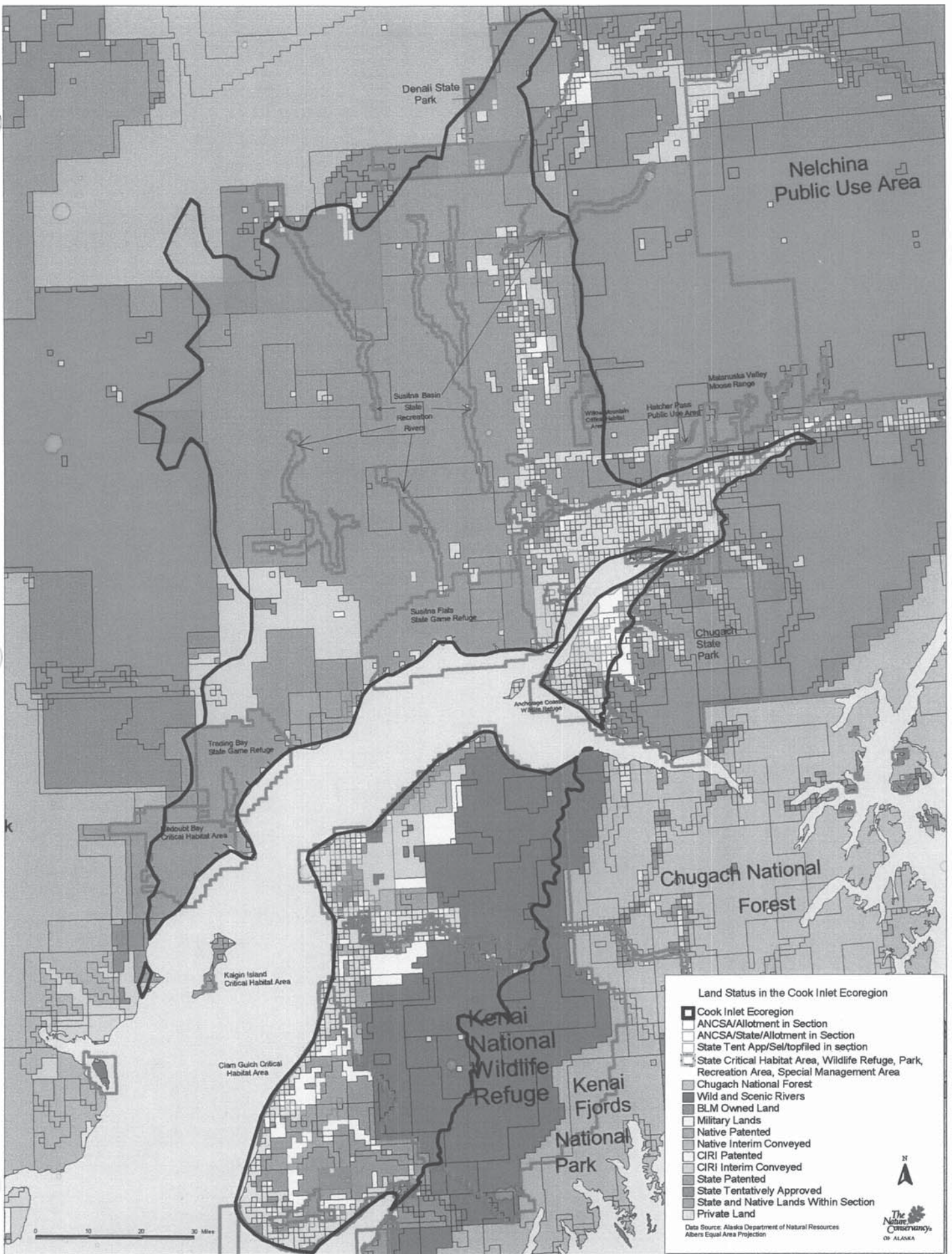
**The Nature
Conservancy** 

SAVING THE LAST GREAT PLACES ON EARTH

BASE DATA



LAND STATUS AND HUMAN USE



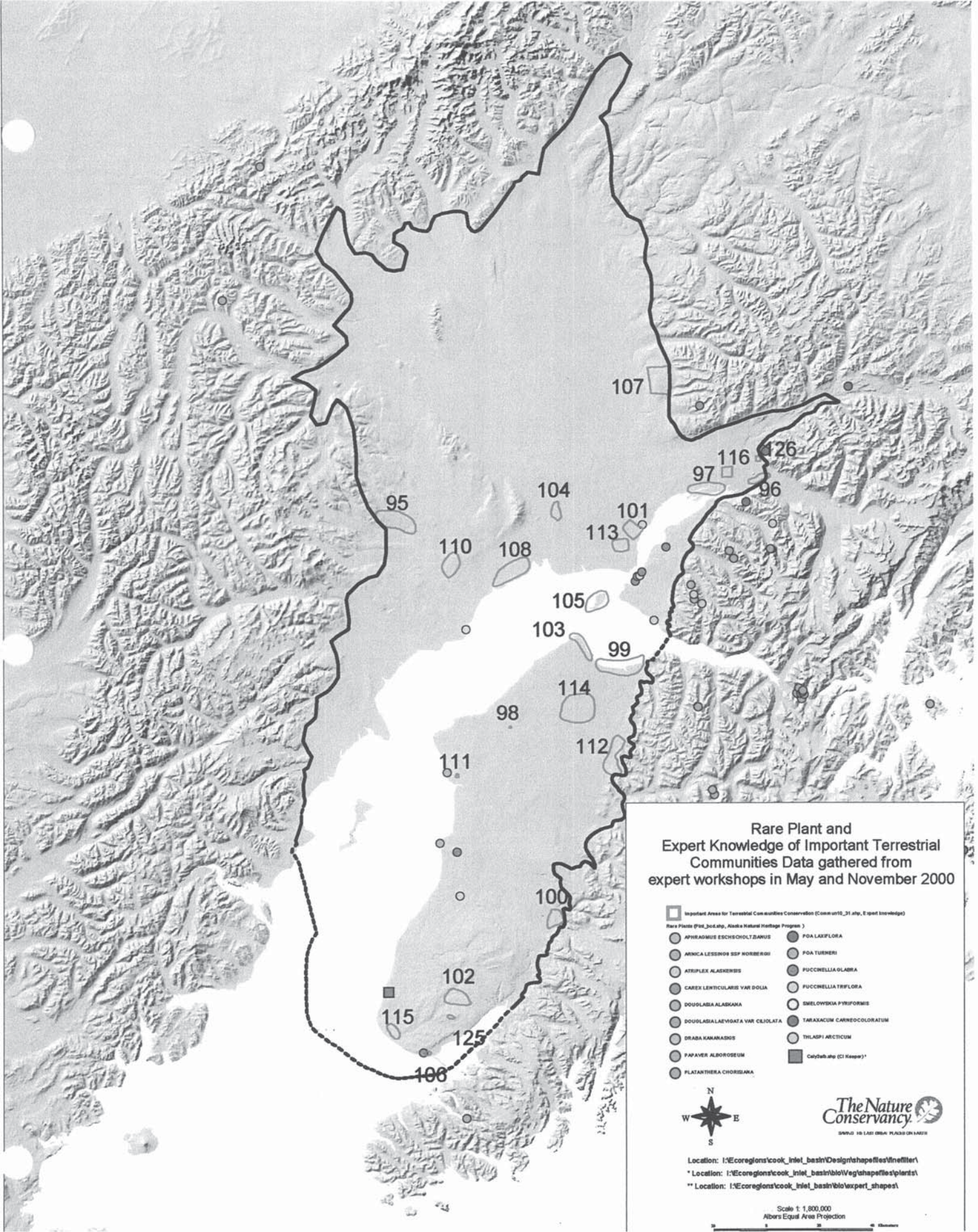
Land Status in the Cook Inlet Ecoregion

- Cook Inlet Ecoregion
- ANCSA/Allotment in Section
- ANCSA/State/Allotment in Section
- State Tent App/Sel/topfiled in section
- State Critical Habitat Area, Wildlife Refuge, Park, Recreation Area, Special Management Area
- Chugach National Forest
- Wild and Scenic Rivers
- BLM Owned Land
- Military Lands
- Native Patented
- Native Interim Conveyed
- CIRI Patented
- CIRI Interim Conveyed
- State Patented
- State Tentatively Approved
- State and Native Lands Within Section
- Private Land

Data Source: Alaska Department of Natural Resources
 Albers Equal Area Projection



TERRESTRIAL SYSTEMS AND VEGETATION



Rare Plant and Expert Knowledge of Important Terrestrial Communities Data gathered from expert workshops in May and November 2000

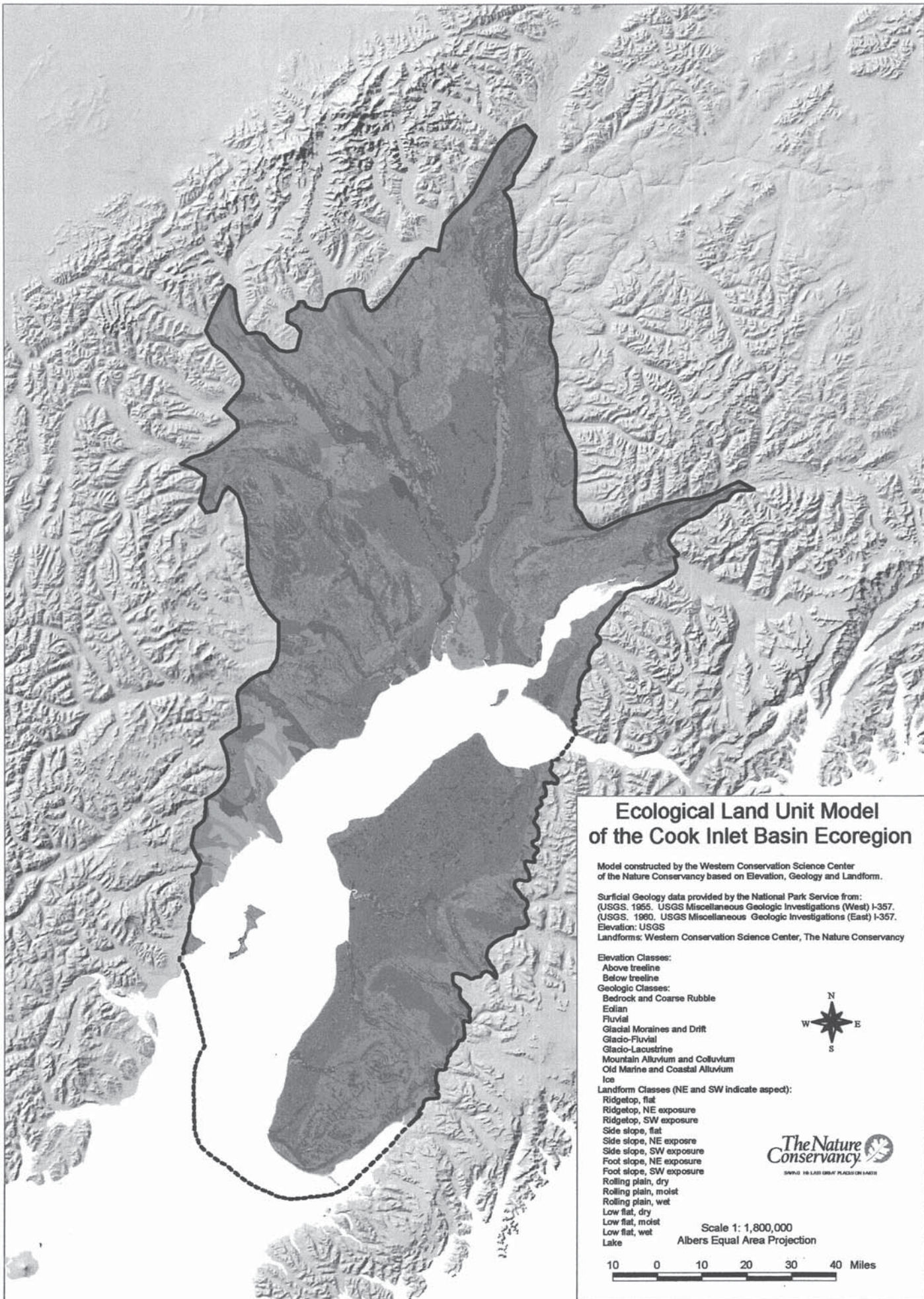
- Important Areas for Terrestrial Communities Conservation (Common10_31.shp, Expert Knowledge)
- Rare Plants (rare_3rd.shp, Alaska Natural Heritage Program)
- APHRADMIUS ESCHSCHOLTZIANUS
- ANEMIA LESSENIS SEP NORBERGII
- ATRIPLEX ALASKENSIS
- CAREX LENTICULARIS VAR DOLIA
- DOUGLASSIA ALASKANA
- DOUGLASSIALAEVOIATA VAR CEILOATA
- DRABA KAMANSIS
- PAPAYER ALBOROSEUM
- PLATANATHERA CHORDIANKA
- POA LAXIFLORA
- POA TUENENII
- PUCCINELLIA GLABRA
- PUCCINELLIA TRIFLORA
- SHELWICKIA PYRIFORMIS
- TARAXACUM CARNEOCOLORATUM
- THLASPI ARCTICUM
- *Calyptothrix* (C. Kasper)*



Location: I:\Ecoregions\cook_inlet_basin\Design\shapfiles\linefilter*
 * Location: I:\Ecoregions\cook_inlet_basin\bio\veg\shapfiles\plants\
 ** Location: I:\Ecoregions\cook_inlet_basin\bio\expert_shapes\

Scale 1:1,800,000
 Albers Equal Area Projection





Ecological Land Unit Model of the Cook Inlet Basin Ecoregion

Model constructed by the Western Conservation Science Center
of the Nature Conservancy based on Elevation, Geology and Landform.

Surficial Geology data provided by the National Park Service from:
(USGS, 1965. USGS Miscellaneous Geologic Investigations (West) I-357,
USGS, 1960. USGS Miscellaneous Geologic Investigations (East) I-357.
Elevation: USGS
Landforms: Western Conservation Science Center, The Nature Conservancy

Elevation Classes:

Above treeline

Below treeline

Geologic Classes:

Bedrock and Coarse Rubble

Eolian

Fluvial

Glacial Moraines and Drift

Glacio-Fluvial

Glacio-Lacustrine

Mountain Alluvium and Colluvium

Old Marine and Coastal Alluvium

Ice

Landform Classes (NE and SW indicate aspect):

Ridgetop, flat

Ridgetop, NE exposure

Ridgetop, SW exposure

Side slope, flat

Side slope, NE exposure

Side slope, SW exposure

Foot slope, NE exposure

Foot slope, SW exposure

Rolling plain, dry

Rolling plain, moist

Low flat, dry

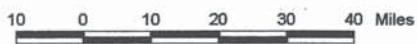
Low flat, moist

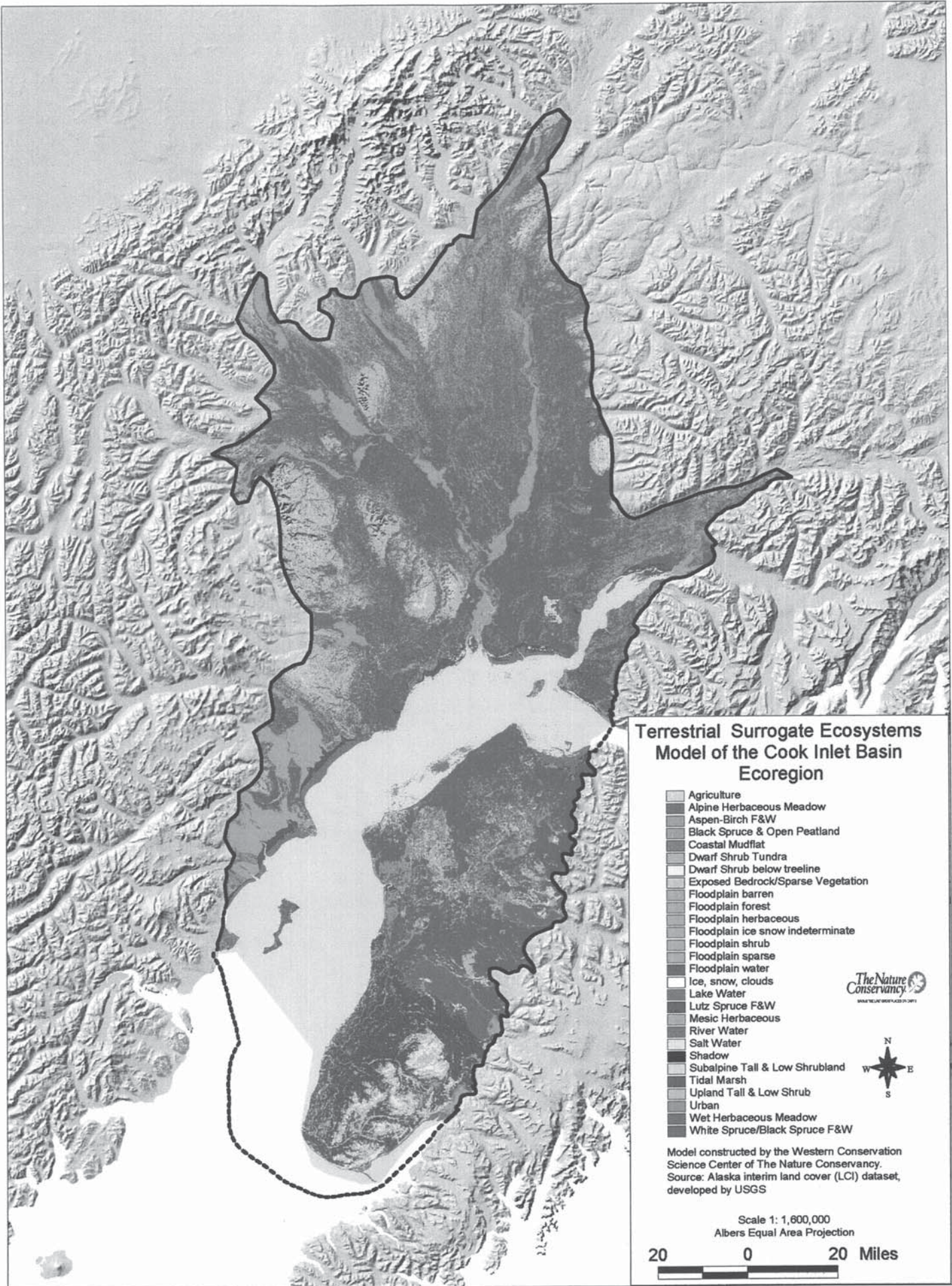
Low flat, wet

Lake



Scale 1: 1,800,000
Albers Equal Area Projection





**Terrestrial Surrogate Ecosystems
Model of the Cook Inlet Basin
Ecoregion**

- Agriculture
- Alpine Herbaceous Meadow
- Aspen-Birch F&W
- Black Spruce & Open Peatland
- Coastal Mudflat
- Dwarf Shrub Tundra
- Dwarf Shrub below treeline
- Exposed Bedrock/Sparse Vegetation
- Floodplain barren
- Floodplain forest
- Floodplain herbaceous
- Floodplain ice snow indeterminate
- Floodplain shrub
- Floodplain sparse
- Floodplain water
- Ice, snow, clouds
- Lake Water
- Lutz Spruce F&W
- Mesic Herbaceous
- River Water
- Salt Water
- Shadow
- Subalpine Tall & Low Shrubland
- Tidal Marsh
- Upland Tall & Low Shrub
- Urban
- Wet Herbaceous Meadow
- White Spruce/Black Spruce F&W

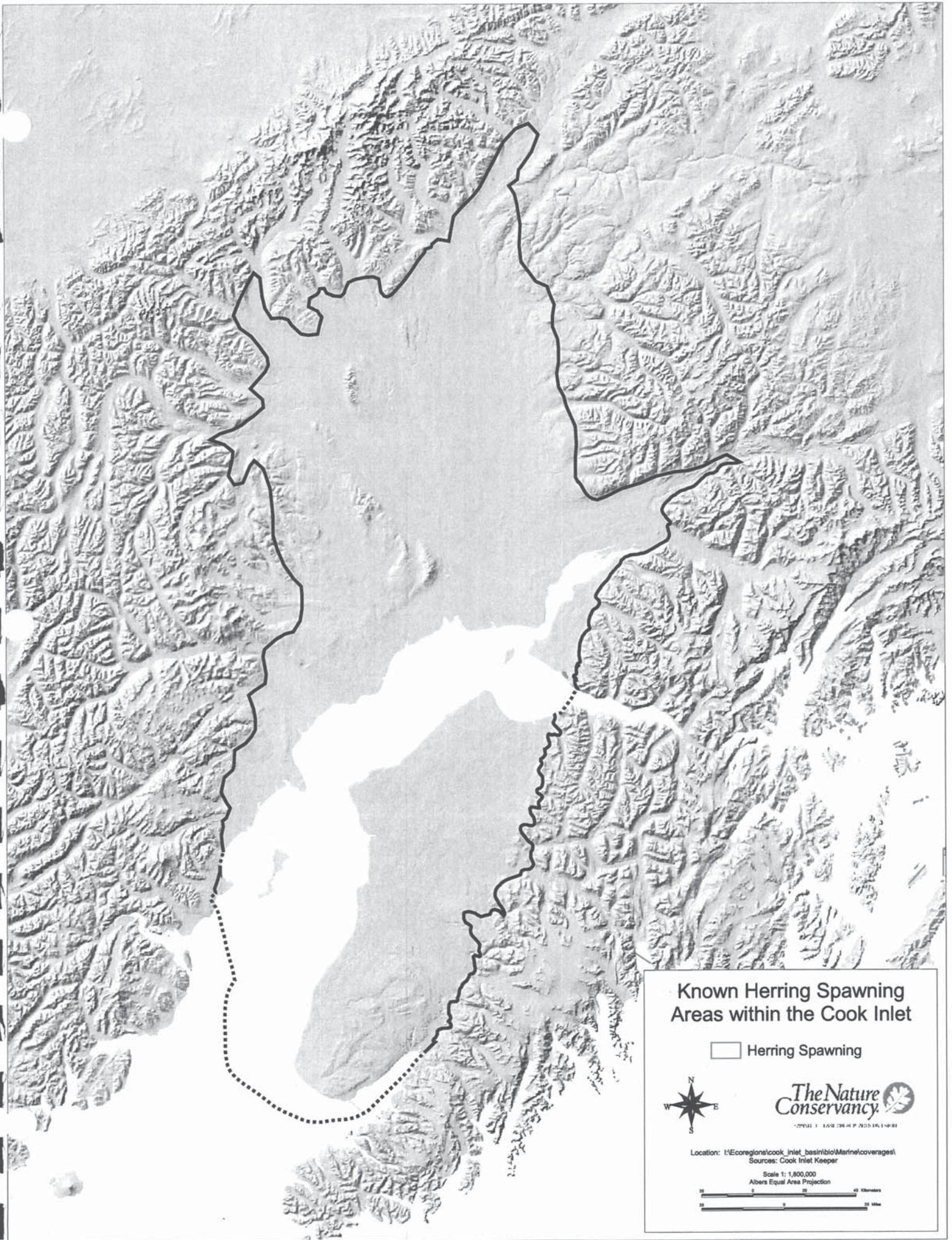


Model constructed by the Western Conservation Science Center of The Nature Conservancy.
Source: Alaska interim land cover (LCI) dataset, developed by USGS

Scale 1: 1,600,000
Albers Equal Area Projection



COASTAL MARINE HABITATS



Known Herring Spawning Areas within the Cook Inlet

 Herring Spawning

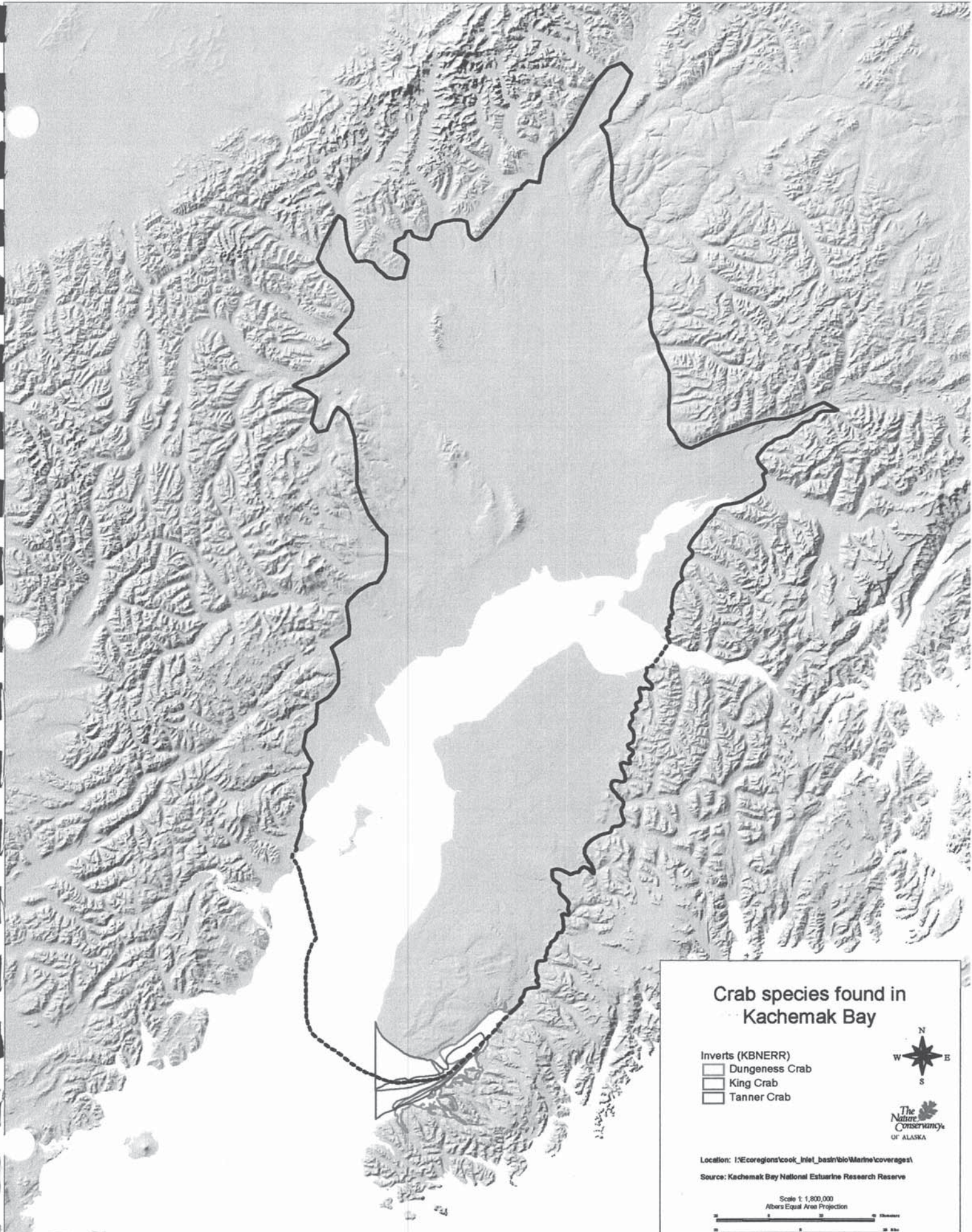


© 2003 The Nature Conservancy

Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\coverages\ Sources: Cook Inlet Keeper

Scale 1:1,000,000
Albers Equal Area Projection



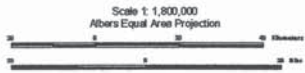


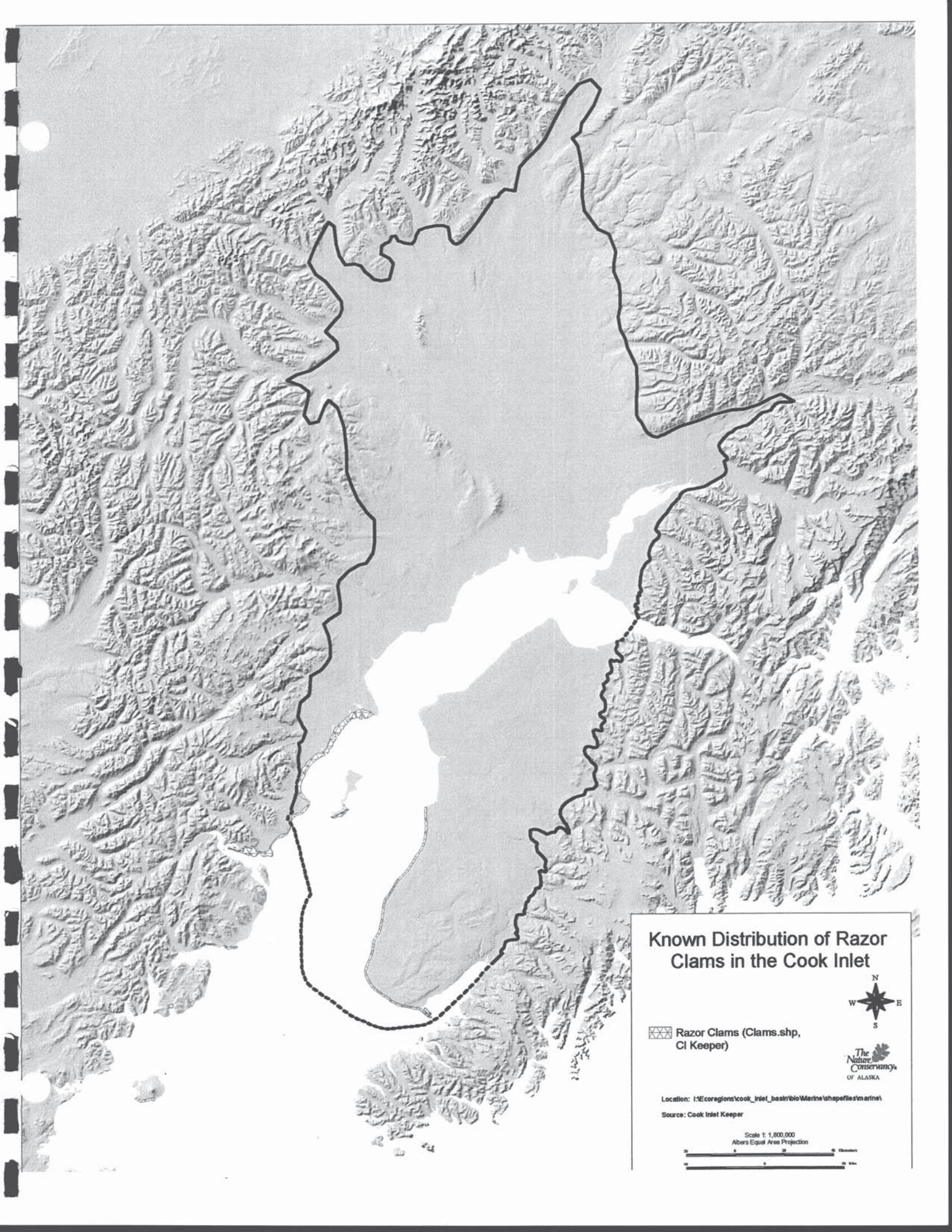
Crab species found in Kachemak Bay

- Inverts (KBNERR)
- Dungeness Crab
 - King Crab
 - Tanner Crab



Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\coverage\st
Source: Kachemak Bay National Estuarine Research Reserve





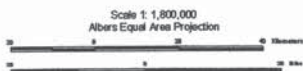
Known Distribution of Razor Clams in the Cook Inlet

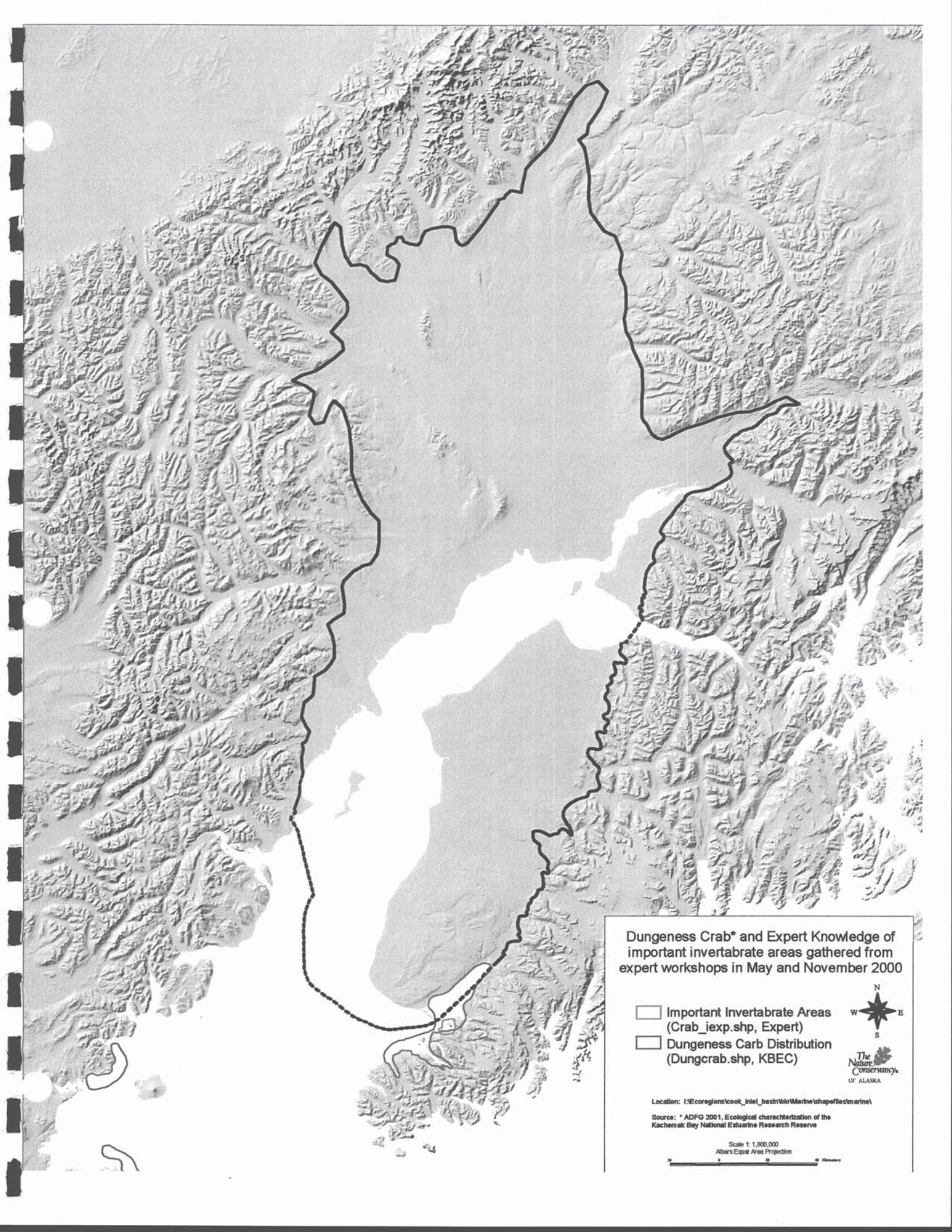
 Razor Clams (Clams.shp, CI Keeper)





Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marnet

Source: Cook Inlet Keeper





Dungeness Crab* and Expert Knowledge of important invertebrate areas gathered from expert workshops in May and November 2000

-  Important Invertebrate Areas (Crab_iexp.shp, Expert)
-  Dungeness Crab Distribution (Dungcrab.shp, KBEC)

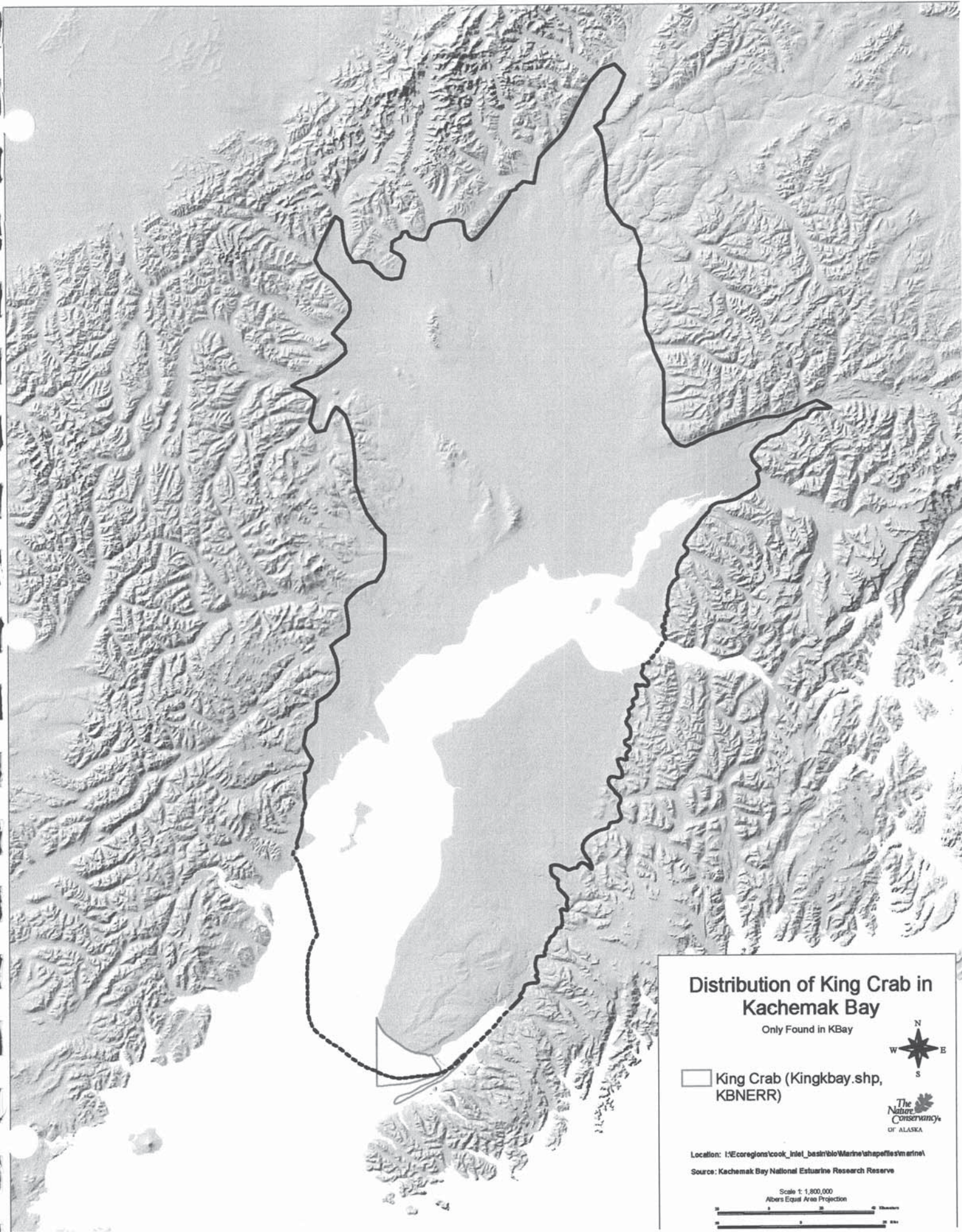


Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marine\

Source: * ADFG 2001, Ecological characterization of the Kachemak Bay National Estuarine Research Reserve

Scale 1:1,800,000
Albers Equal Area Projection





Distribution of King Crab in Kachemak Bay

Only Found in KBay

King Crab (Kingcbay.shp, KBNERR)

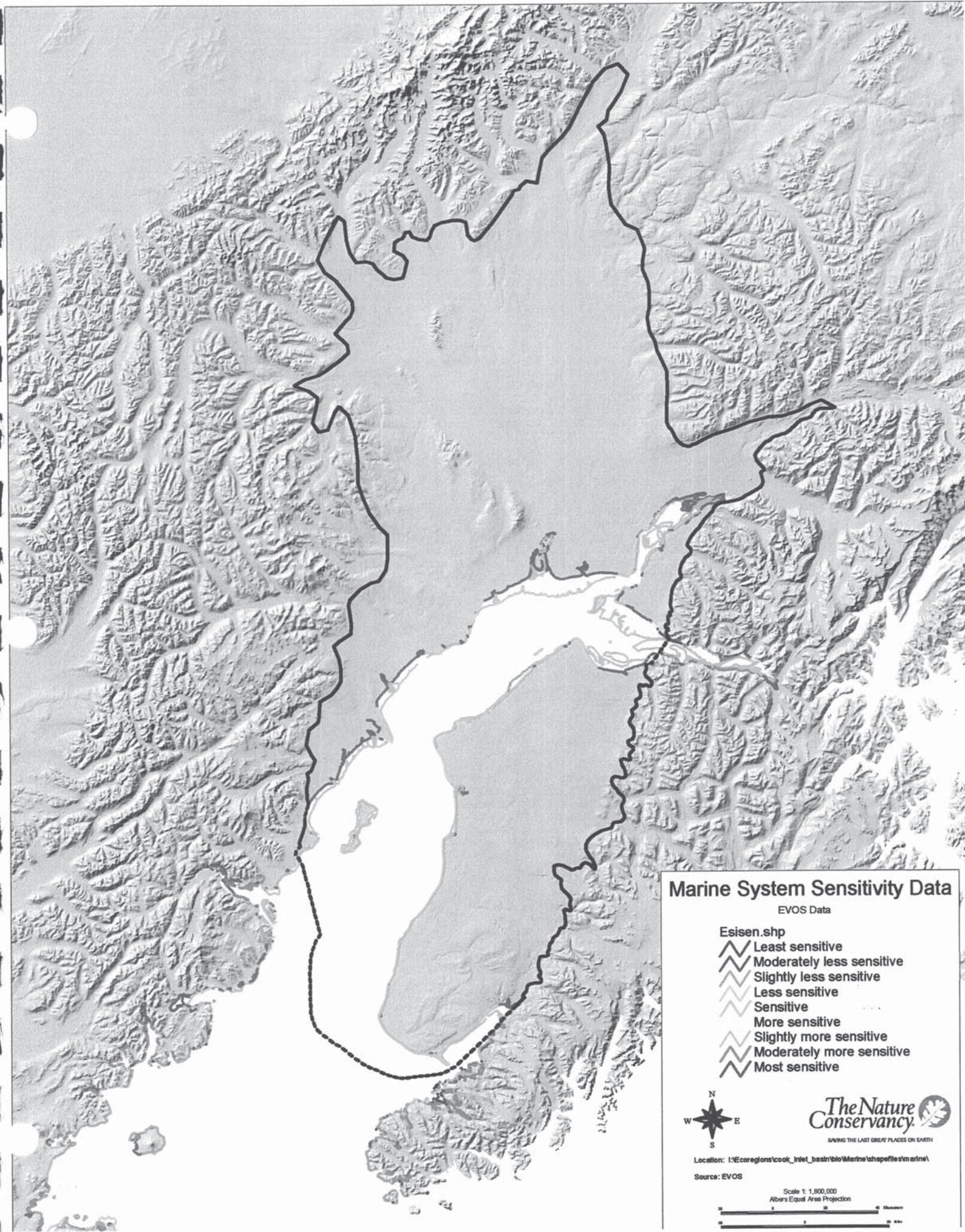


Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marine\

Source: Kachemak Bay National Estuarine Research Reserve

Scale 1:1,800,000
Albers Equal Area Projection





Marine System Sensitivity Data

EVOS Data

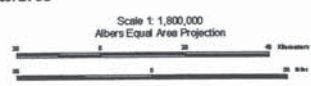
Eisen.shp

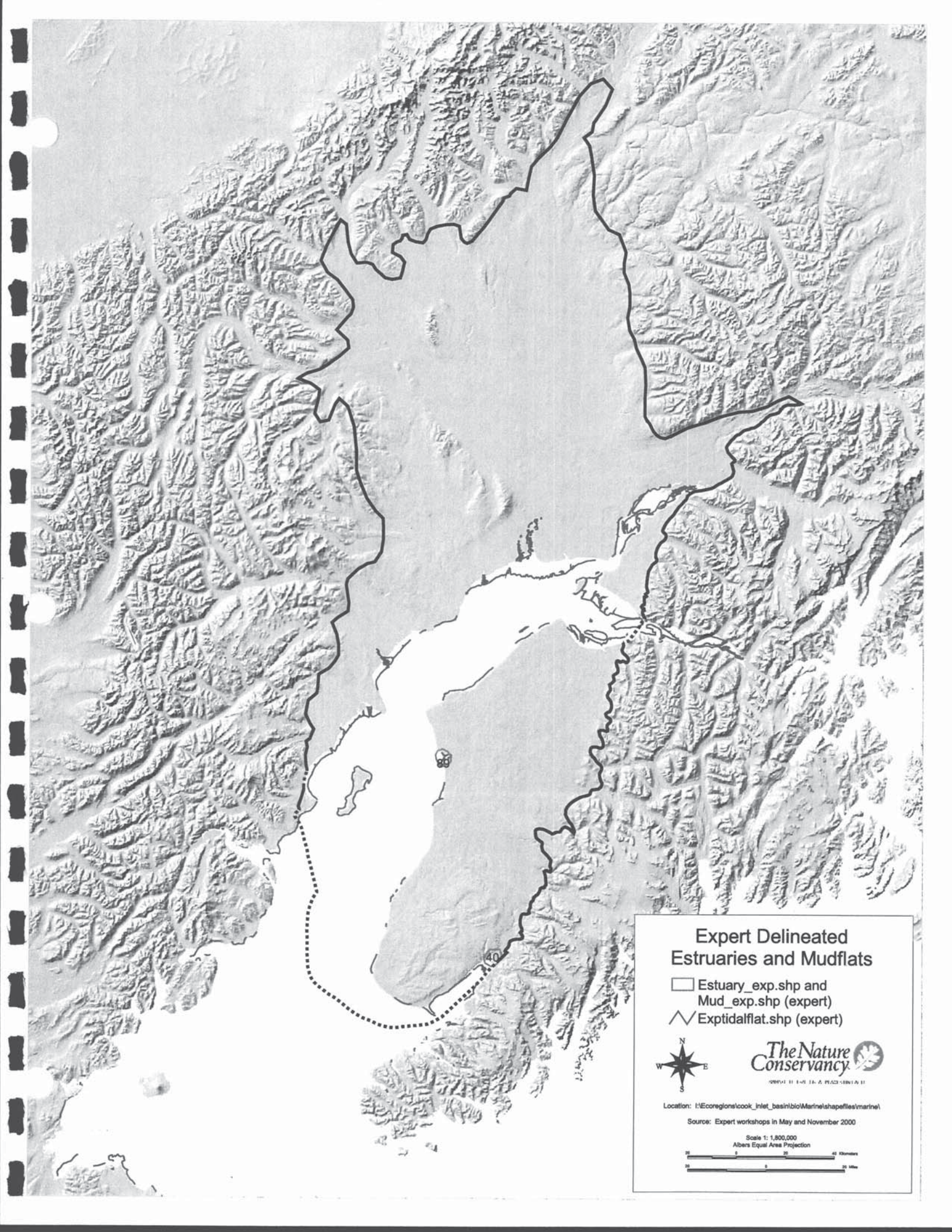
- Least sensitive
- Moderately less sensitive
- Slightly less sensitive
- Less sensitive
- Sensitive
- More sensitive
- Slightly more sensitive
- Moderately more sensitive
- Most sensitive



Location: I:\Ecoregions\cook_inlet_basin\blo\Marine\shpfiles\marine\

Source: EVOS





Expert Delineated Estuaries and Mudflats

- Estuary_exp.shp and
Mud_exp.shp (expert)
- ∨ Exptidalflat.shp (expert)



08/04/11 11:41:13 A.M. P:\GIS\1011\A11

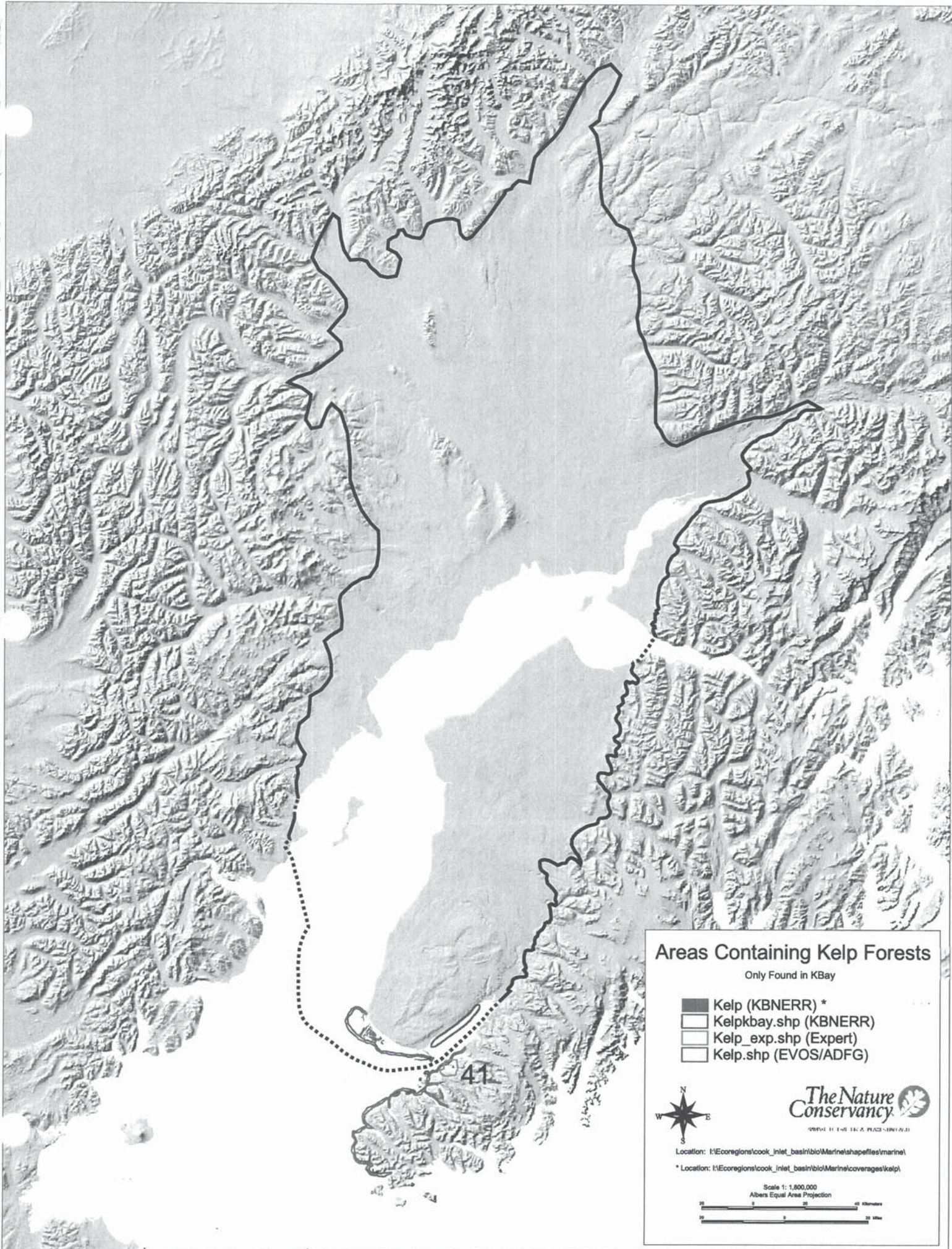
Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marine\

Source: Expert workshops in May and November 2000

Scale 1:1,800,000





Albers Equal Area Projection





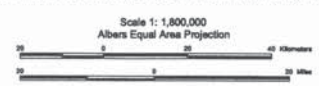
Areas Containing Kelp Forests

Only Found in KBay

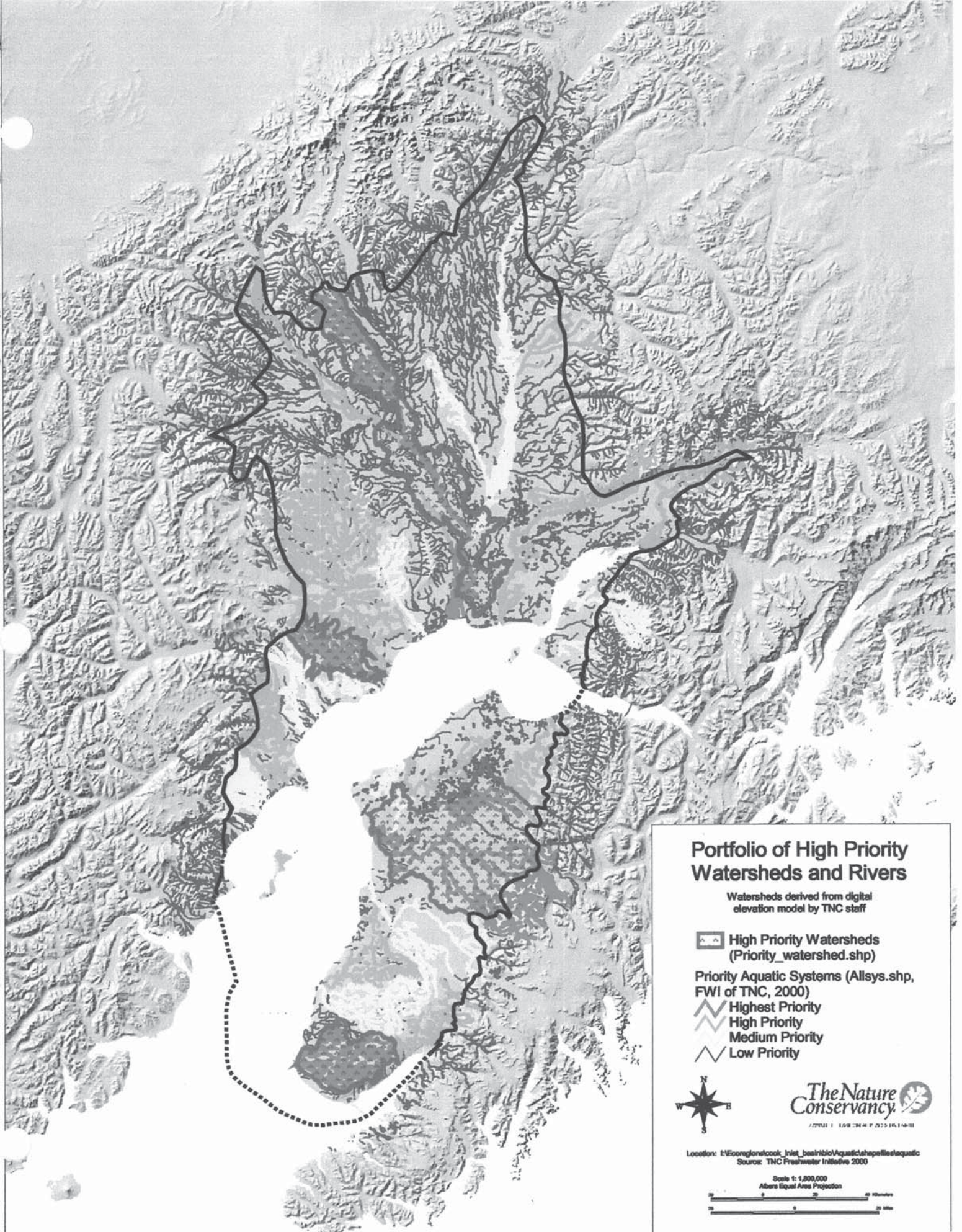
-  Kelp (KBNERR) *
-  Kelpkbay.shp (KBNERR)
-  Kelp_exp.shp (Expert)
-  Kelp.shp (EVOS/ADFG)



Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marine\
* Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\coverages\kelp\




AQUATIC ECOSYSTEMS AND FISH







Portfolio of High Priority Watersheds and Rivers

Watersheds derived from digital elevation model by TNC staff

 High Priority Watersheds (Priority_watershed.shp)

Priority Aquatic Systems (Allsys.shp, FWI of TNC, 2000)

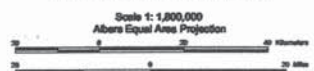
-  Highest Priority
-  High Priority
-  Medium Priority
-  Low Priority

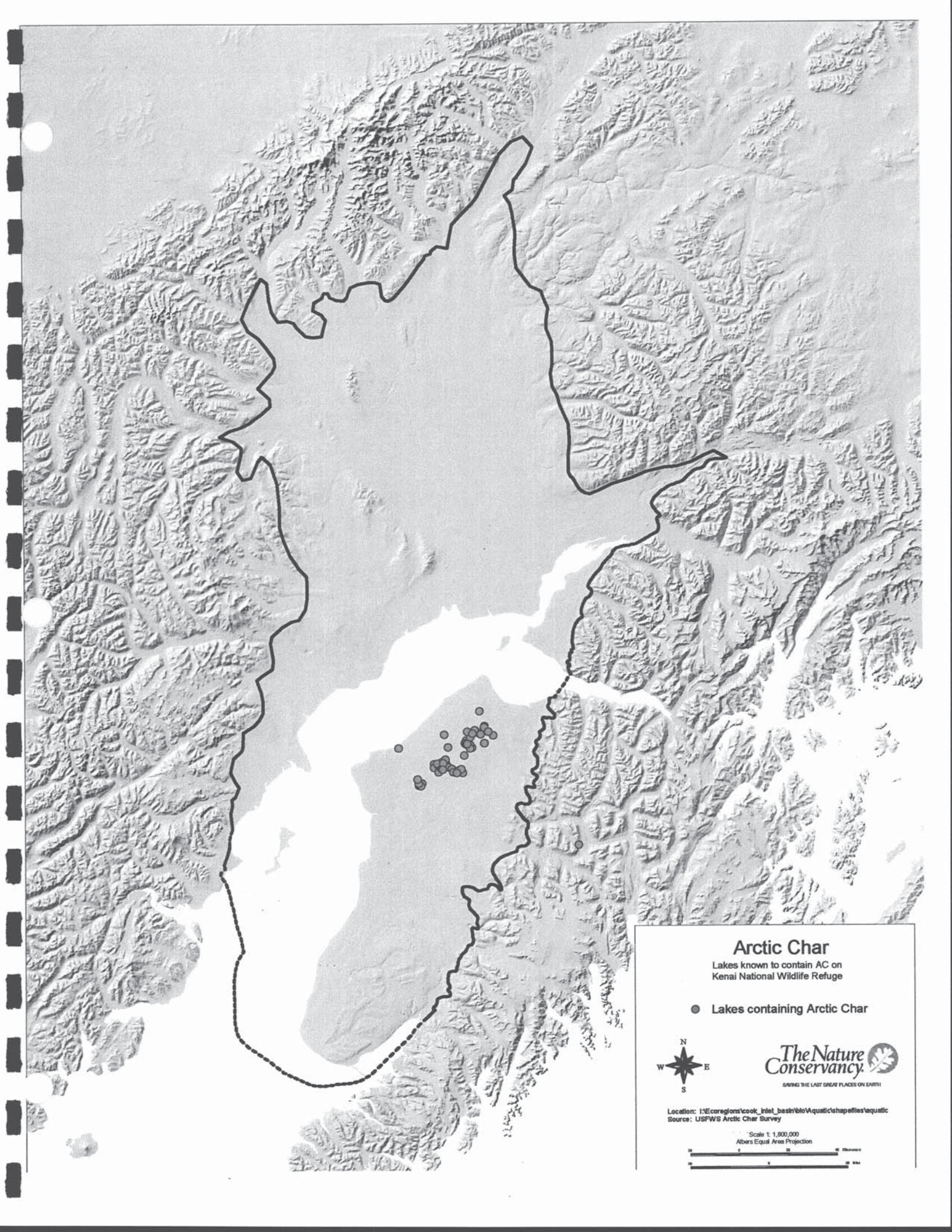


The Nature Conservancy 

77001 1 1/98 (M & P) 205 161-0011

Location: I:\Ecoregions\cook_inlet_basin\bio\Aquatic\shpfiles\aquatic Source: TNC Freshwater Initiative 2000





Arctic Char

Lakes known to contain AC on
Kenai National Wildlife Refuge

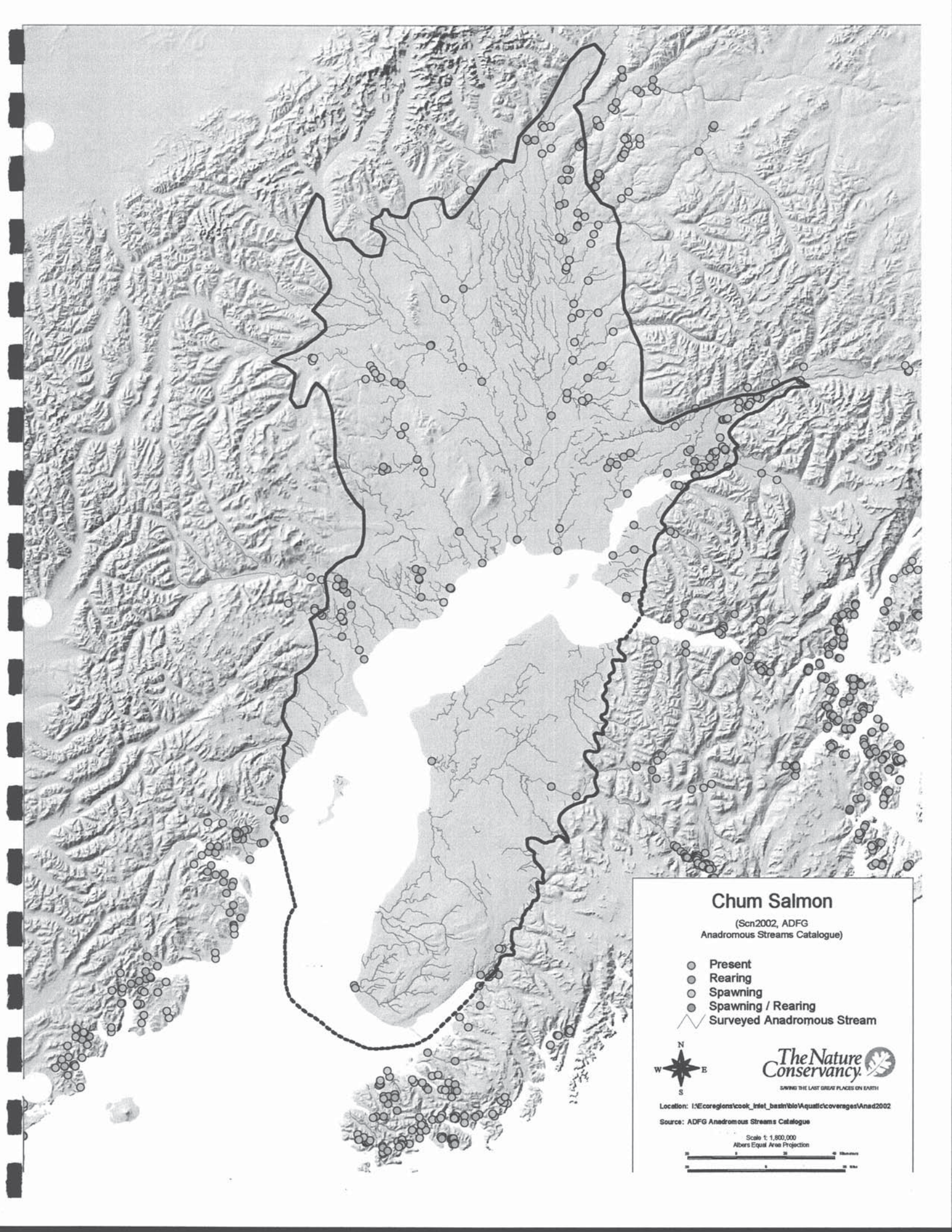
- Lakes containing Arctic Char



Location: I:\Ecoregions\cook_inlet_basin\lto\aquatic\shapefiles\aquatic
Source: USFWS Arctic Char Survey

Scale 1:1,800,000
Albers Equal Area Projection





Chum Salmon

(Scn2002, ADFG
Anadromous Streams Catalogue)

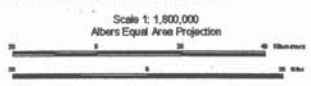
- Present
- Rearing
- Spawning
- Spawning / Rearing
- Surveied Anadromous Stream

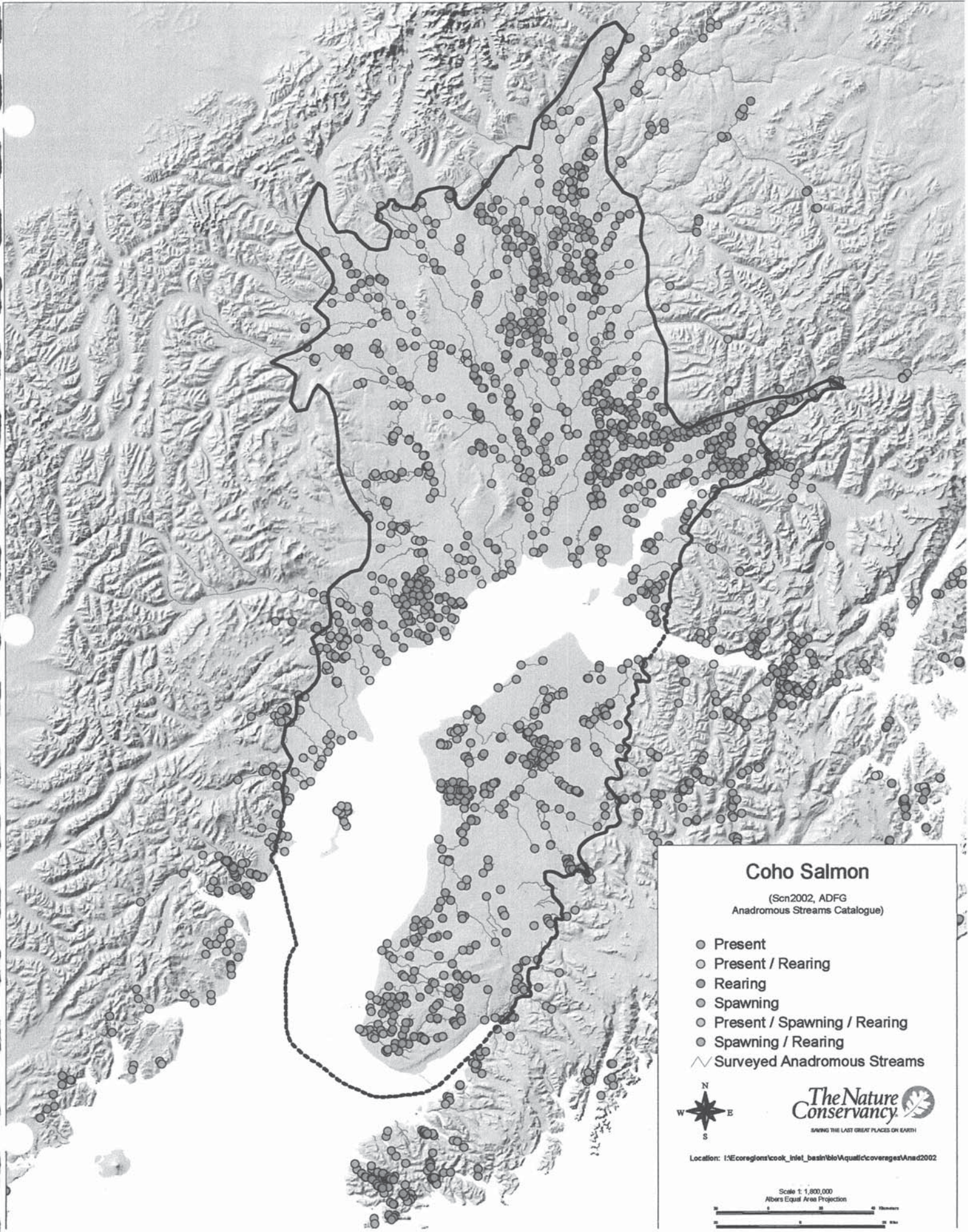


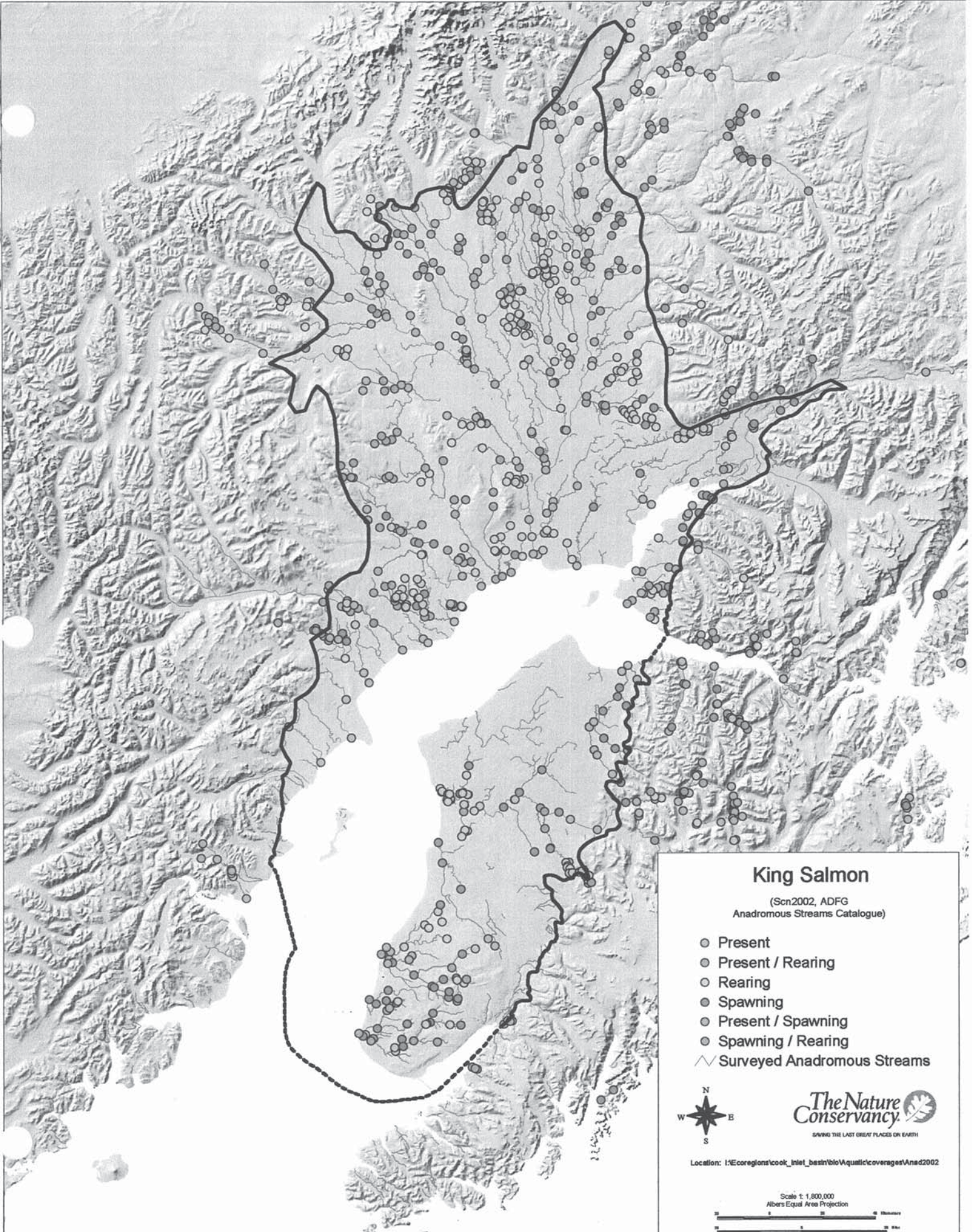
SAVING THE LAST GREAT PLACES ON EARTH

Location: I:\Ecoregions\cook_inlet_basin\ba\Qualtic\coverages\Anad2002

Source: ADFG Anadromous Streams Catalogue







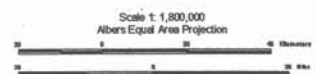
King Salmon

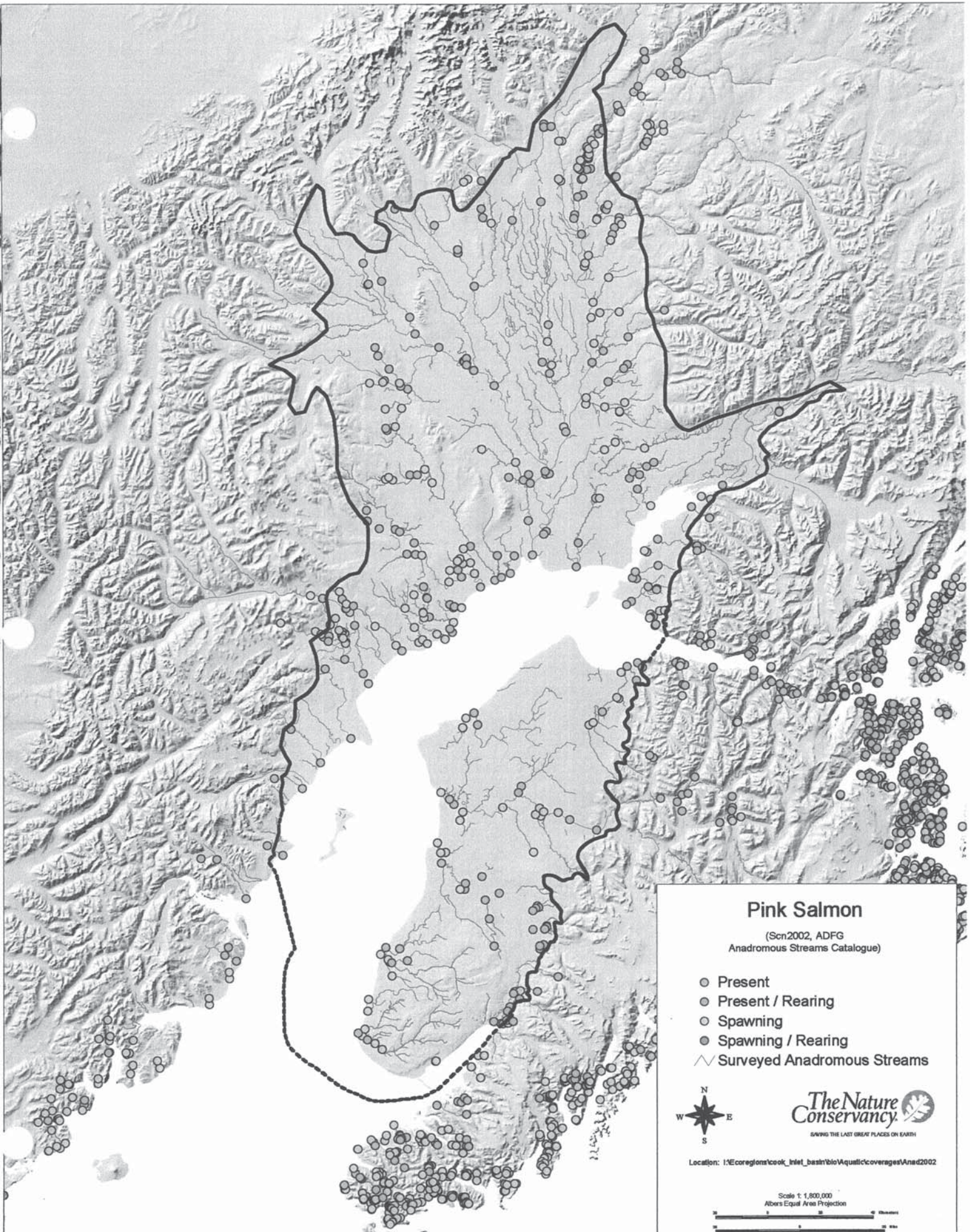
(Scn2002, ADFG
Anadromous Streams Catalogue)

- Present
- Present / Rearing
- Rearing
- Spawning
- Present / Spawning
- Spawning / Rearing
- ∧ Surveyed Anadromous Streams



Location: I:\Ecoregions\cook_inlet_basin\bio\aquatic\coverages\Anad2002





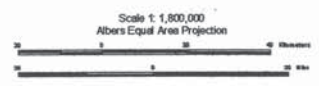
Pink Salmon

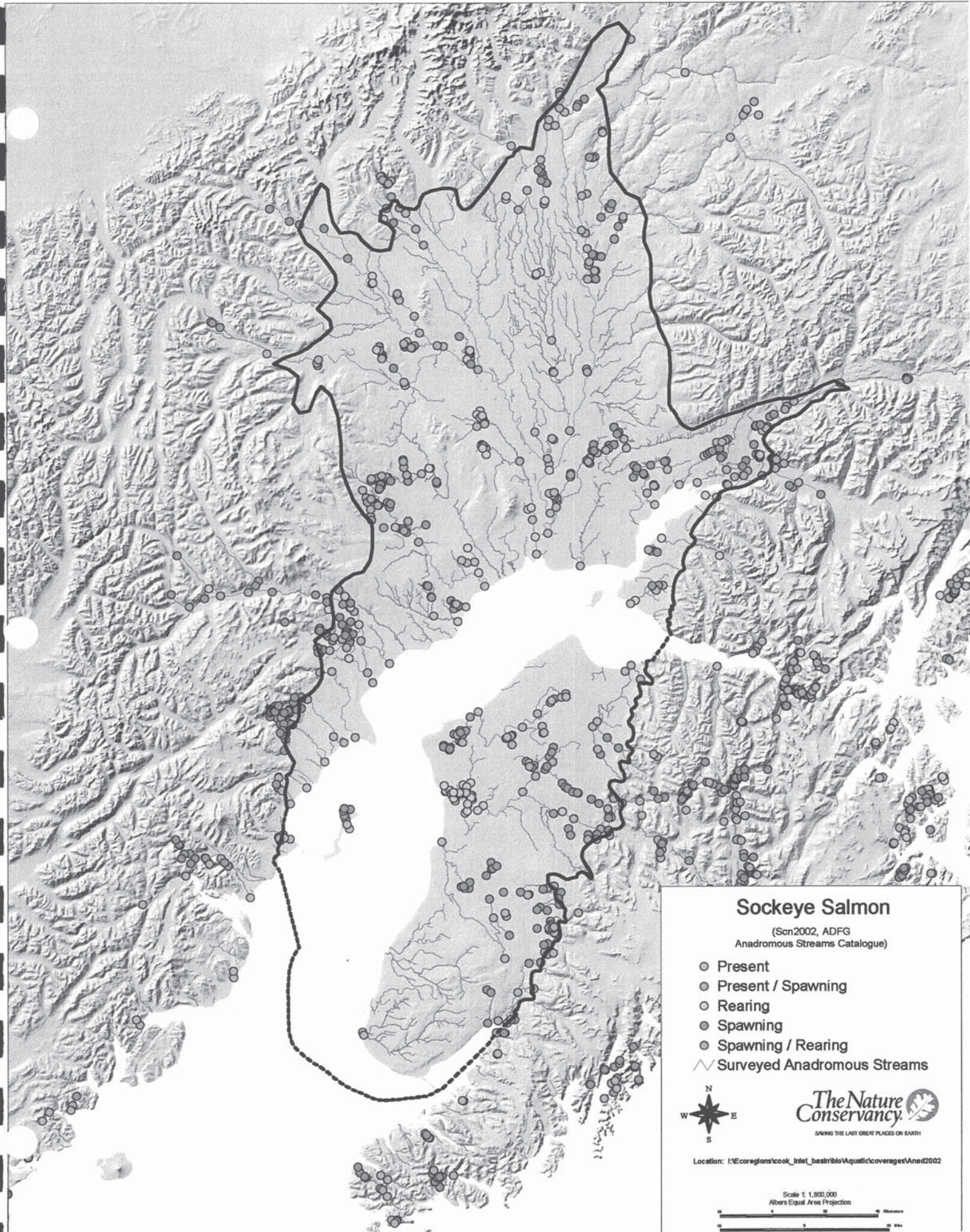
(Scn2002, ADFG
Anadromous Streams Catalogue)

- Present
- Present / Rearing
- Spawning
- Spawning / Rearing
- ∧ Surveyed Anadromous Streams



Location: 1:\Ecoregions\cook_inlet_basin\bio\aquatic\coverages\Anad2002





Sockeye Salmon

(Scn2002, ADFG
Anadromous Streams Catalogue)

- Present
- Present / Spawning
- Rearing
- Spawning
- Spawning / Rearing
- ∨ Surveied Anadromous Streams

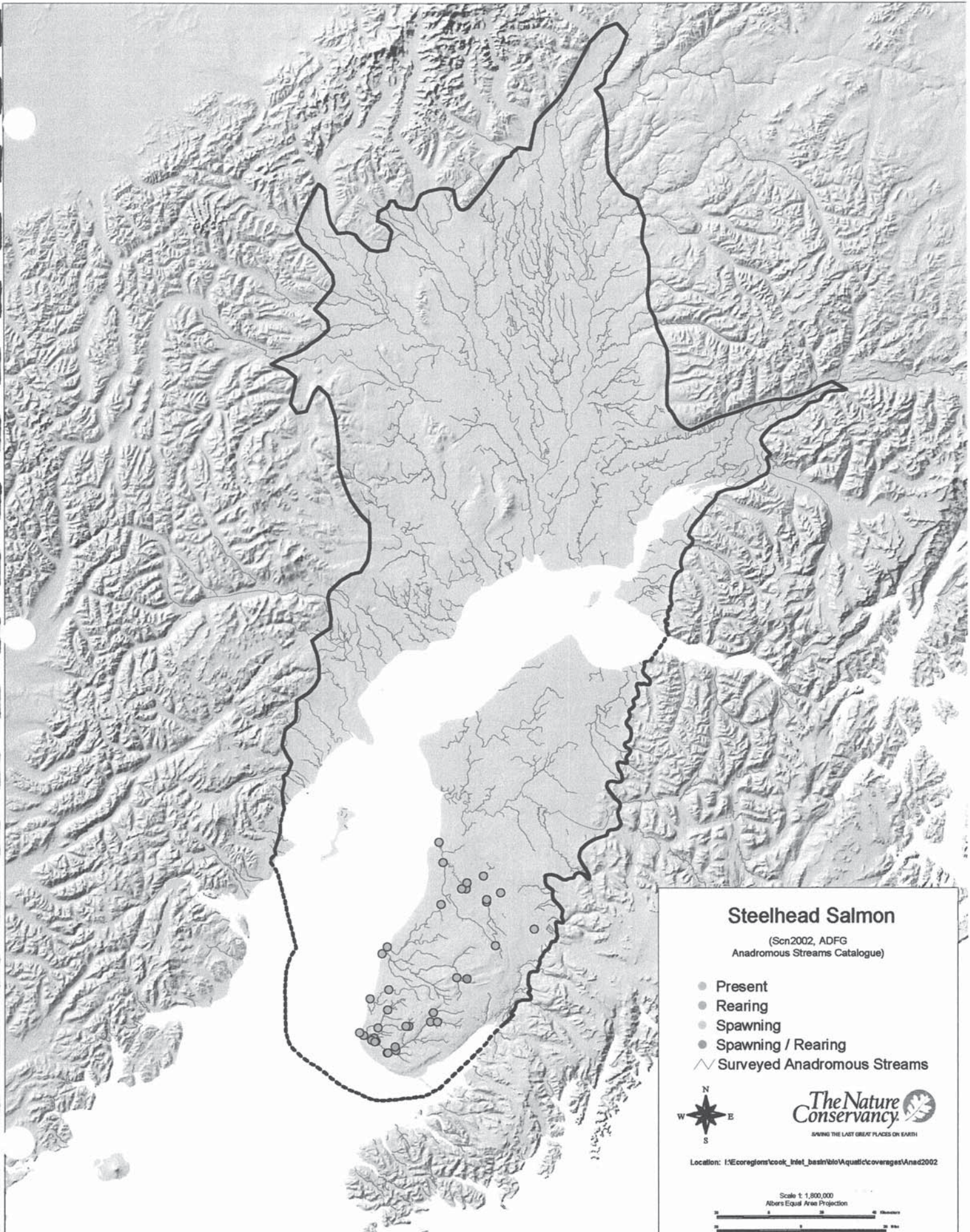


SAVING THE LAST GREAT PLACES ON EARTH

Location: I:\Ecoregions\cook_inla_basin\blo\qualc\coverages\Anad2002

Scale 1: 1,600,000
Albers Equal Area Projection





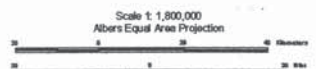
Steelhead Salmon

(Scn2002, ADFG
Anadromous Streams Catalogue)

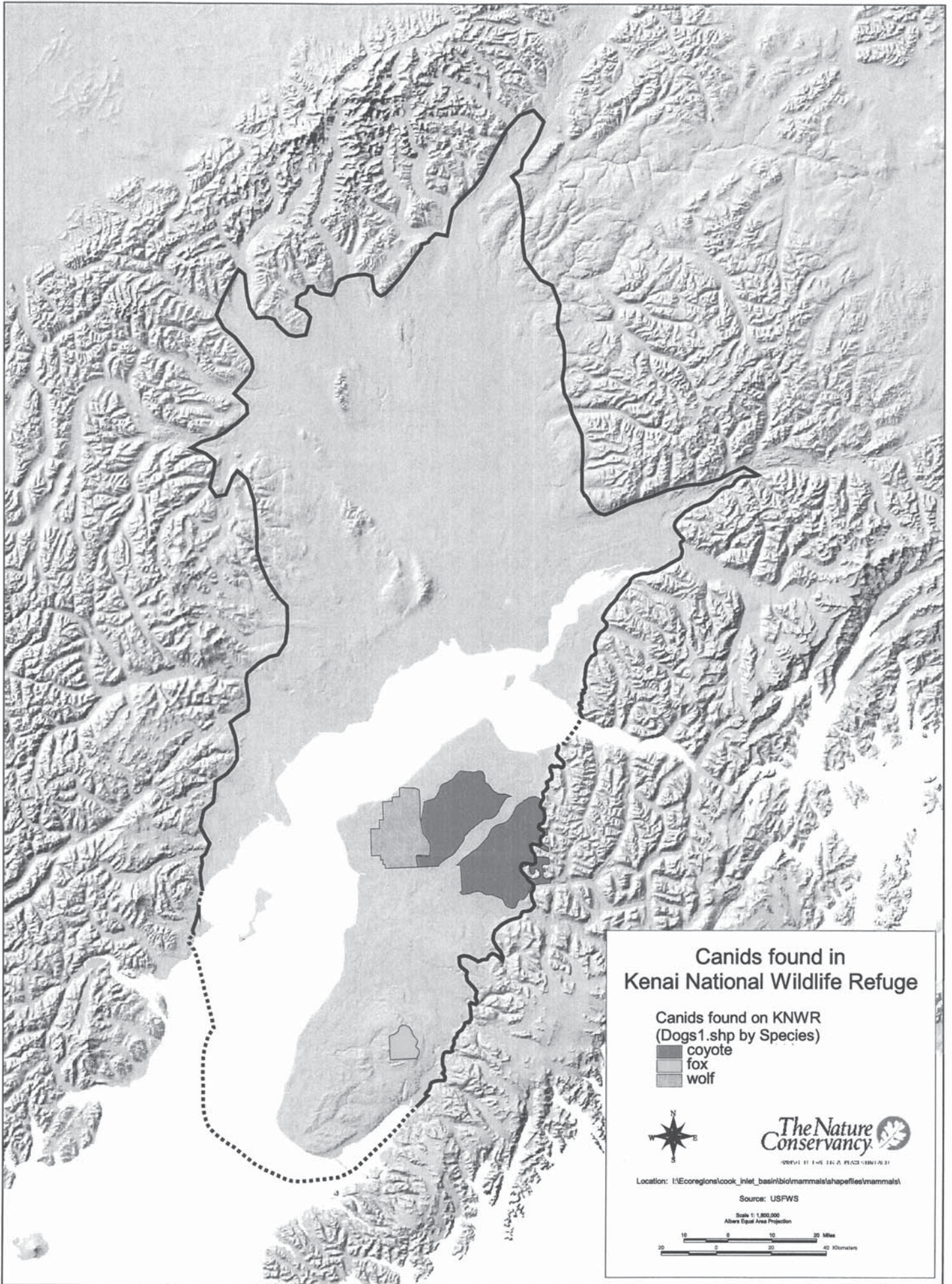
- Present
- Rearing
- Spawning
- Spawning / Rearing
- ∨ Surveyed Anadromous Streams

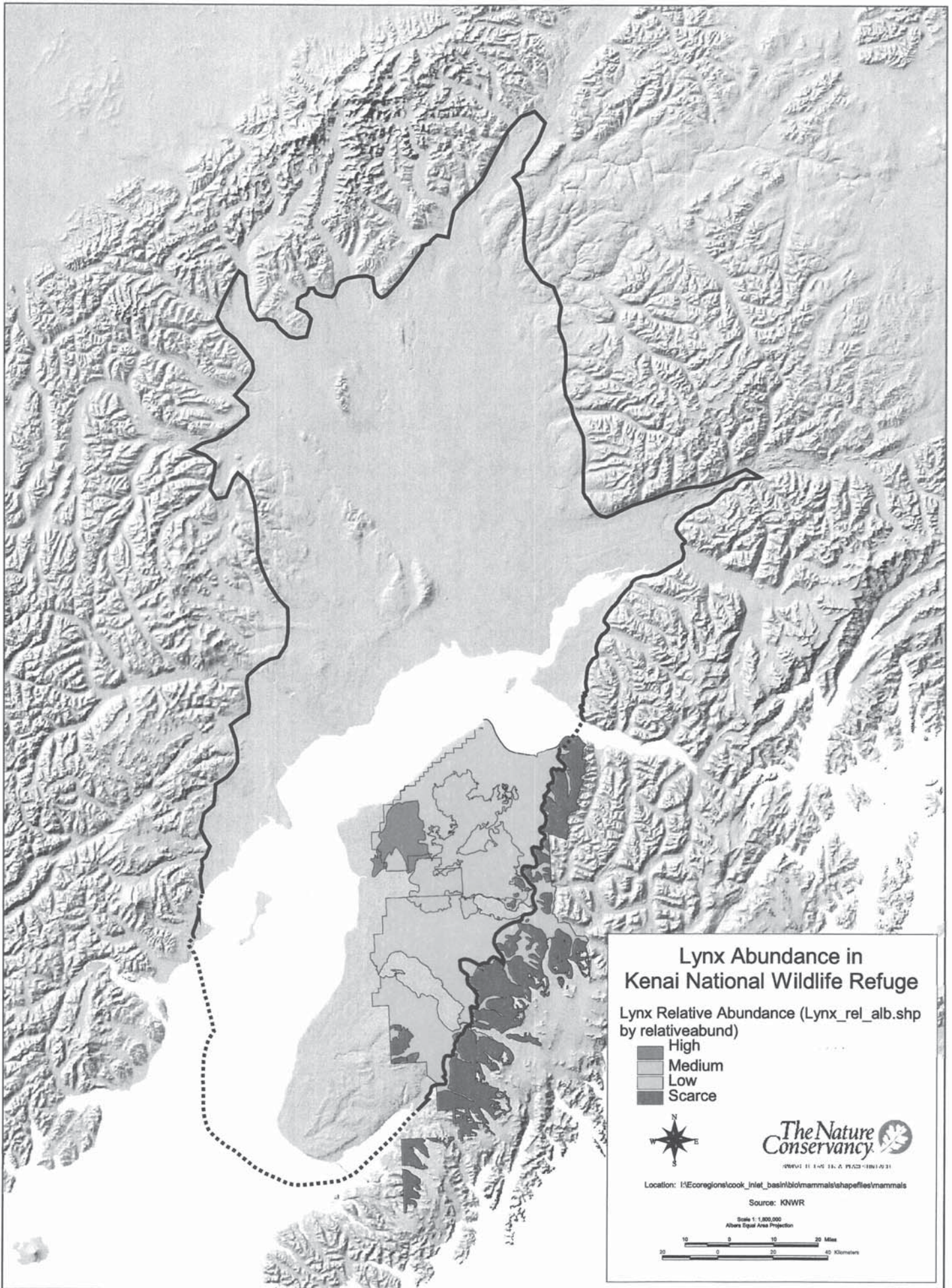


Location: I:\Ecoregions\cook_inlet_basin\bio\Aqualtic\coverages\Anad2002



TERRESTRIAL MAMMALS





Lynx Abundance in Kenai National Wildlife Refuge

Lynx Relative Abundance (Lynx_rel_alb.shp by relativeabund)

- High
- Medium
- Low
- Scarce

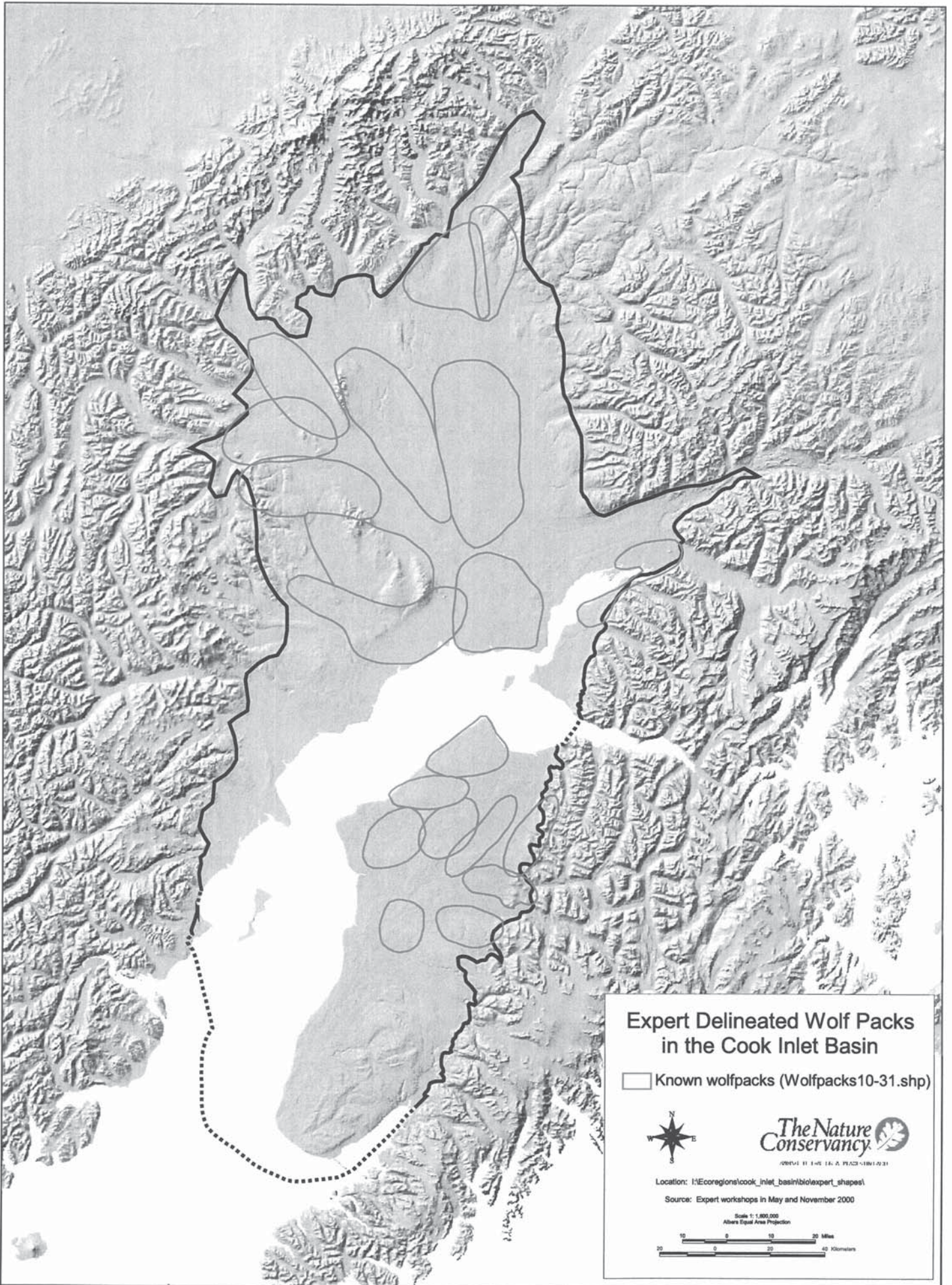


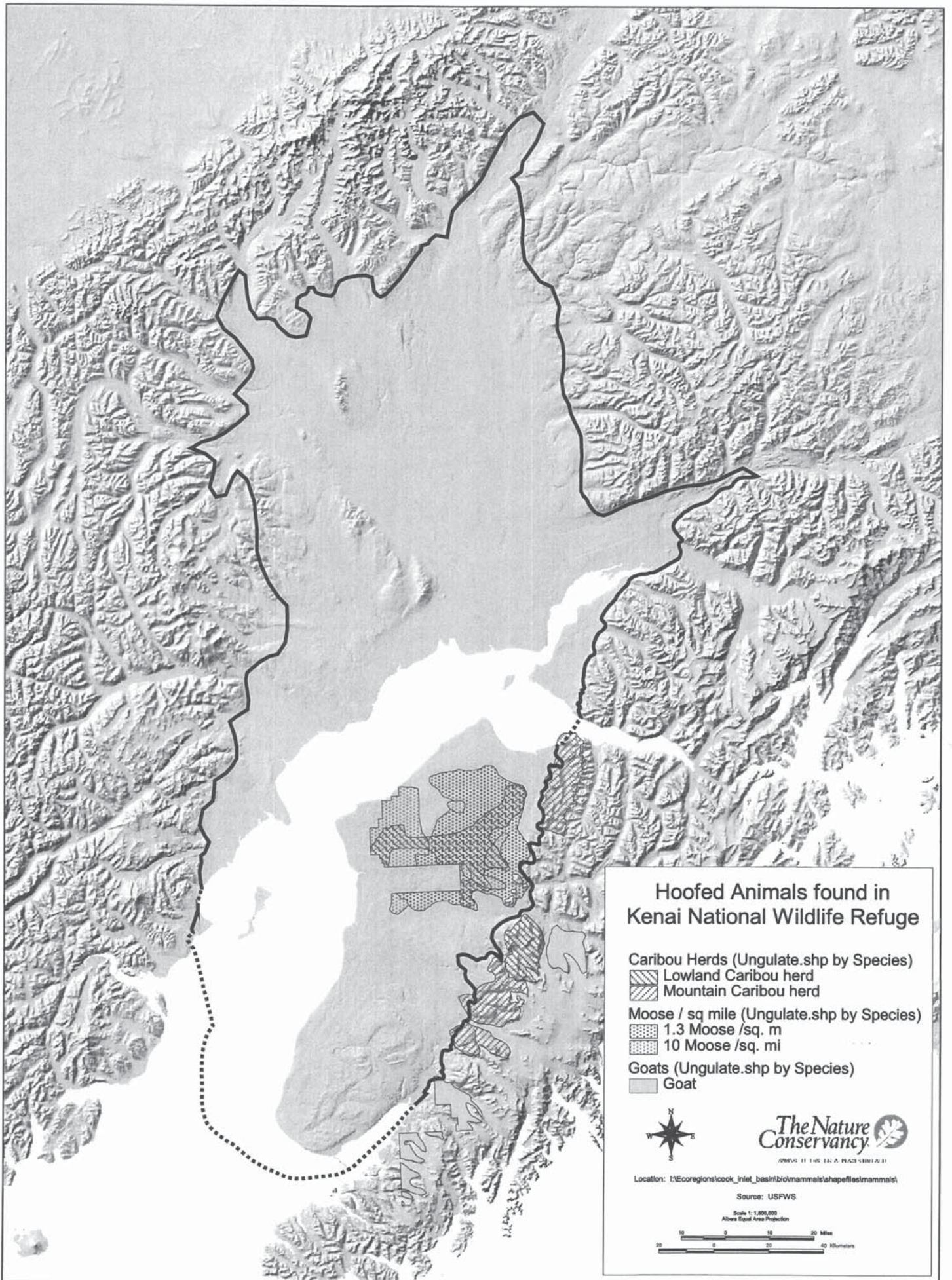
Location: I:\Ecoregions\cook_inlet_basin\biomammals\shapfiles\mammals

Source: KNWR






Scale 1:1,000,000
Albers Equal Area Projection







Hooved Animals found in Kenai National Wildlife Refuge

- Caribou Herds (Ungulate.shp by Species)
-  Lowland Caribou herd
 -  Mountain Caribou herd
- Moose / sq mile (Ungulate.shp by Species)
-  1.3 Moose /sq. m
 -  10 Moose /sq. mi
- Goats (Ungulate.shp by Species)
-  Goat

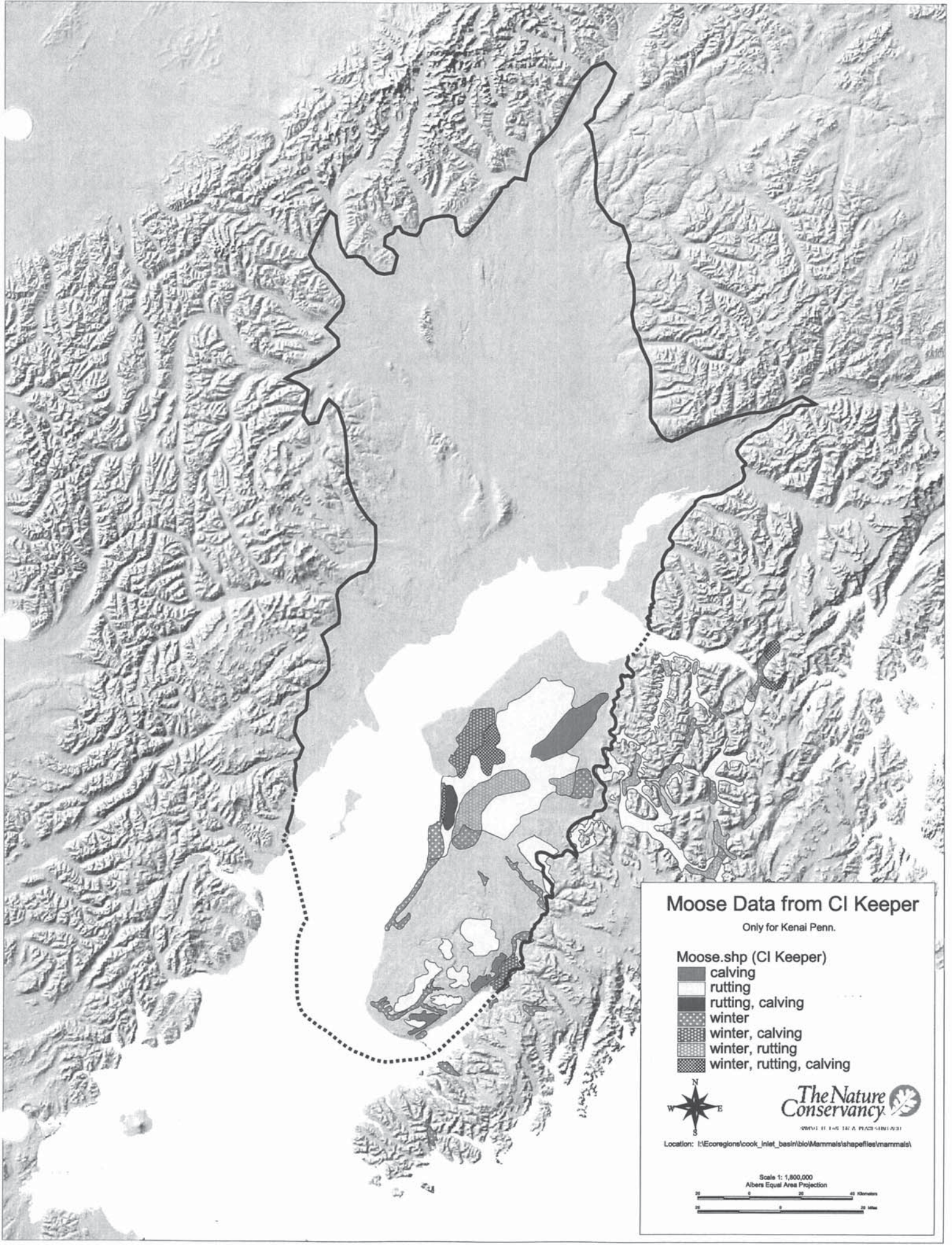


Location: I:\Ecoregions\cook_inlet_basin\bio\mammals\shapfiles\mammals

Source: USFWS

Scale 1: 1,000,000
 Albers Equal Area Projection












Moose Data from CI Keeper

Only for Kenai Penn.

Moose.shp (CI Keeper)

-  calving
-  rutting
-  rutting, calving
-  winter
-  winter, calving
-  winter, rutting
-  winter, rutting, calving

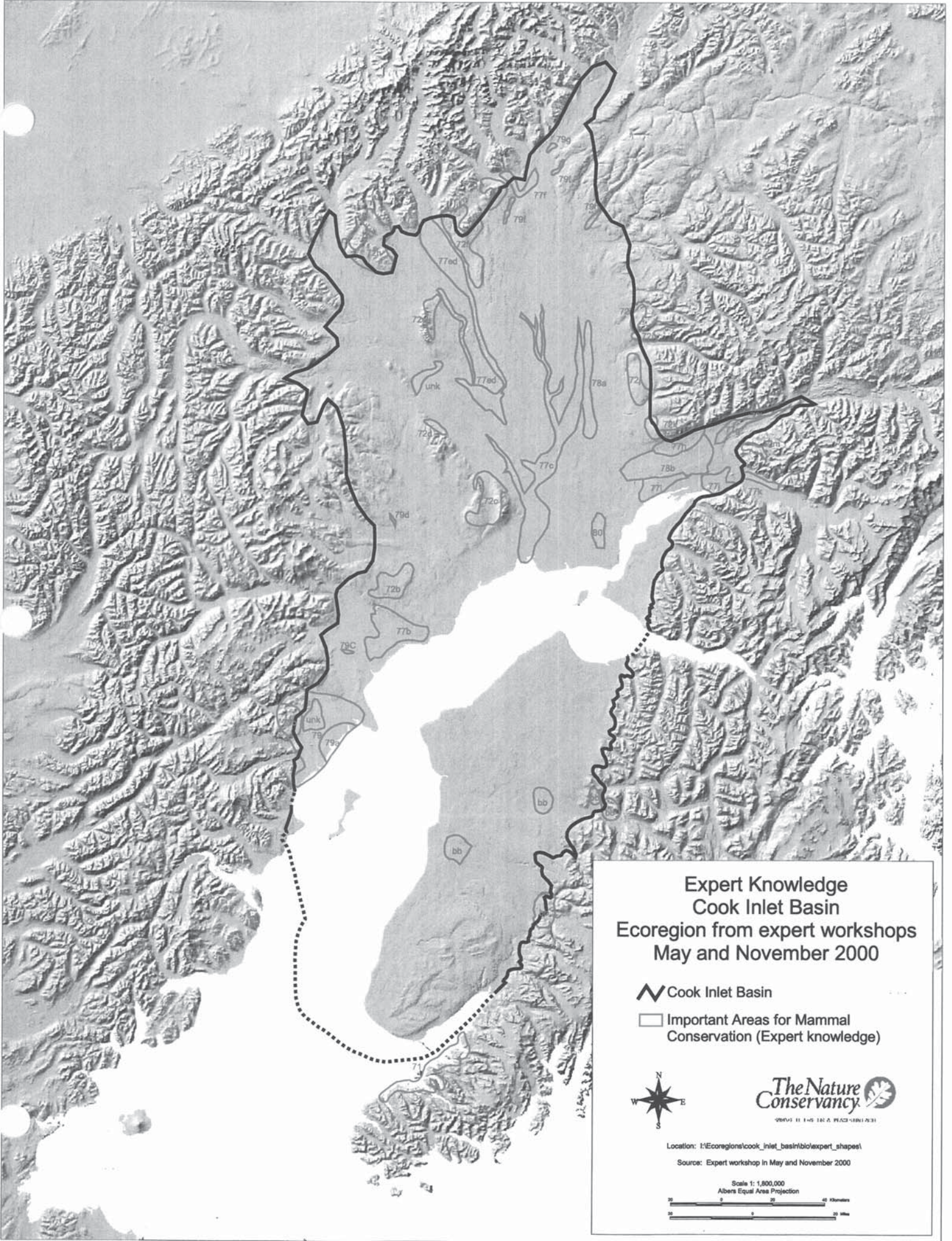


©2001 The Nature Conservancy



Location: I:\Ecoregions\cook_inlet_basin\bio\Mammals\shapfiles\mammals

Scale 1:1,800,000
Albers Equal Area Projection



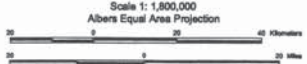


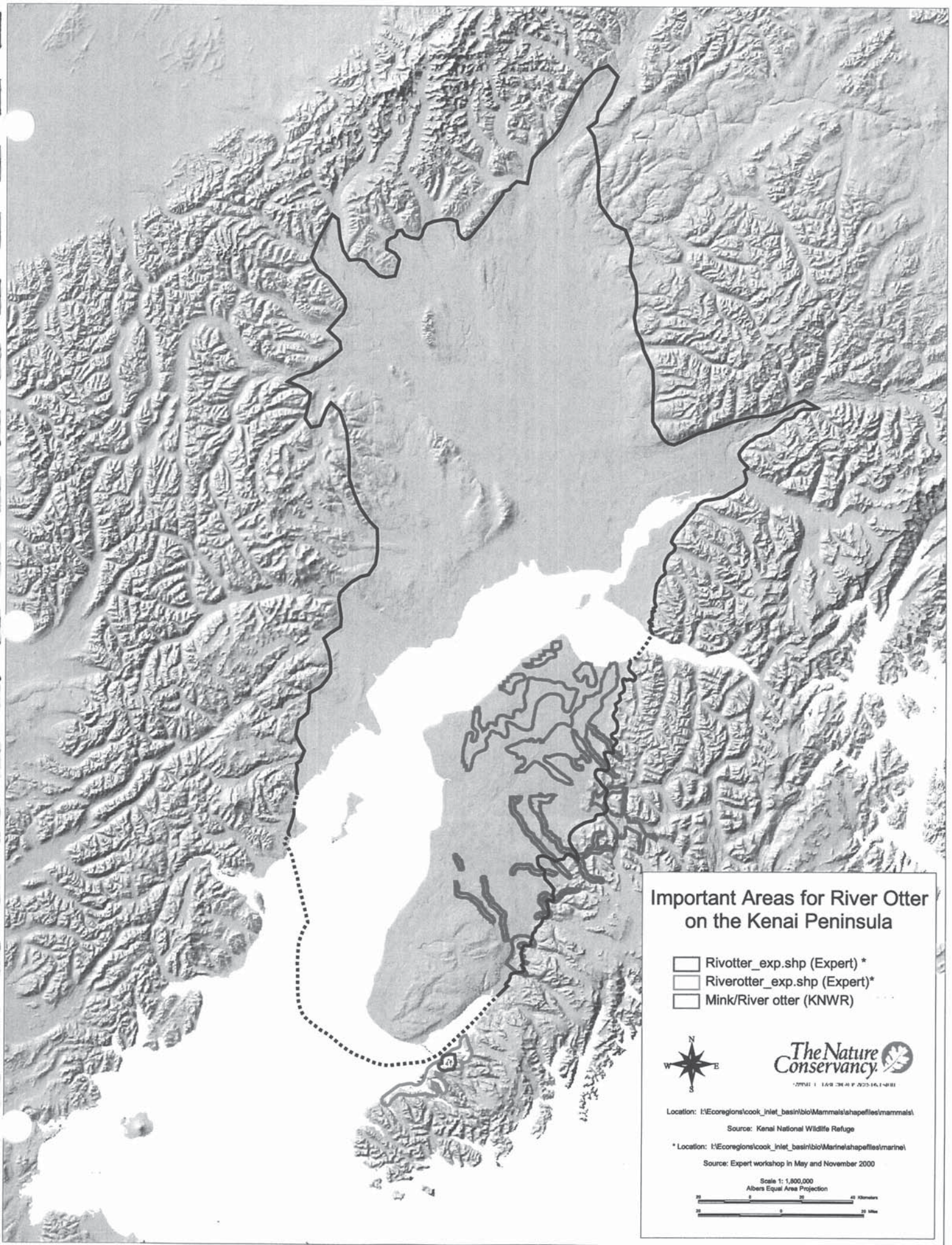
Expert Knowledge
Cook Inlet Basin
Ecoregion from expert workshops
May and November 2000

-  Cook Inlet Basin
-  Important Areas for Mammal Conservation (Expert knowledge)






Location: I:\Ecoregions\cook_inlet_basin\bio\expert_shapes\
Source: Expert workshop in May and November 2000





Important Areas for River Otter on the Kenai Peninsula

-  Rivotter_exp.shp (Expert) *
-  Riverotter_exp.shp (Expert)*
-  Mink/River otter (KNWR)

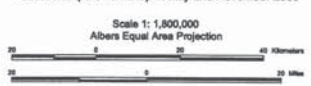


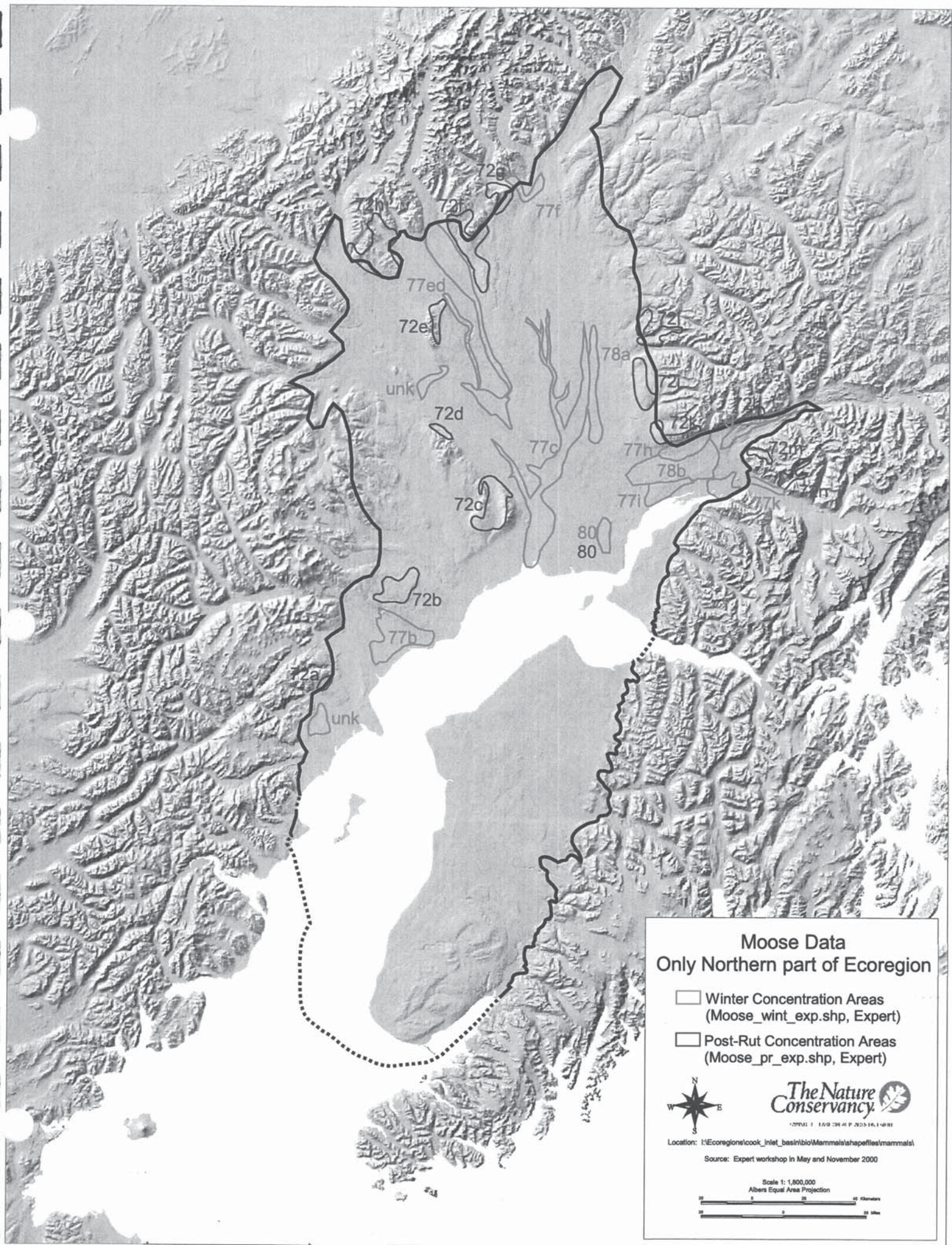
Location: I:\Ecoregions\cook_inlet_basin\bio\Mammals\shapefiles\mammals

Source: Kenai National Wildlife Refuge

* Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marine

Source: Expert workshop in May and November 2000





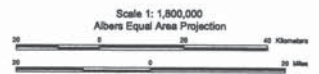
Moose Data Only Northern part of Ecoregion

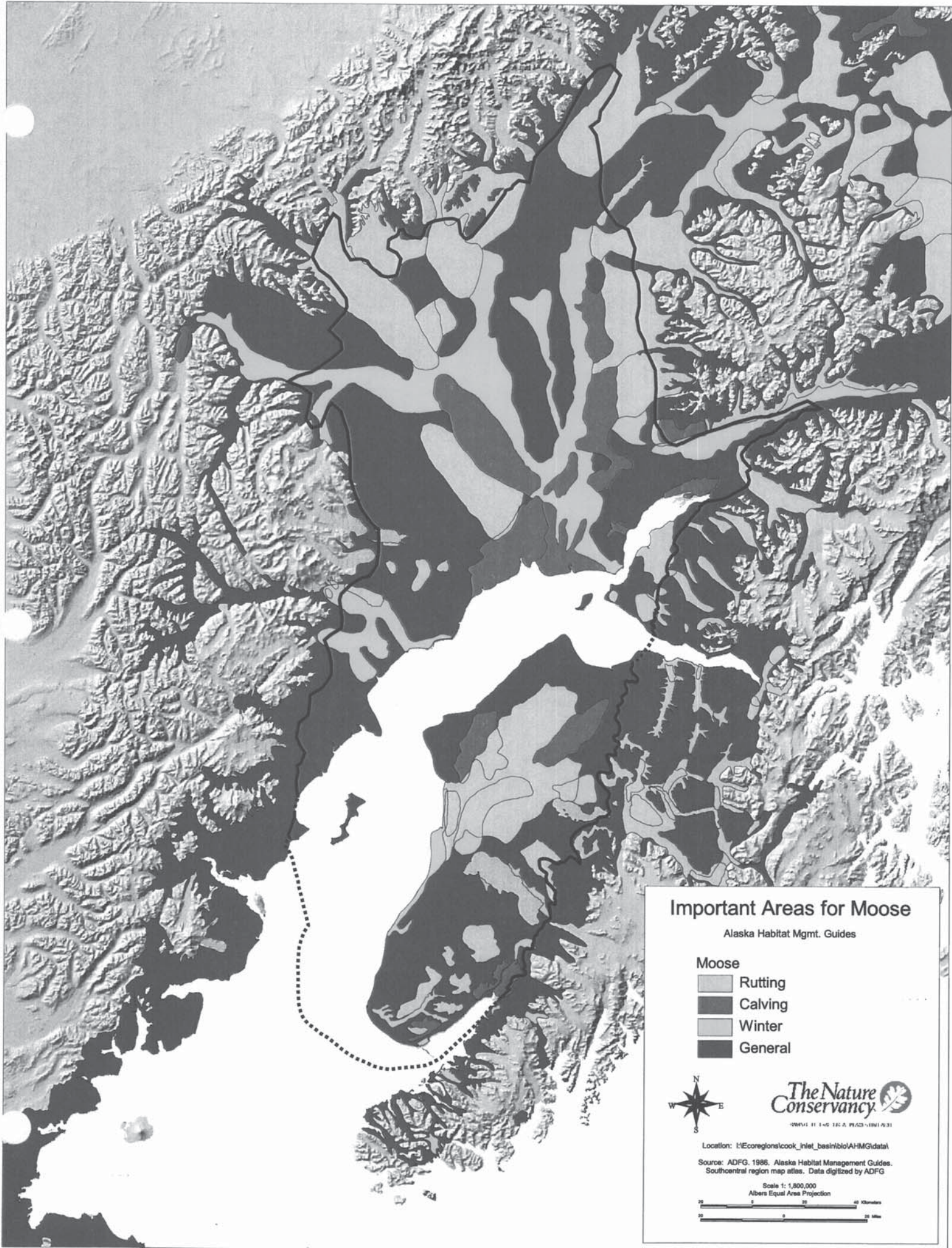
- Winter Concentration Areas
(Moose_wint_exp.shp, Expert)
- Post-Rut Concentration Areas
(Moose_pr_exp.shp, Expert)



Location: I:\Ecoregions\cook_inlet_basin\bio\Mammals\shapefiles\mammals

Source: Expert workshop in May and November 2000





Important Areas for Moose

Alaska Habitat Mgmt. Guides

Moose

-  Rutting
-  Calving
-  Winter
-  General

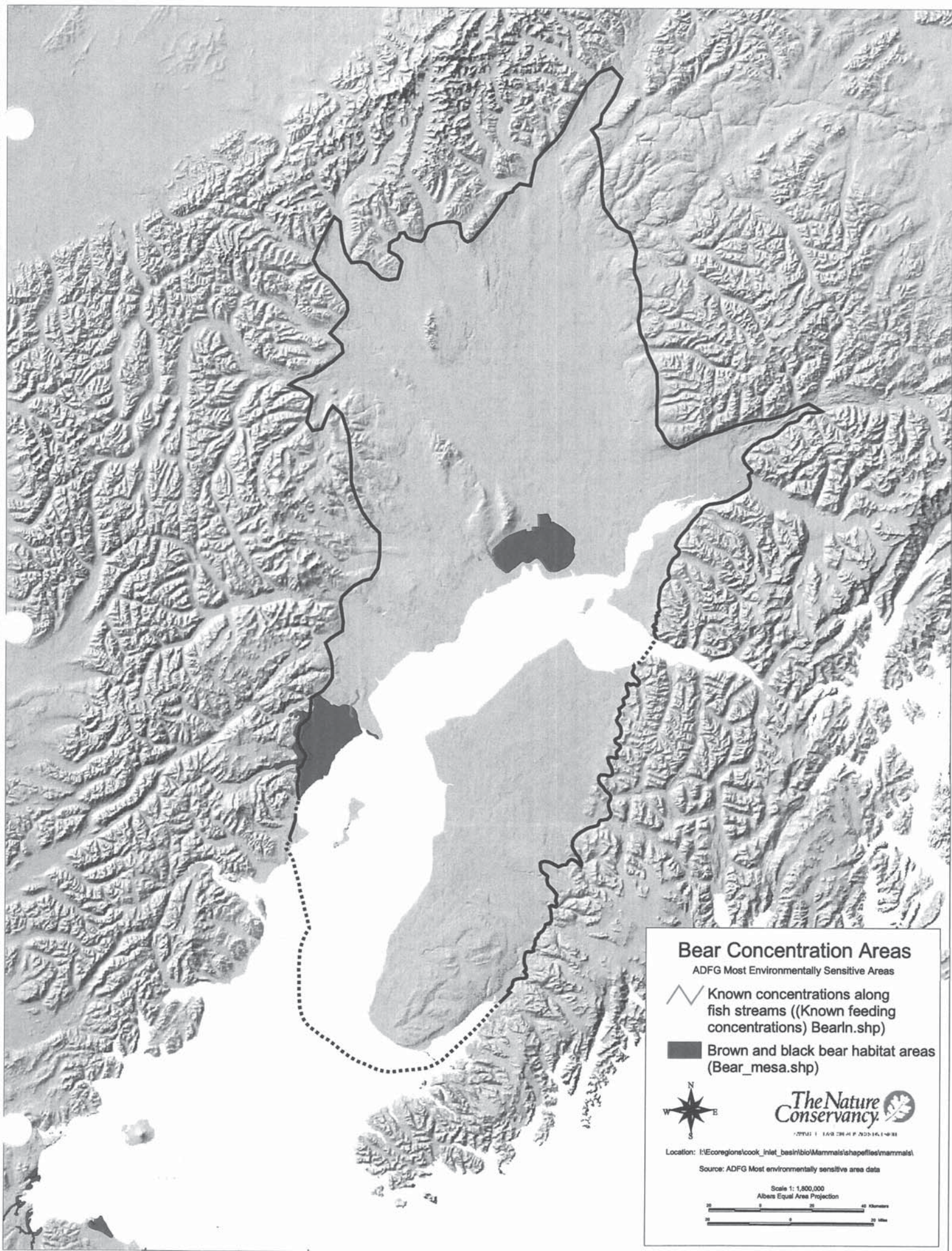


WWW.TNC.ORG

Location: I:\Ecoregions\cook_inlet_basin\bio\AHMG\data
 Source: ADFG, 1986, Alaska Habitat Management Guides, Southcentral region map atlas. Data digitized by ADFG


Scale 1:1,800,000
 Albers Equal Area Projection






Bear Concentration Areas

ADFG Most Environmentally Sensitive Areas

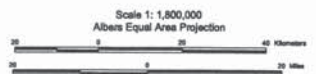
 Known concentrations along fish streams ((Known feeding concentrations) BearIn.shp)

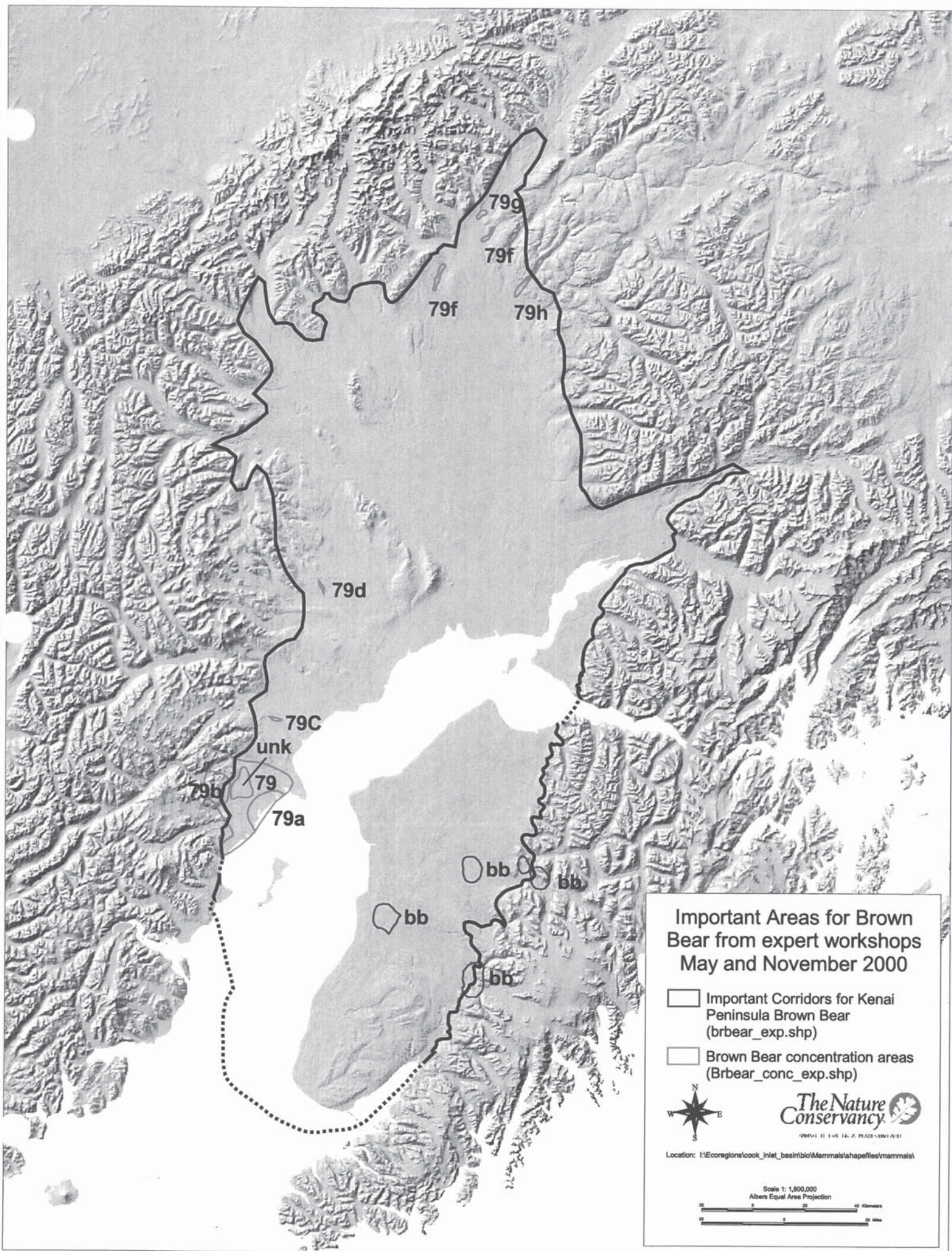
 Brown and black bear habitat areas (Bear_mesa.shp)





Location: I:\Ecoregions\cook_inlet_basin\bio\Mammals\shapefiles\mammals\

Source: ADFG Most environmentally sensitive area data



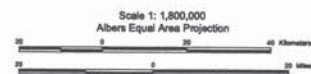


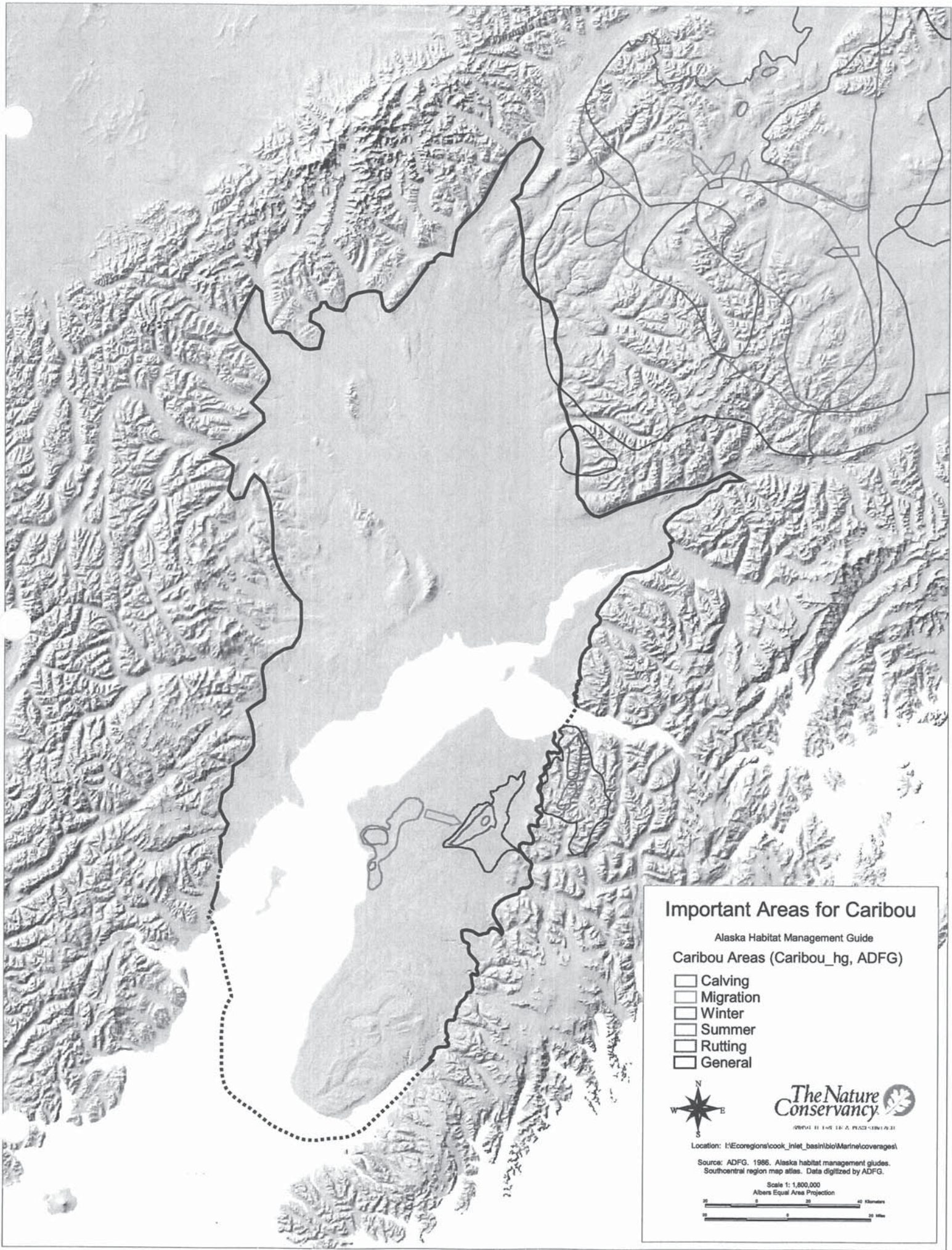
Important Areas for Brown Bear from expert workshops May and November 2000

-  Important Corridors for Kenai Peninsula Brown Bear (brbear_exp.shp)
-  Brown Bear concentration areas (Brbear_conc_exp.shp)



Location: I:\Ecoregions\cook_inlet_basin\bio\Mammals\shapefiles\mammals





Important Areas for Caribou

Alaska Habitat Management Guide

Caribou Areas (Caribou_hg, ADFG)

-  Calving
-  Migration
-  Winter
-  Summer
-  Rutting
-  General

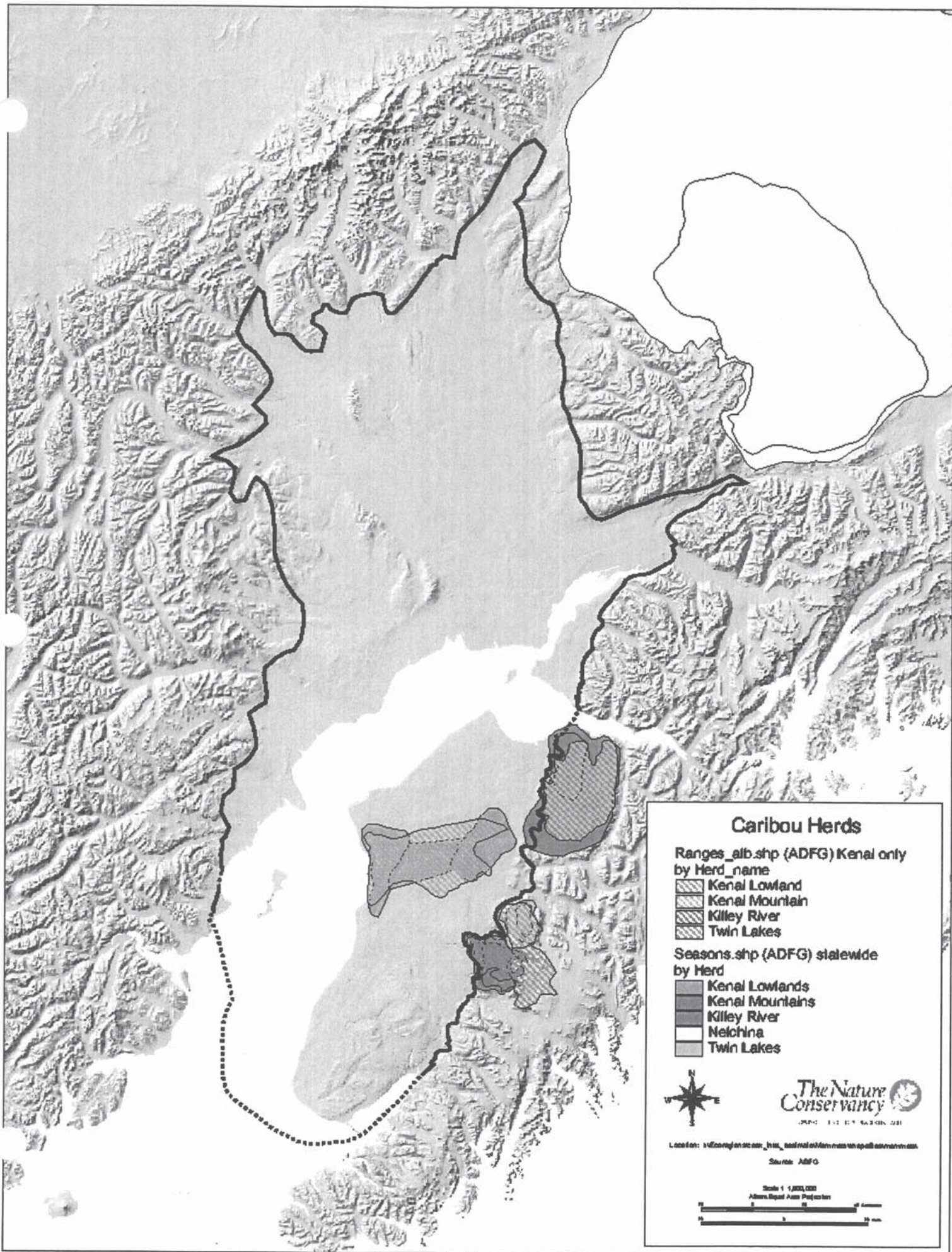


Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\coverages\

Source: ADFG, 1986. Alaska habitat management guides. Southcentral region map atlas. Data digitized by ADFG.





Scale 1:1,800,000
Albers Equal Area Projection





Caribou Herds

Ranges_alb.shp (ADFG) Kenai only
by Herd_name

-  Kenai Lowland
-  Kenai Mountain
-  Killey River
-  Twin Lakes

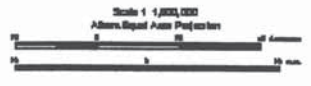
Seasons.shp (ADFG) statewide
by Herd

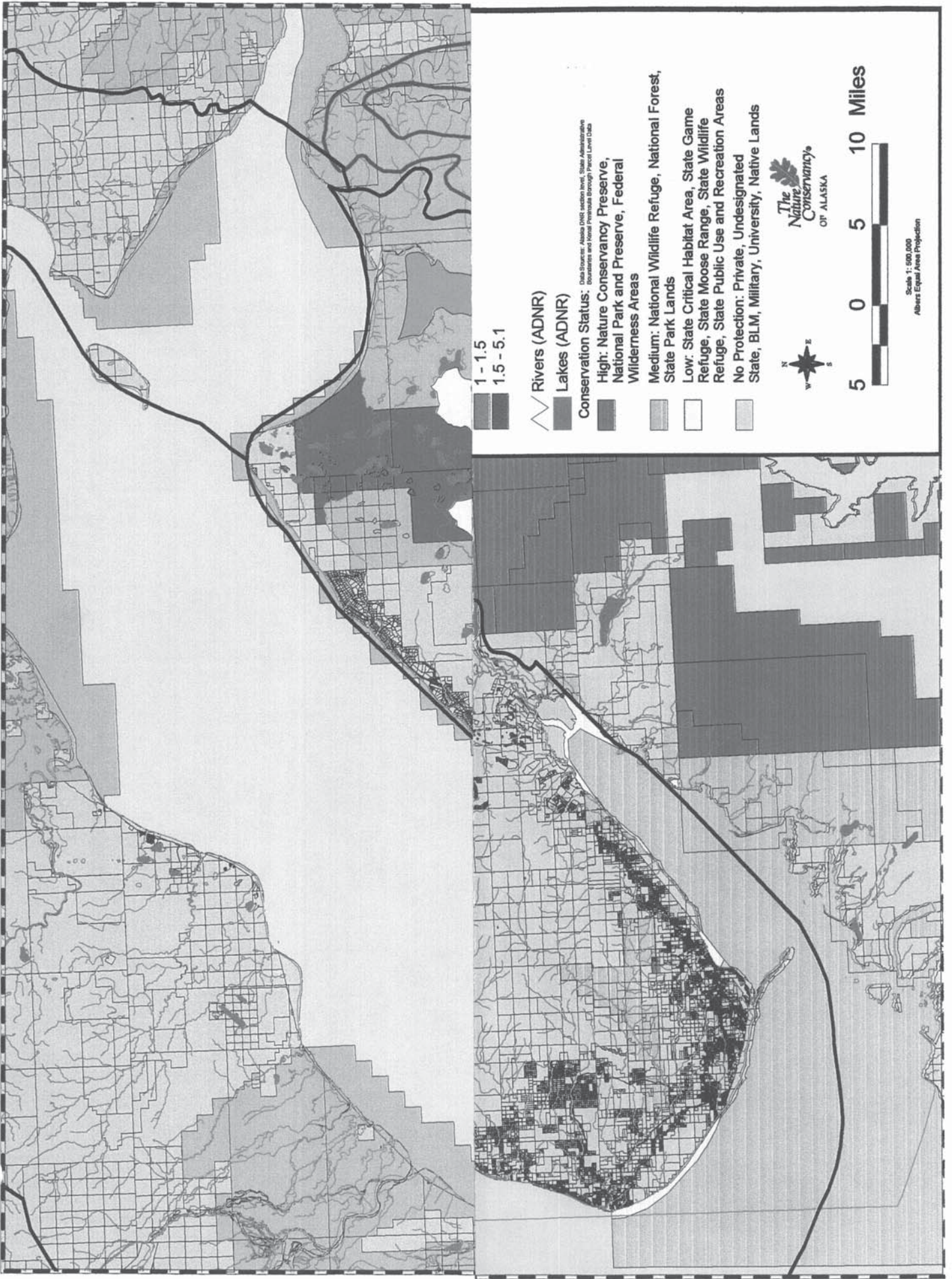
-  Kenai Lowlands
-  Kenai Mountains
-  Killey River
-  Nelchina
-  Twin Lakes



Location: \\fconj\arcgis\arc_gis_data\alaska\caribou\herd\seasons.shp

Source: ADFG





1 - 1.5
1.5 - 5.1

Rivers (ADNR)
Lakes (ADNR)

Conservation Status: Data Source: Alaska DNR section level, State Administrative Boundaries and Local Parcels through Parcel Level Data

High: Nature Conservancy Preserve, National Park and Preserve, Federal Wilderness Areas

Medium: National Wildlife Refuge, National Forest, State Park Lands

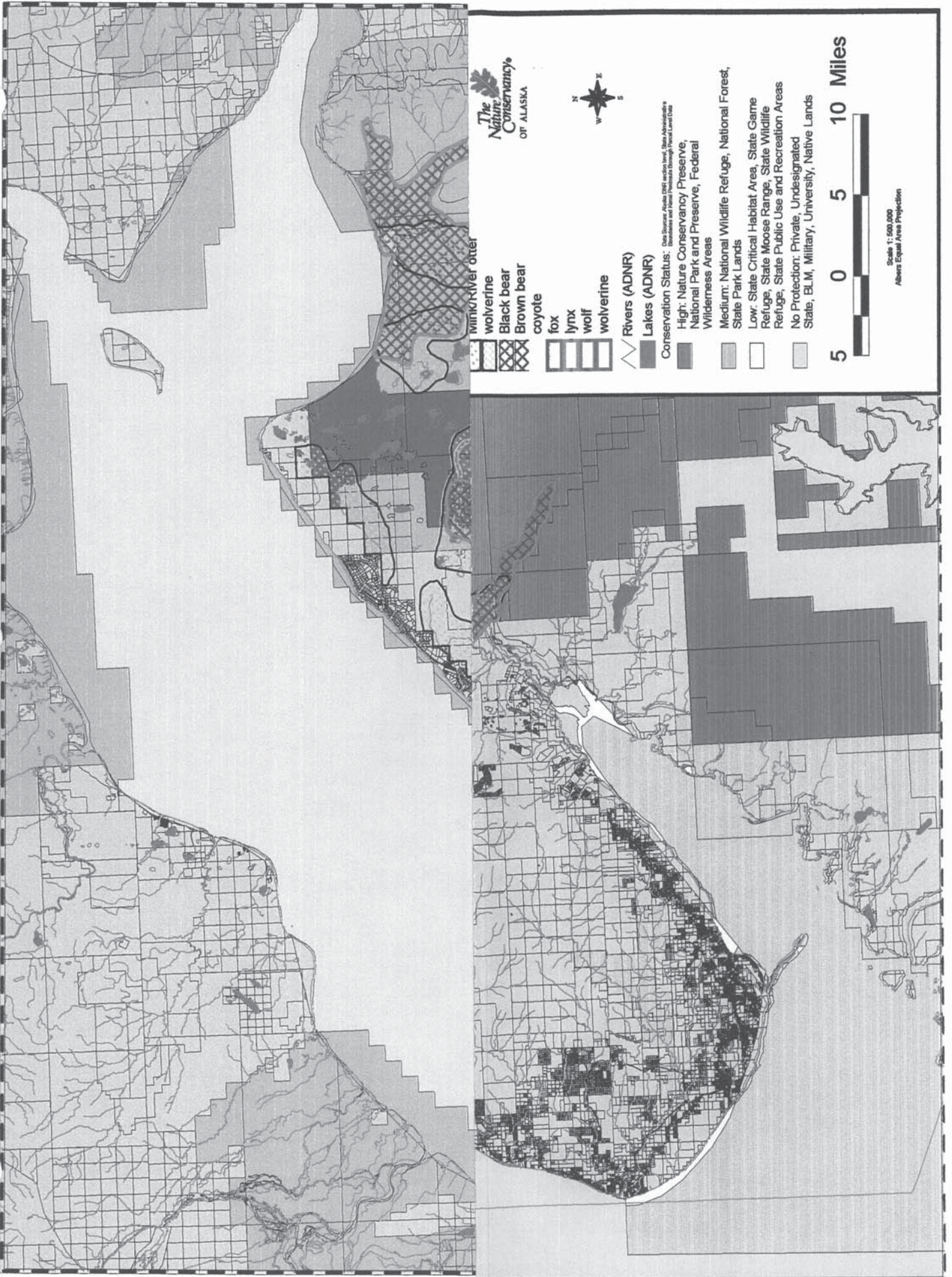
Low: State Critical Habitat Area, State Game Refuge, State Moose Range, State Wildlife Refuge, State Public Use and Recreation Areas

No Protection: Private, Undesignated State, BLM, Military, University, Native Lands



5 0 5 10 Miles

Scale 1: 500,000
Abers Equal Area Projection



The Nature Conservancy OF ALASKA

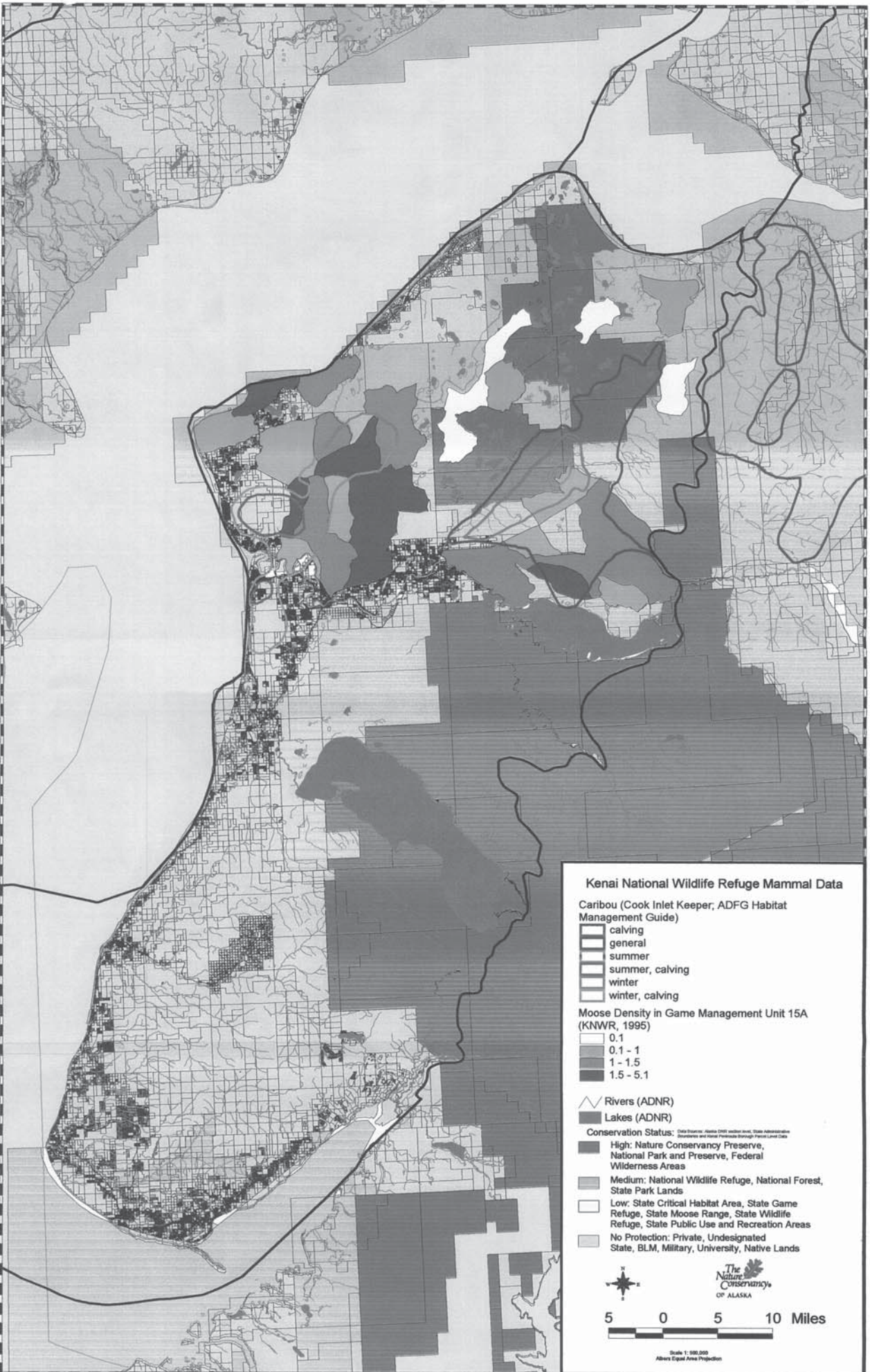


- wink/river otter
- wolverine
- Black bear
- Brown bear
- coyote
- fox
- lynx
- wolf
- wolverine
- Rivers (ADNR)
- Lakes (ADNR)

Conservation Status:
 High: Nature Conservancy Preserve, National Park and Preserve, Federal Wilderness Areas
 Medium: National Wildlife Refuge, National Forest, State Park Lands
 Low: State Critical Habitat Area, State Game Refuge, State Moose Range, State Wildlife Refuge, State Public Use and Recreation Areas
 No Protection: Private, Undesignated State, BLM, Military, University, Native Lands



Scale 1:500,000
 Albers Equal Area Projection



Kenai National Wildlife Refuge Mammal Data

Caribou (Cook Inlet Keeper, ADFG Habitat Management Guide)

- ▬ calving
- ▬ general
- ▬ summer
- ▬ summer, calving
- ▬ winter
- ▬ winter, calving

Moose Density in Game Management Unit 15A (KNWR, 1995)

- 0.1
- ▬ 0.1 - 1
- ▬ 1 - 1.5
- ▬ 1.5 - 5.1

▬ Rivers (ADNR)

▬ Lakes (ADNR)

Conservation Status: Data Provided: Alaska DNR website, State Administration Resources and Natural Professions Strategic Plan, Land Use Data

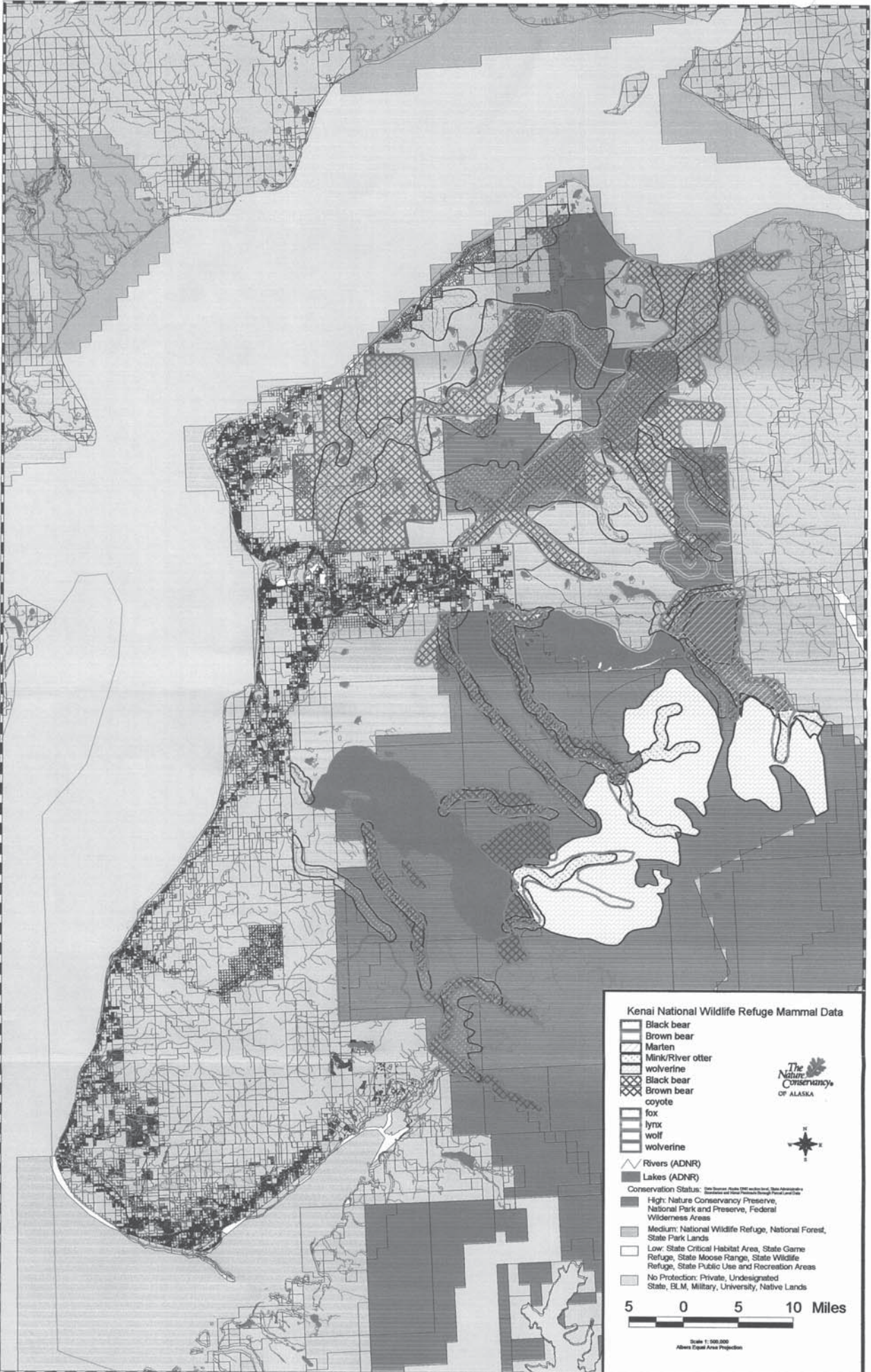
- ▬ High: Nature Conservancy Preserve, National Park and Preserve, Federal Wilderness Areas
- ▬ Medium: National Wildlife Refuge, National Forest, State Park Lands
- ▬ Low: State Critical Habitat Area, State Game Refuge, State Moose Range, State Wildlife Refuge, State Public Use and Recreation Areas
- ▬ No Protection: Private, Undesignated State, BLM, Military, University, Native Lands



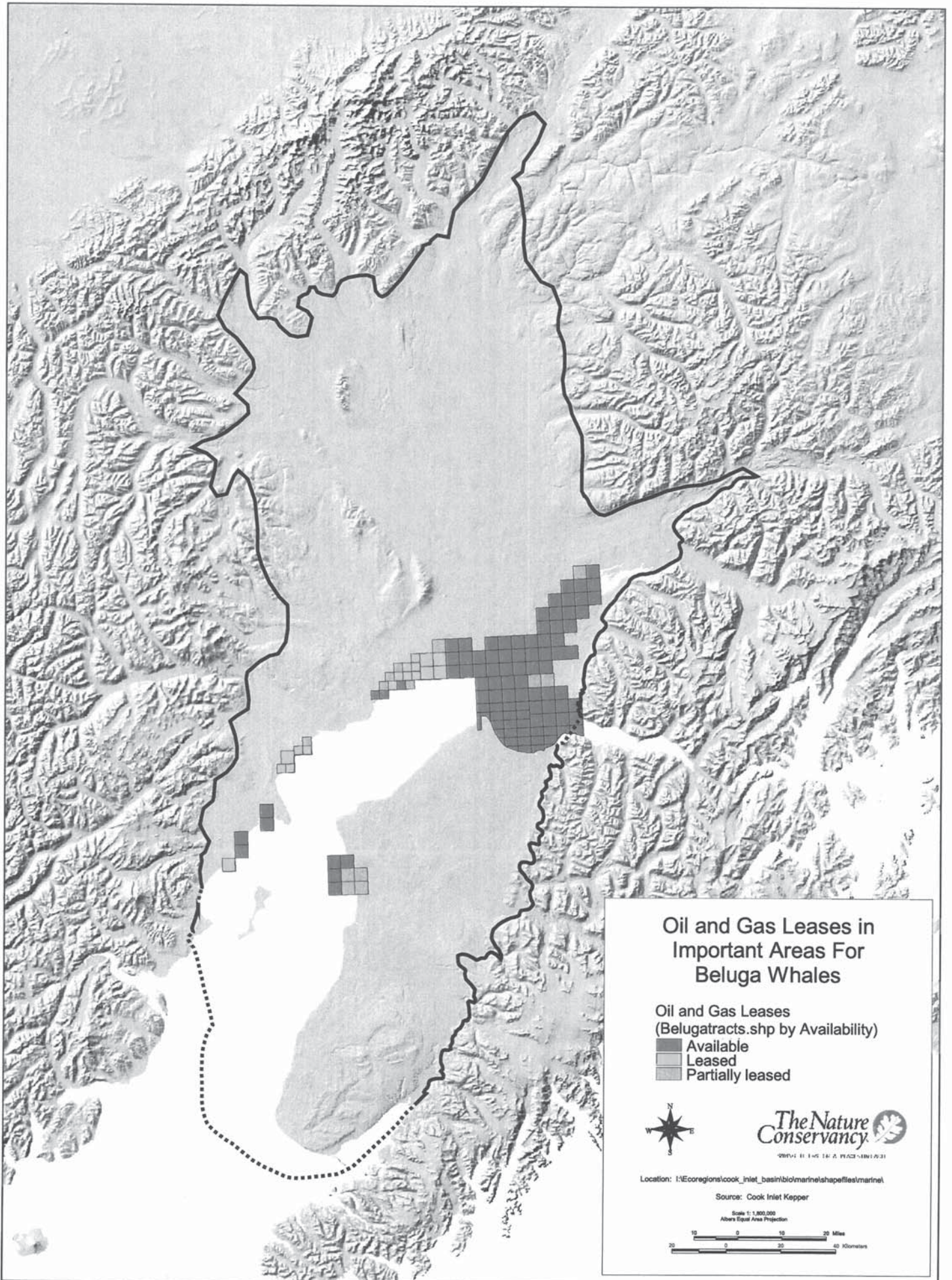
5 0 5 10 Miles



Scale: 1:500,000
Albers Equal Area Projection



MARINE MAMMALS



Sea Otter Data

Range

Range of Sea Otter (otter, ADFG AHMG)

Established

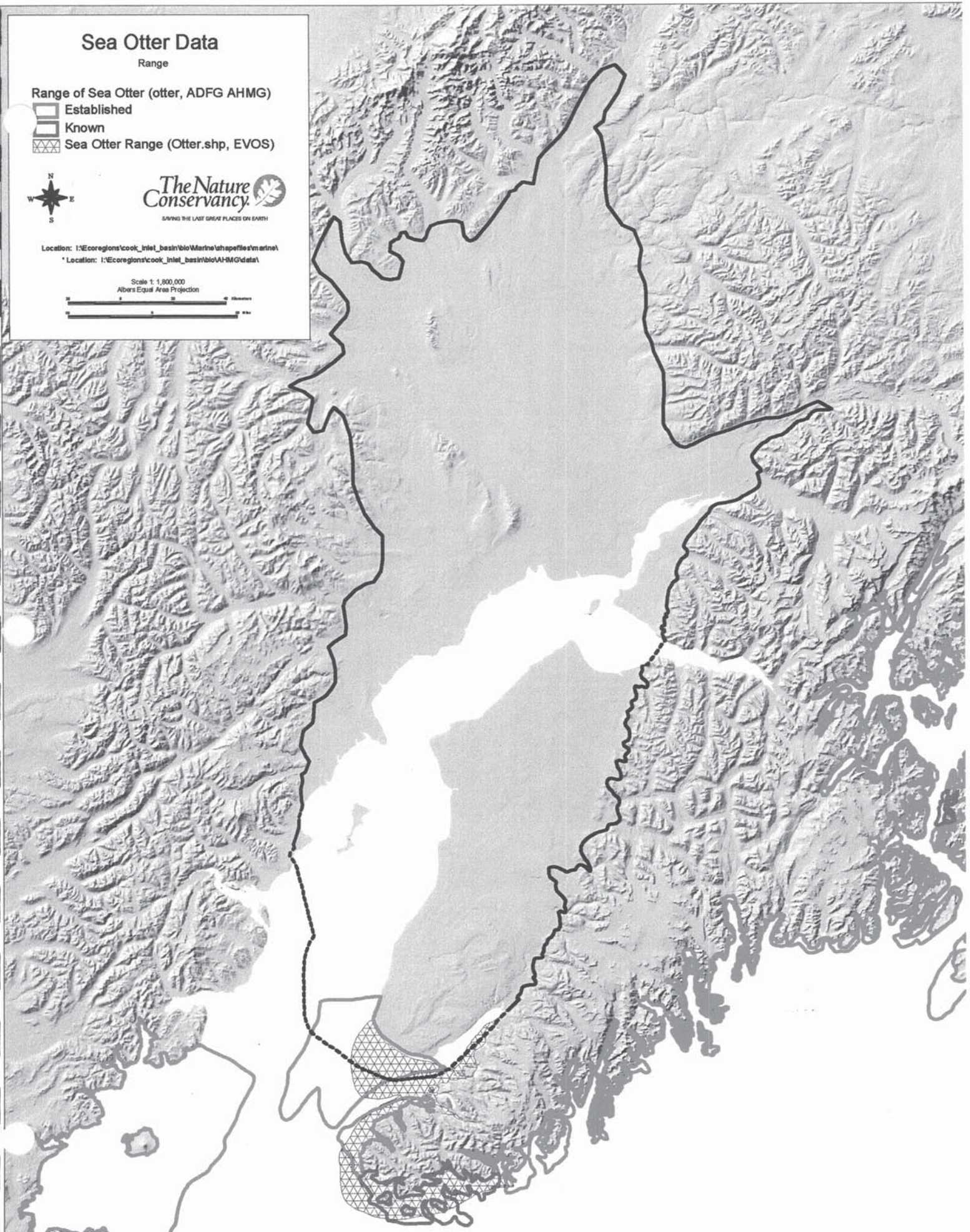
Known

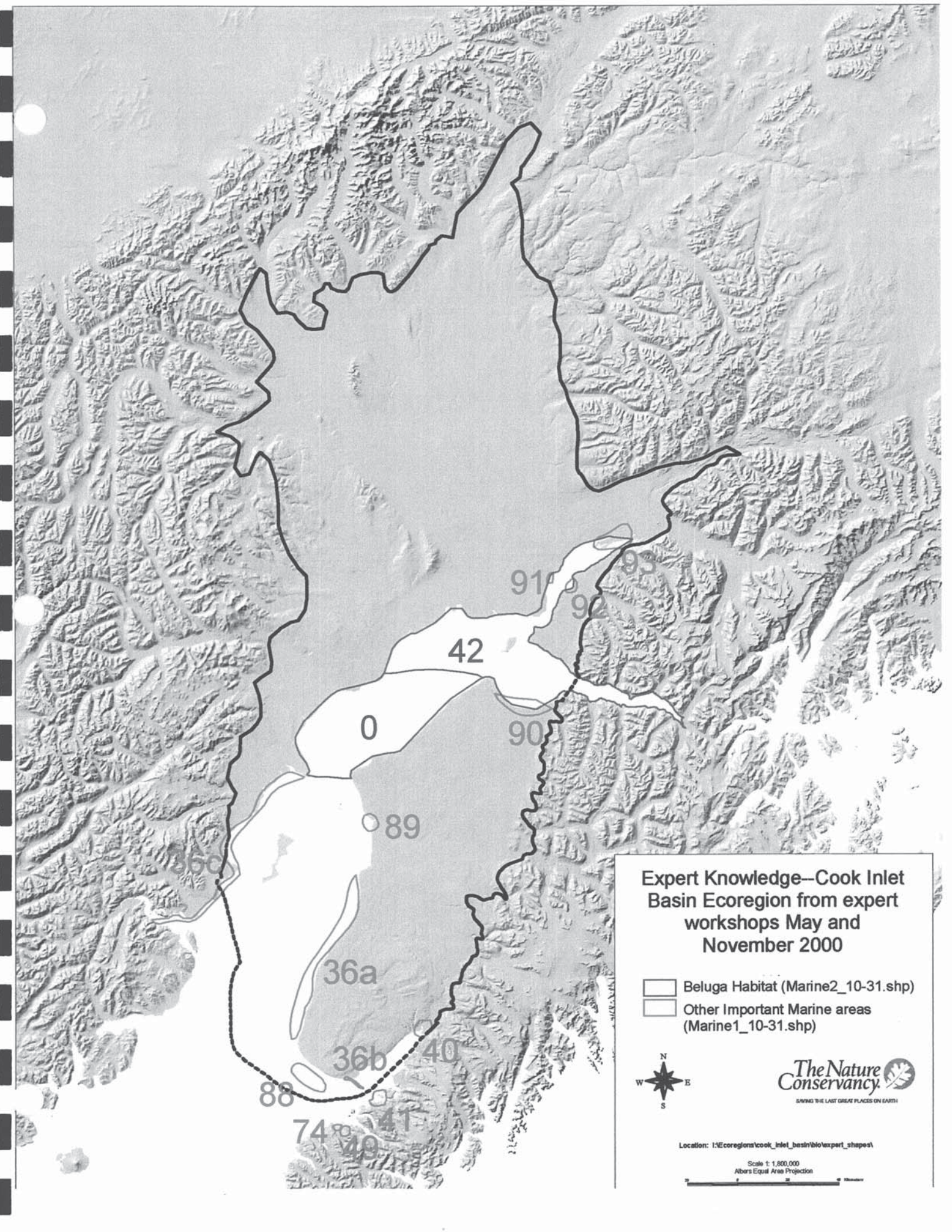
Sea Otter Range (Otter.shp, EVOS)





Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marine\
*Location: I:\Ecoregions\cook_inlet_basin\bio\AHMG\data\

Scale 1: 1,800,000
Albers Equal Area Projection





Expert Knowledge—Cook Inlet Basin Ecoregion from expert workshops May and November 2000

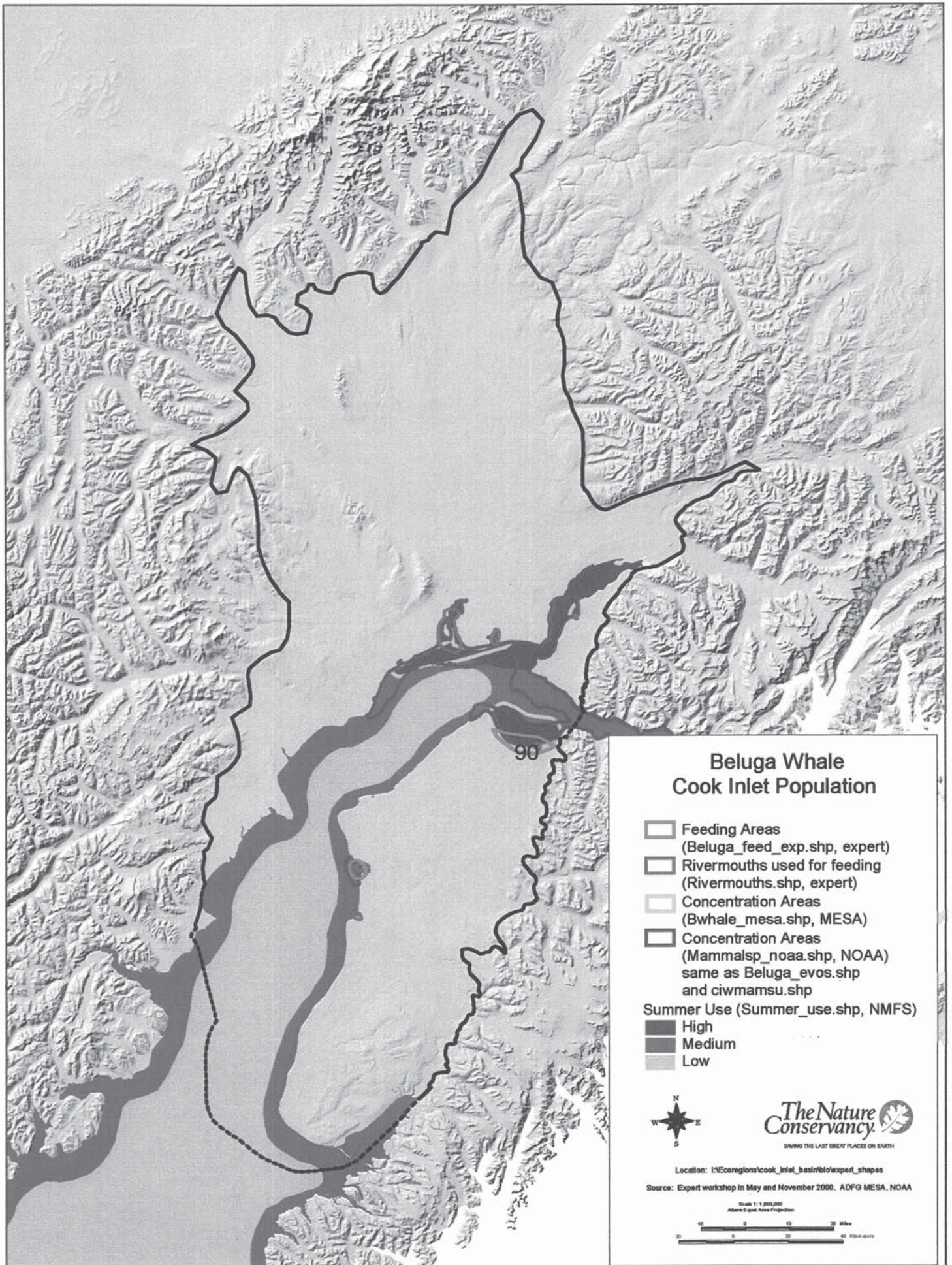
-  Beluga Habitat (Marine2_10-31.shp)
-  Other Important Marine areas (Marine1_10-31.shp)










Location: I:\Ecoregions\cook_inlet_basin\bio\expert_shapes\

Scale 1:1,800,000
Albers Equal Area Projection



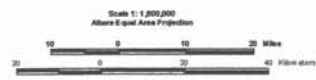


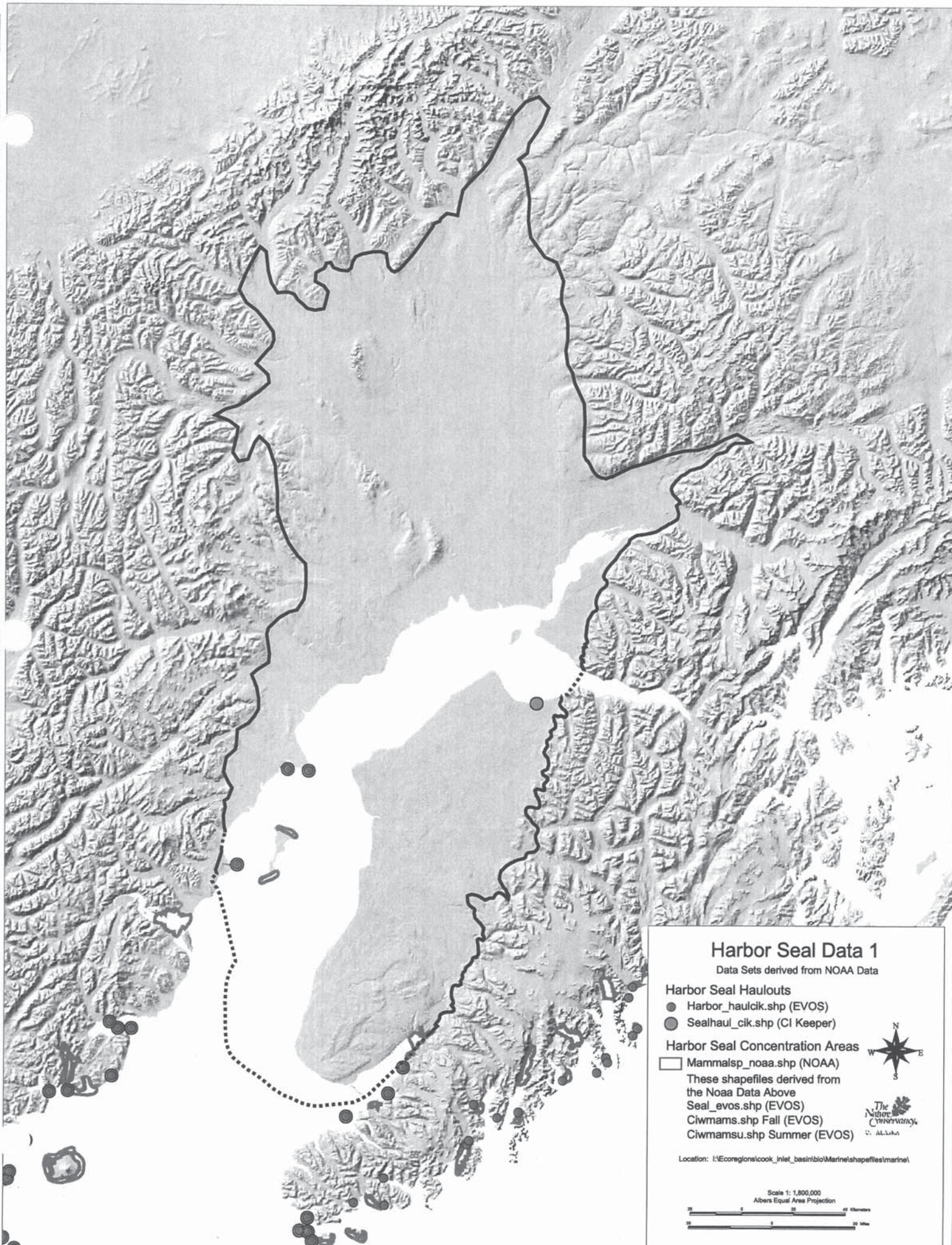
Beluga Whale Cook Inlet Population

-  Feeding Areas
(Beluga_feed_exp.shp, expert)
-  Rivermouths used for feeding
(Rivermouths.shp, expert)
-  Concentration Areas
(Bwhale_mesa.shp, MESA)
-  Concentration Areas
(Mammalsp_noaa.shp, NOAA)
same as Beluga_evos.shp
and ciwmamsu.shp
- Summer Use (Summer_use.shp, NMFS)
 -  High
 -  Medium
 -  Low



Location: I:\Ecoregions\cook_inlet_basin\bio\expert_shapes
 Source: Expert workshop in May and November 2000, ADFG MESA, NOAA





Harbor Seal Data 1

Data Sets derived from NOAA Data

Harbor Seal Haulouts

- Harbor_haulcik.shp (EVOS)
- Sealhaul_cik.shp (CI Keeper)

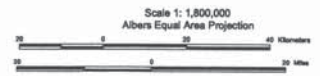
Harbor Seal Concentration Areas

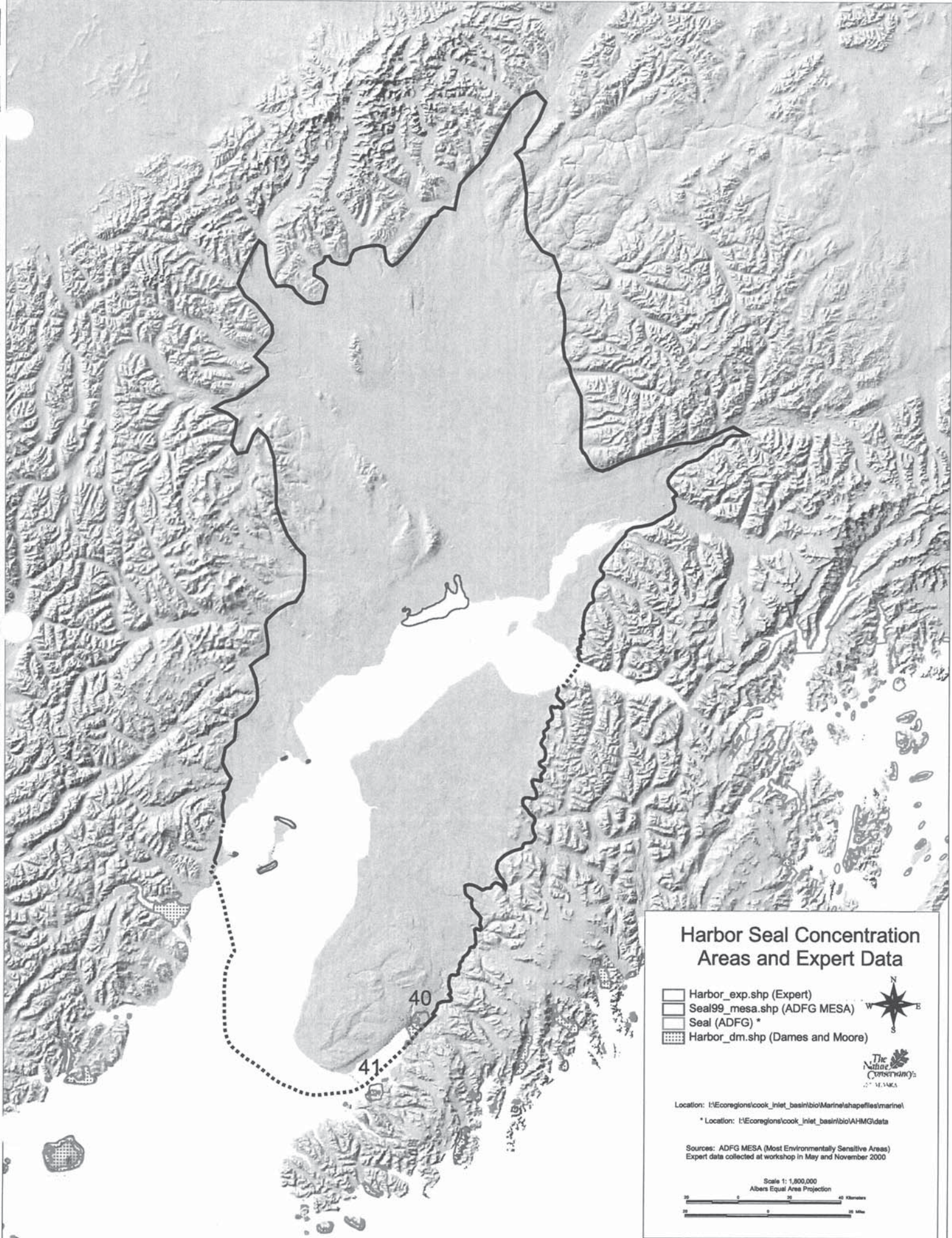
- Mammalsp_noaa.shp (NOAA)

These shapefiles derived from the NOAA Data Above
Seal_evos.shp (EVOS)
Ciwmmams.shp Fall (EVOS)
Ciwmmamsu.shp Summer (EVOS)







Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marine\





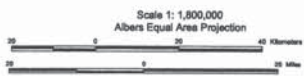
Harbor Seal Concentration Areas and Expert Data

-  Harbor_exp.shp (Expert)
-  Seal99_mesa.shp (ADFG MESA)
-  Seal (ADFG) *
-  Harbor_dm.shp (Dames and Moore)

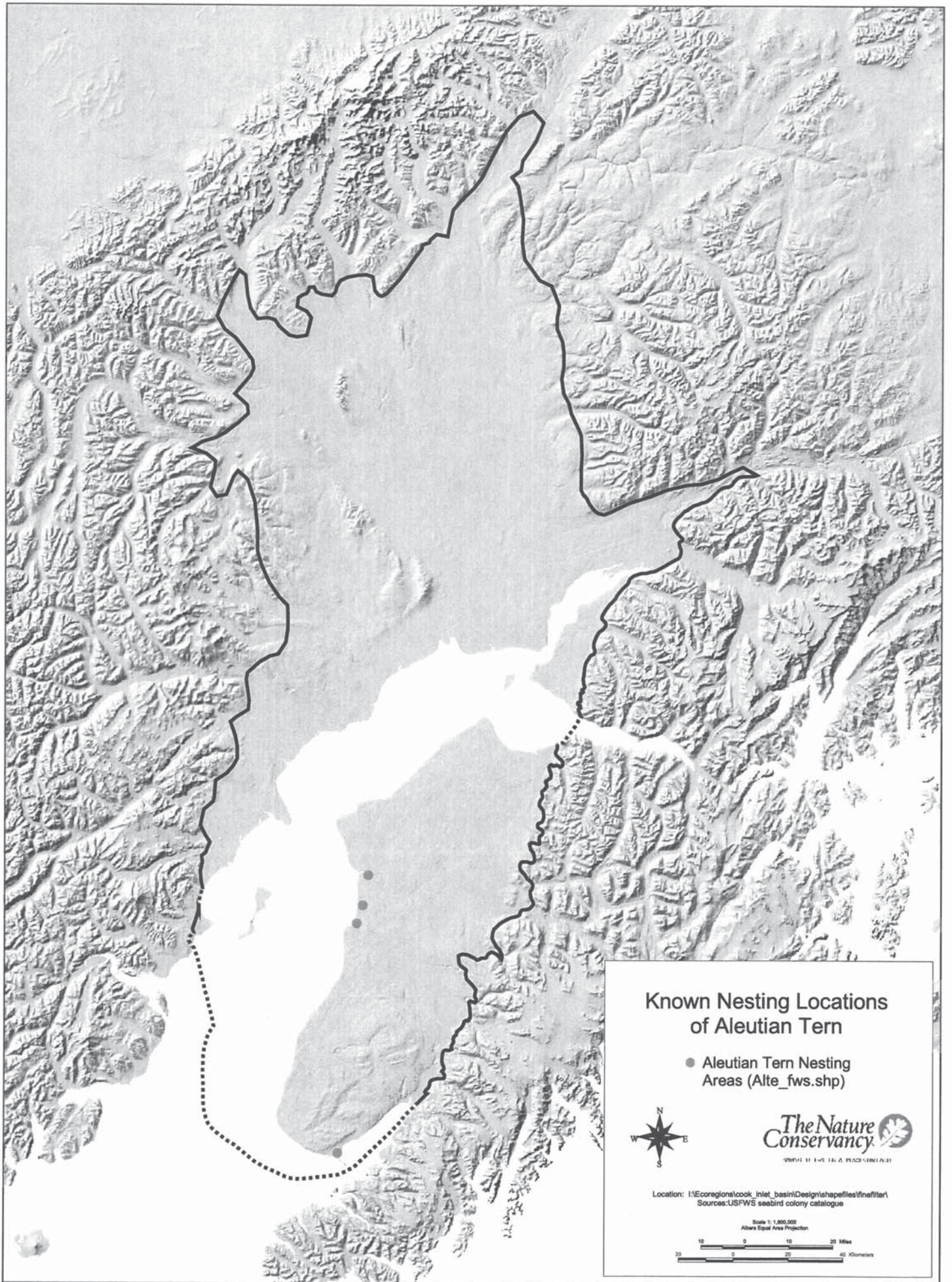


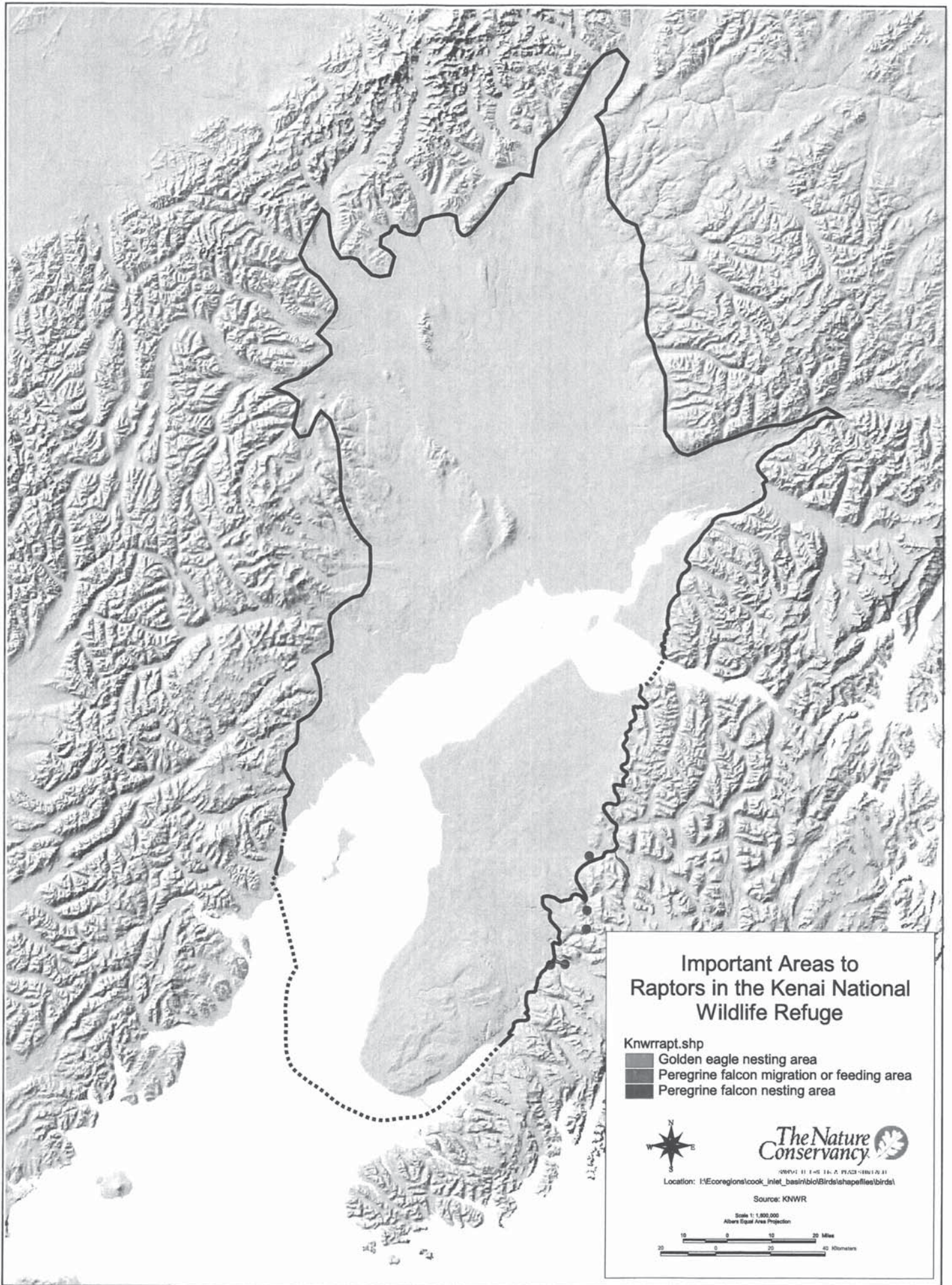
Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapefiles\marine\
 * Location: I:\Ecoregions\cook_inlet_basin\bio\AHMG\data

Sources: ADFG MESA (Most Environmentally Sensitive Areas)
 Expert data collected at workshop in May and November 2000



BIRDS





Important Areas to Raptors in the Kenai National Wildlife Refuge

Knwrrapt.shp

- Golden eagle nesting area
- Peregrine falcon migration or feeding area
- Peregrine falcon nesting area

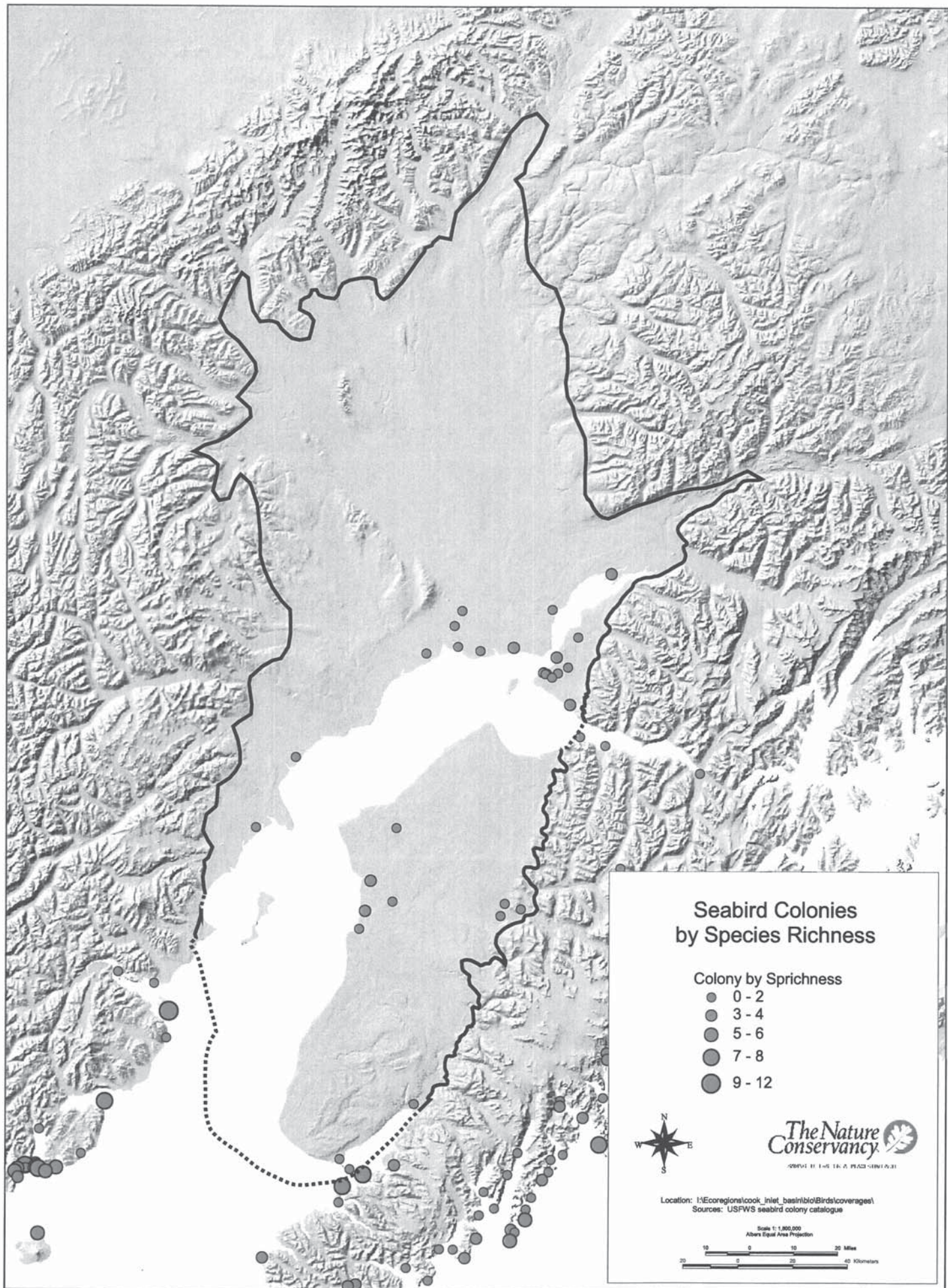


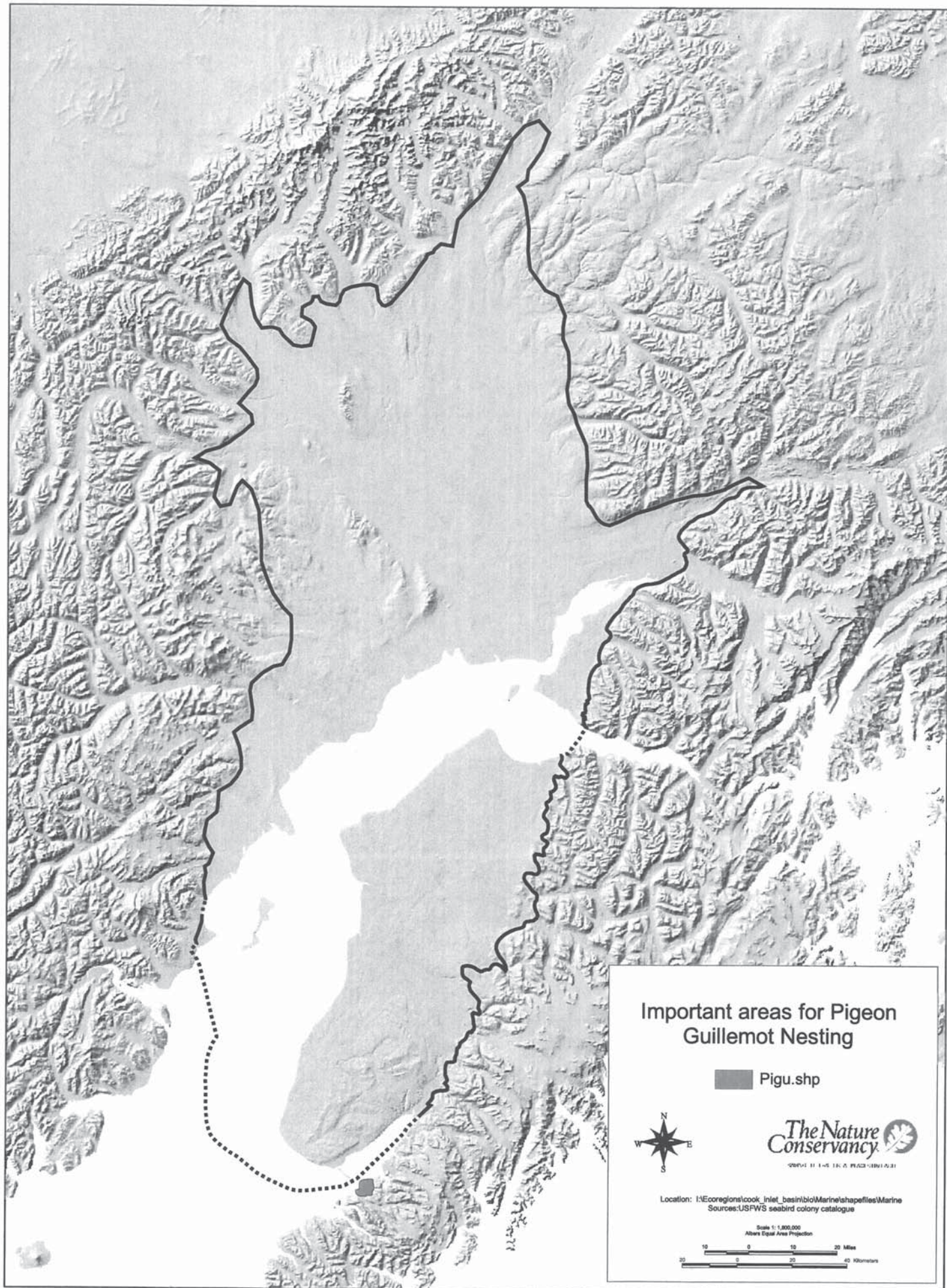
Location: I:\Ecoregions\cook_inlet_basin\bio\Birds\shapfiles\birds\

Source: KNWR

Scale 1:1,800,000
Albers Equal Area Projection







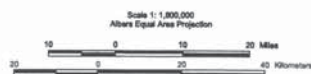
Important areas for Pigeon Guillemot Nesting

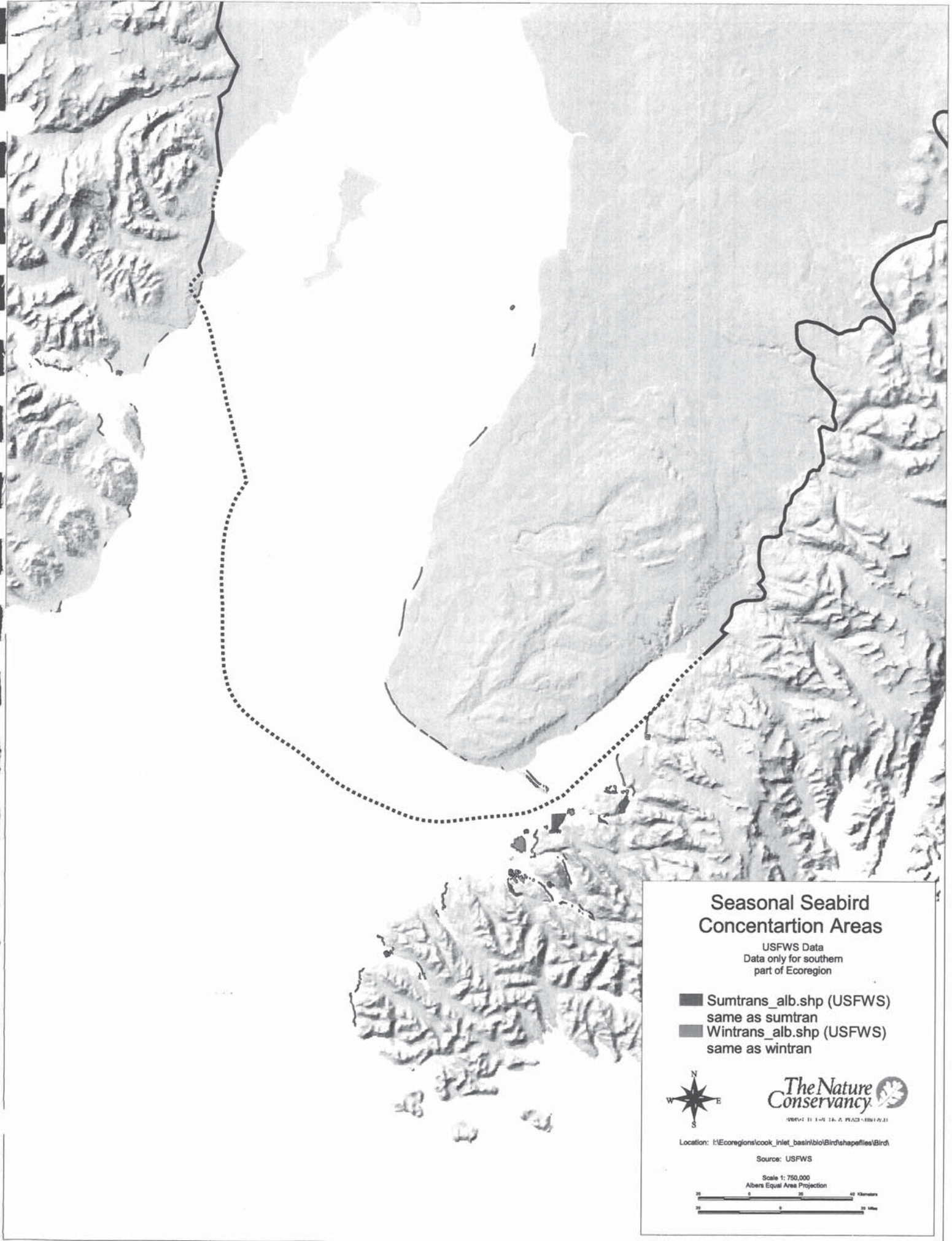
 Pigu.shp



© 2001 The Nature Conservancy

Location: I:\Ecoregions\cook_inlet_basin\biol\Marine\shapfiles\Marine
Sources:USFWS seabird colony catalogue





Seasonal Seabird Concentration Areas

USFWS Data
Data only for southern
part of Ecoregion

- Sumtrans_alb.shp (USFWS)
same as sumtran
- Wintrans_alb.shp (USFWS)
same as wintran

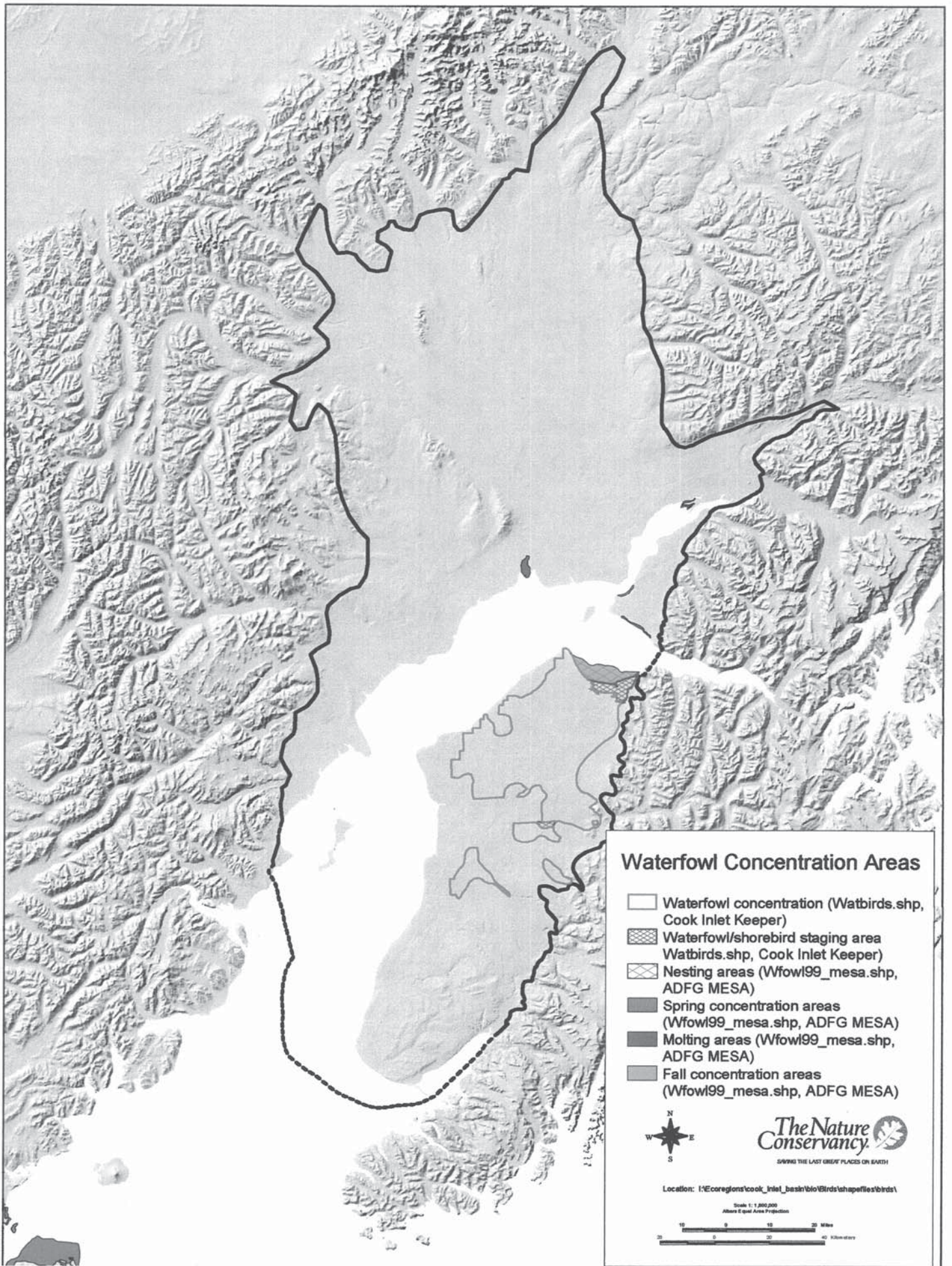


Location: I:\Ecoregions\cook_inlet_basin\bio\Bird\shapefiles\Bird\







Source: USFWS

Scale 1: 750,000
Albers Equal Area Projection



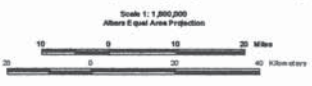


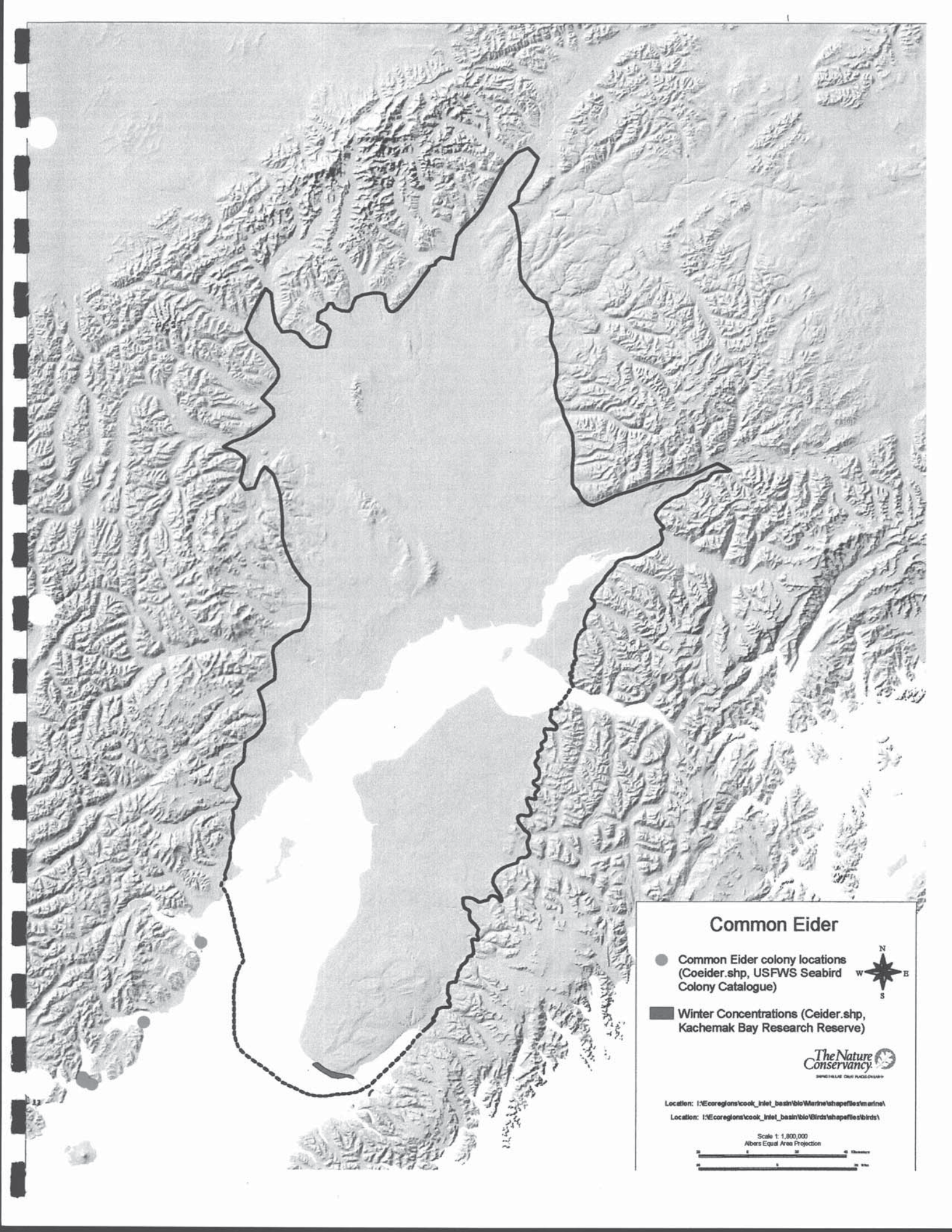
Waterfowl Concentration Areas

-  Waterfowl concentration (Watbirds.shp, Cook Inlet Keeper)
-  Waterfowl/shorebird staging area (Watbirds.shp, Cook Inlet Keeper)
-  Nesting areas (Wfowl99_mesa.shp, ADFG MESA)
-  Spring concentration areas (Wfowl99_mesa.shp, ADFG MESA)
-  Molting areas (Wfowl99_mesa.shp, ADFG MESA)
-  Fall concentration areas (Wfowl99_mesa.shp, ADFG MESA)



Location: I:\Ecoregions\cook_inlet_basin\bio\birds\shapfiles\birds\



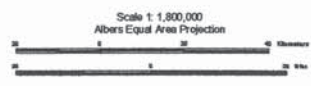


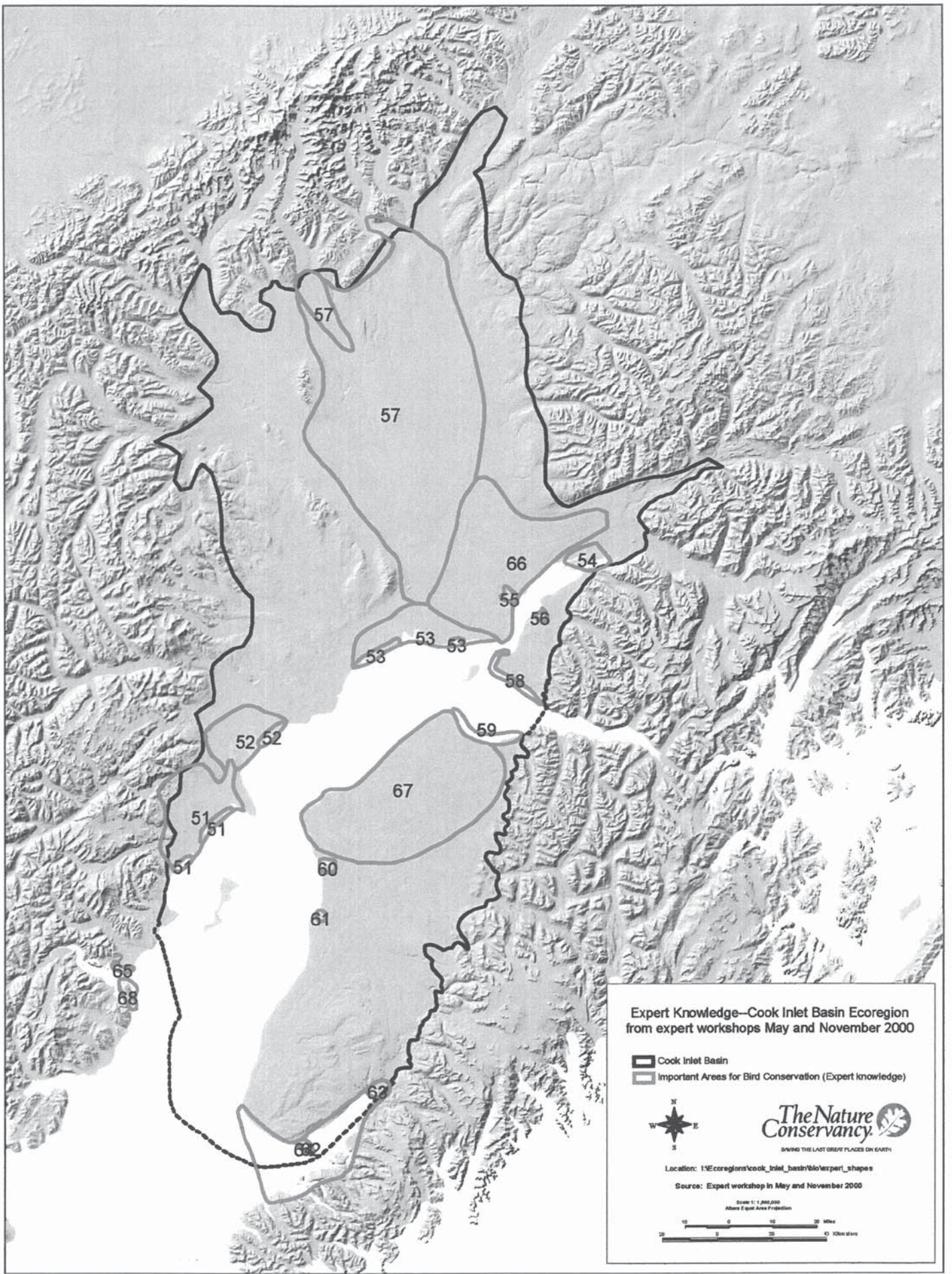
Common Eider

- Common Eider colony locations (Coeider.shp, USFWS Seabird Colony Catalogue)
- Winter Concentrations (Ceider.shp, Kachemak Bay Research Reserve)



Location: I:\Ecoregions\cook_inlet_basin\bio\Marine\shapfiles\marine\brd
Location: I:\Ecoregions\cook_inlet_basin\bio\Birds\shapfiles\birds\





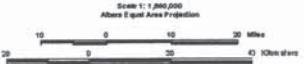
**Expert Knowledge—Cook Inlet Basin Ecoregion
from expert workshops May and November 2000**

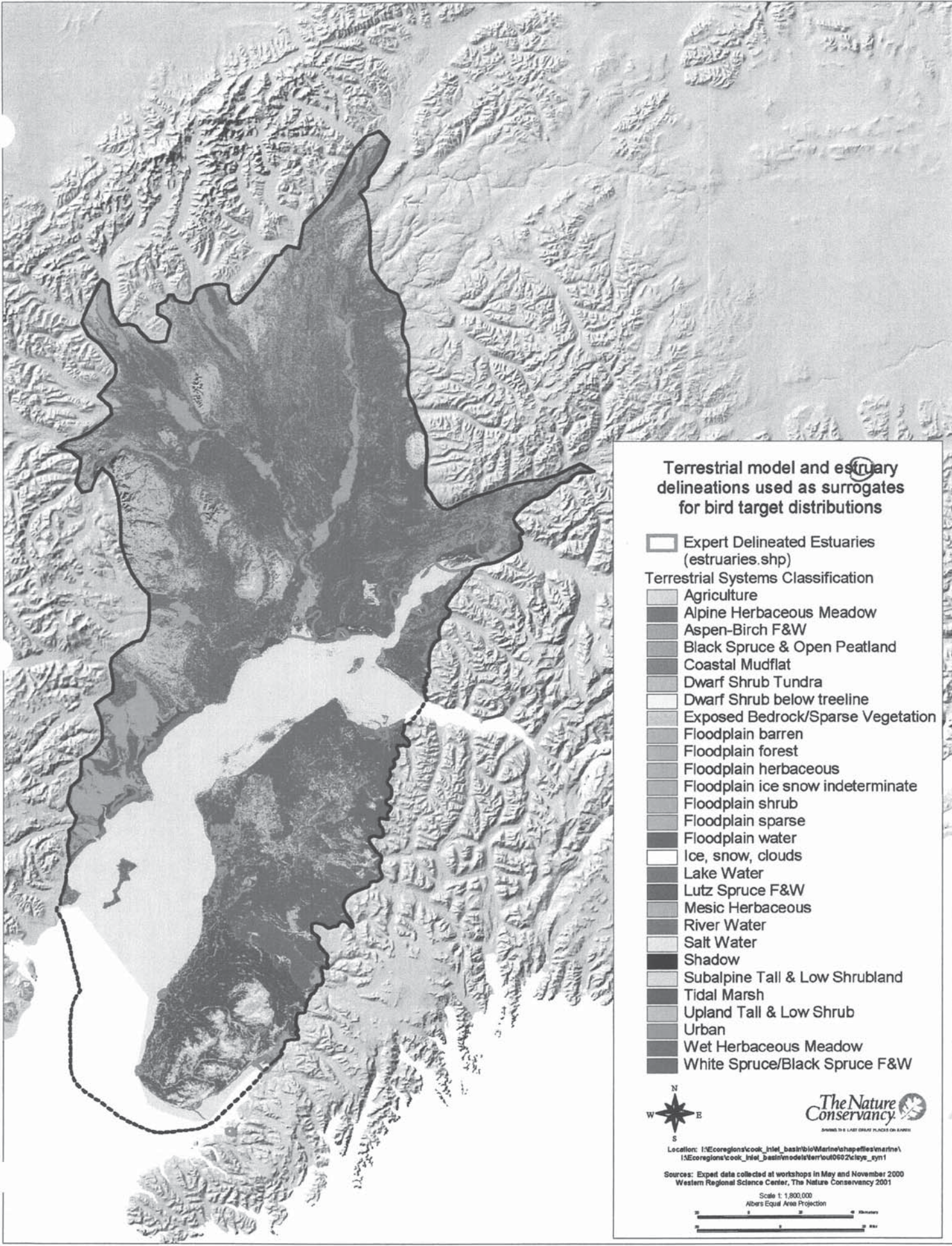
-  Cook Inlet Basin
-  Important Areas for Bird Conservation (Expert knowledge)
































Location: 1\Ecoregions\cook_inlet_basin\16\expert_shapes

Source: Expert workshop in May and November 2000





Terrestrial model and estuary delineations used as surrogates for bird target distributions

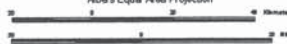
-  Expert Delineated Estuaries (estuaries.shp)
- Terrestrial Systems Classification**
-  Agriculture
-  Alpine Herbaceous Meadow
-  Aspen-Birch F&W
-  Black Spruce & Open Peatland
-  Coastal Mudflat
-  Dwarf Shrub Tundra
-  Dwarf Shrub below treeline
-  Exposed Bedrock/Sparse Vegetation
-  Floodplain barren
-  Floodplain forest
-  Floodplain herbaceous
-  Floodplain ice snow indeterminate
-  Floodplain shrub
-  Floodplain sparse
-  Floodplain water
-  Ice, snow, clouds
-  Lake Water
-  Lutz Spruce F&W
-  Mesic Herbaceous
-  River Water
-  Salt Water
-  Shadow
-  Subalpine Tall & Low Shrubland
-  Tidal Marsh
-  Upland Tall & Low Shrub
-  Urban
-  Wet Herbaceous Meadow
-  White Spruce/Black Spruce F&W

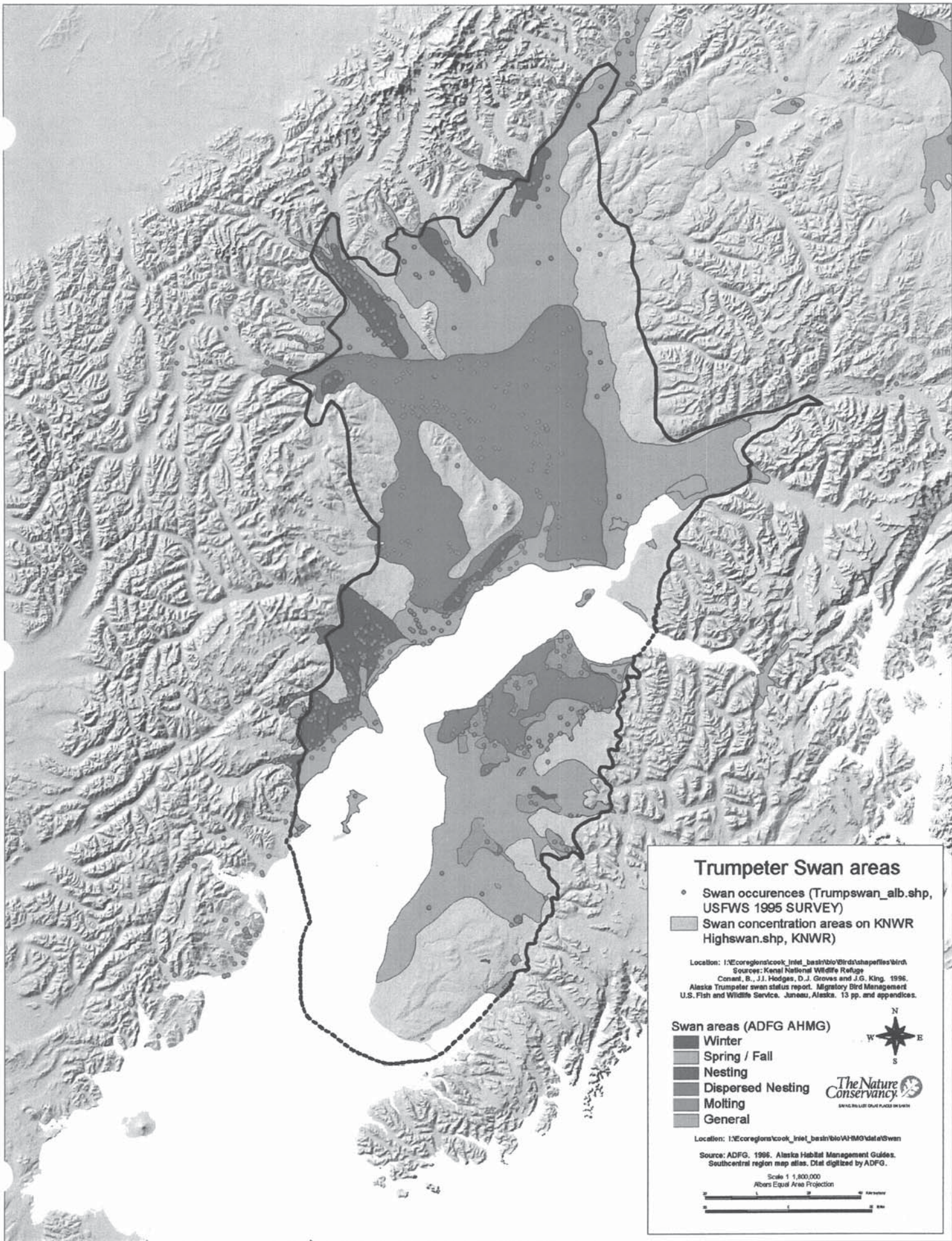


Location: I:\Coregions\cook_intel_basin\bio\Marine\shapelles\marine\
I:\Coregions\cook_intel_basin\models\Terr\out0602\cleye_syn1

Sources: Exped data collected at workshops in May and November 2000
Western Regional Science Center, The Nature Conservancy 2001

Scale 1:1,800,000
Albers Equal Area Projection





Trumpeter Swan areas

- Swan occurrences (Trumpswan_alb.shp, USFWS 1995 SURVEY)
- Swan concentration areas on KNWR Highswan.shp, KNWR)

Location: I:\Ecoregions\cook_inlet_basin\bio\birds\shapfiles\birds
 Source: Kenai National Wildlife Refuge
 Conant, B., J.J. Hodges, D.J. Groves and J.G. King, 1996.
 Alaska Trumpeter swan status report. Migratory Bird Management
 U.S. Fish and Wildlife Service, Juneau, Alaska. 13 pp. and appendices.

Swan areas (ADFG AHMG)

- Winter
- Spring / Fall
- Nesting
- Dispersed Nesting
- Molting
- General

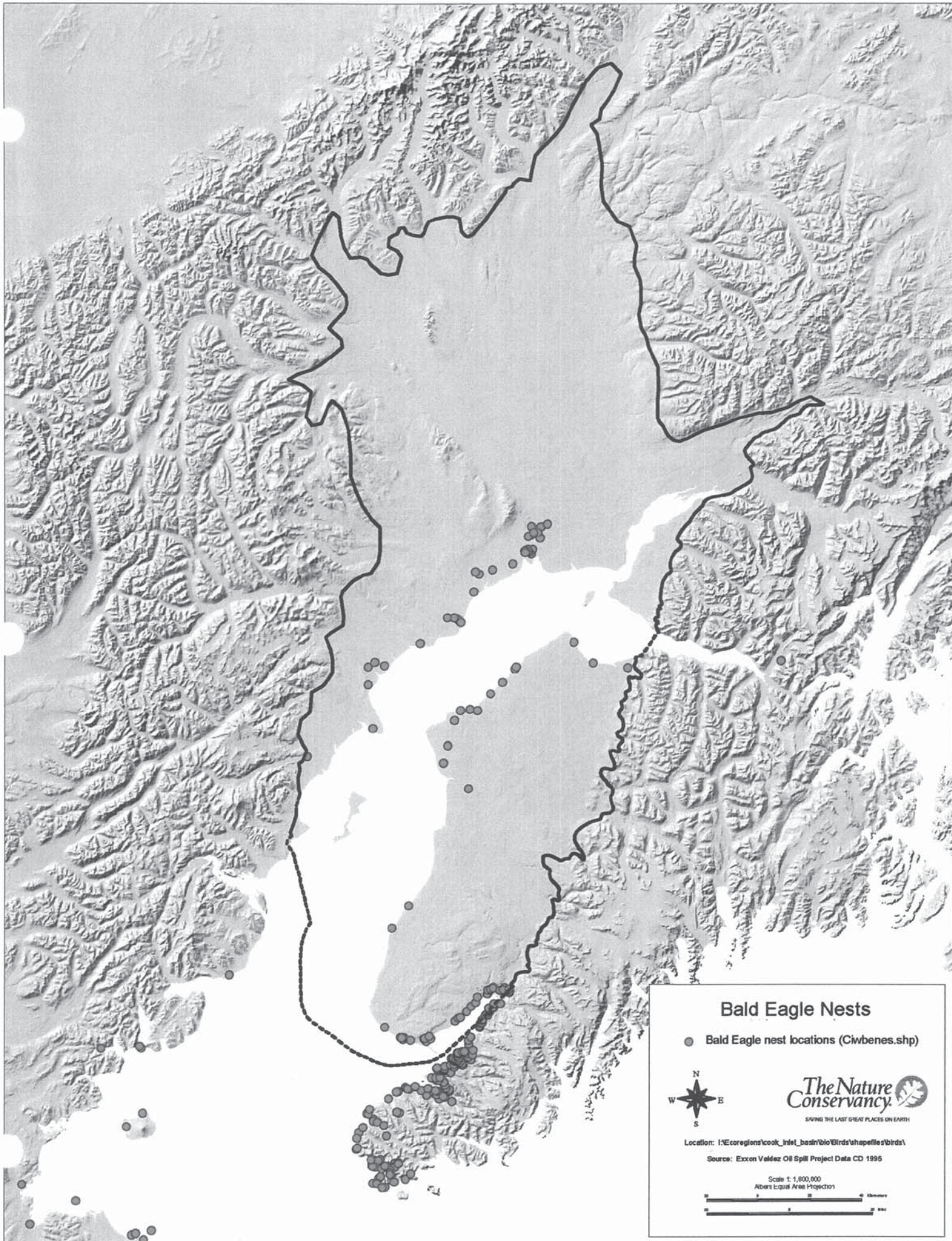


Location: I:\Ecoregions\cook_inlet_basin\bio\AHMG\data\Swan

Source: ADFG, 1996. Alaska Habitat Management Guides.
 Southcentral region map atlas. Data digitized by ADFG.

Scale 1:1,800,000
 Albers Equal Area Projection





Bald Eagle Nests

● Bald Eagle nest locations (Ciwbenes.shp)

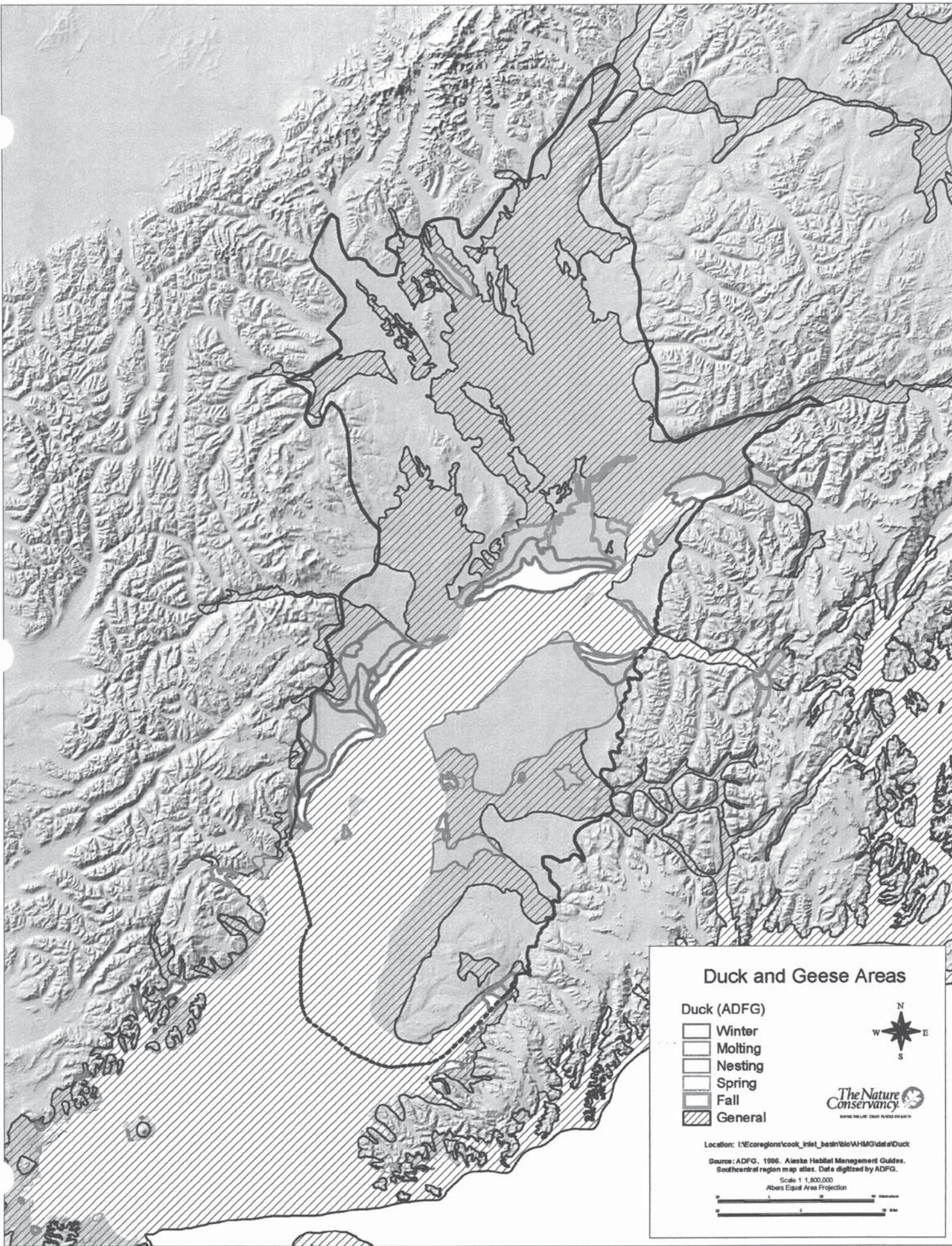


Location: I:\Ecoregions\cook_inlet_basin\bio\Birds\shapfiles\birds\

Source: Exxon Valdez Oil Spill Project Data CD 1995







Scale 1:1,800,000
Albers Equal Area Projection





Duck and Geese Areas

Duck (ADFG)

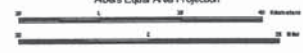
-  Winter
-  Molting
-  Nesting
-  Spring
-  Fall
-  General

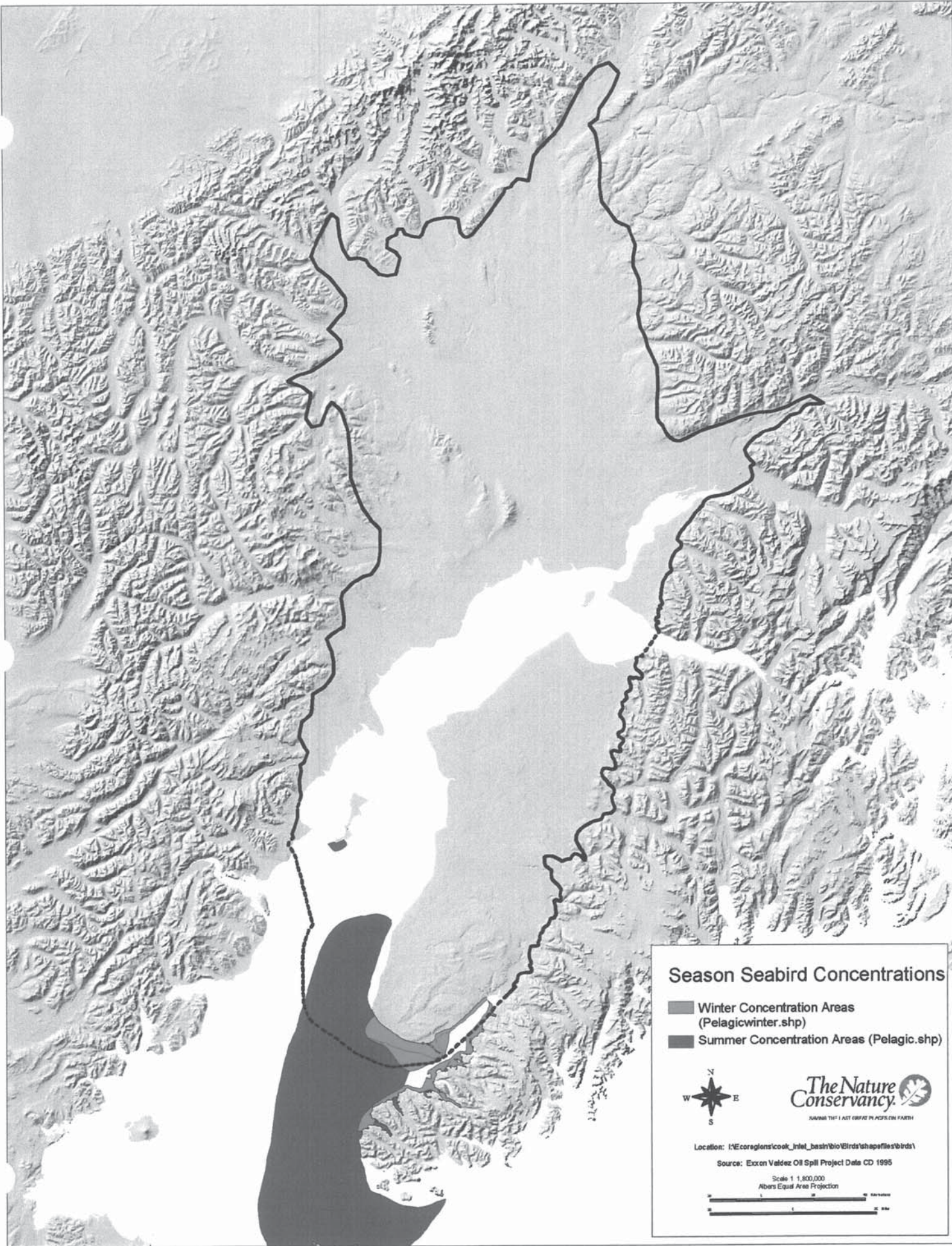


Location: I:\Ecoregions\cook_inlet_basin\bio\W\HMG\data/Duck

Source: ADFG. 1996. Alaska Habitat Management Guides. Southcentral region map atlas. Data digitized by ADFG.

Scale 1:1,800,000
Albers Equal Area Projection





Season Seabird Concentrations

- Winter Concentration Areas (Pelagicwinter.shp)
- Summer Concentration Areas (Pelagic.shp)

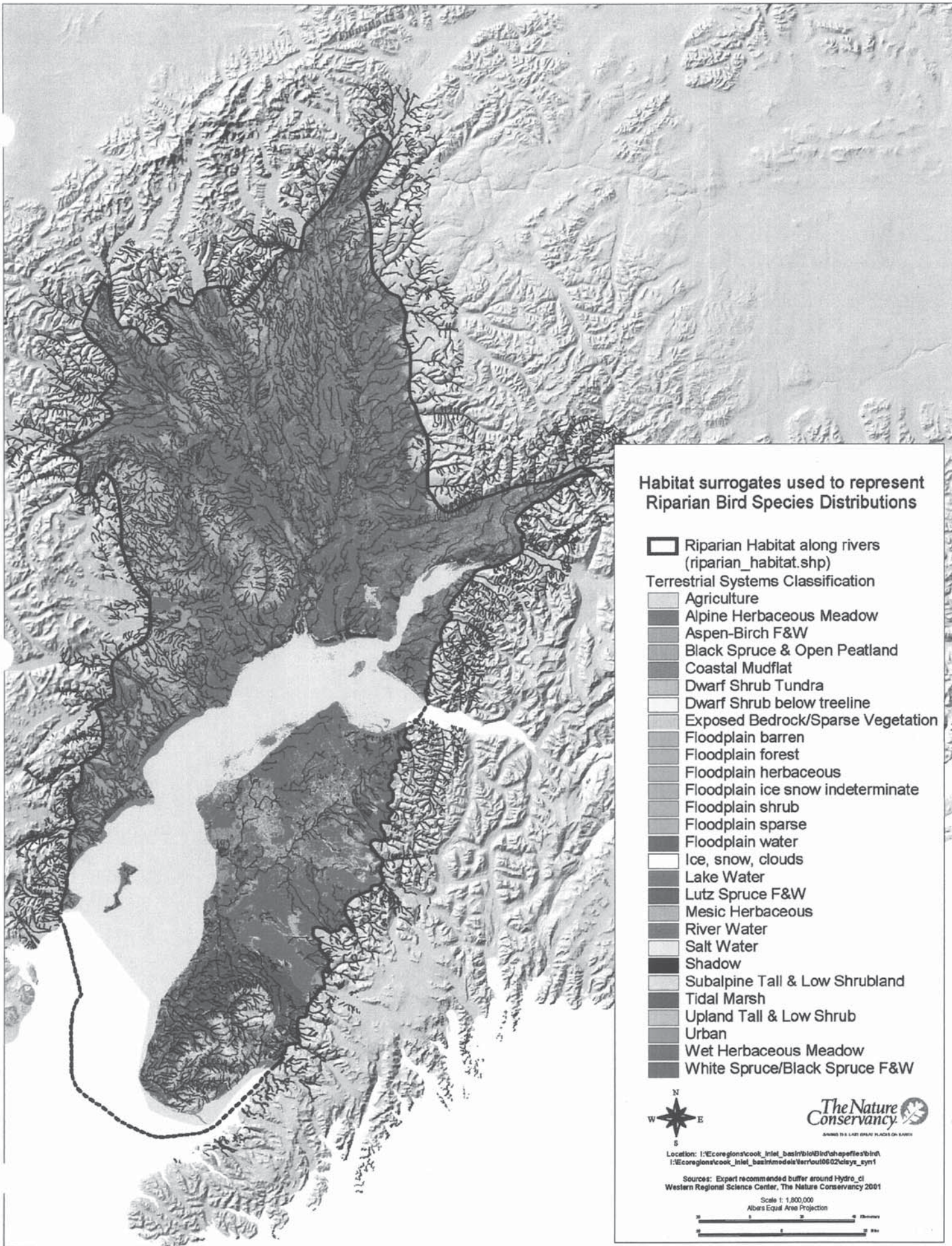


Location: I:\Ecoregions\cook_inlet_basin\bio\birds\shapfiles\birds\

Source: Exxon Valdez Oil Spill Project Data CD 1995

Scale 1:1,800,000
Albers Equal Area Projection

































**Habitat surrogates used to represent
Riparian Bird Species Distributions**

 Riparian Habitat along rivers
(riparian_habitat.shp)

Terrestrial Systems Classification

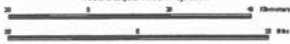
-  Agriculture
-  Alpine Herbaceous Meadow
-  Aspen-Birch F&W
-  Black Spruce & Open Peatland
-  Coastal Mudflat
-  Dwarf Shrub Tundra
-  Dwarf Shrub below treeline
-  Exposed Bedrock/Sparse Vegetation
-  Floodplain barren
-  Floodplain forest
-  Floodplain herbaceous
-  Floodplain ice snow indeterminate
-  Floodplain shrub
-  Floodplain sparse
-  Floodplain water
-  Ice, snow, clouds
-  Lake Water
-  Lutz Spruce F&W
-  Mesic Herbaceous
-  River Water
-  Salt Water
-  Shadow
-  Subalpine Tall & Low Shrubland
-  Tidal Marsh
-  Upland Tall & Low Shrub
-  Urban
-  Wet Herbaceous Meadow
-  White Spruce/Black Spruce F&W

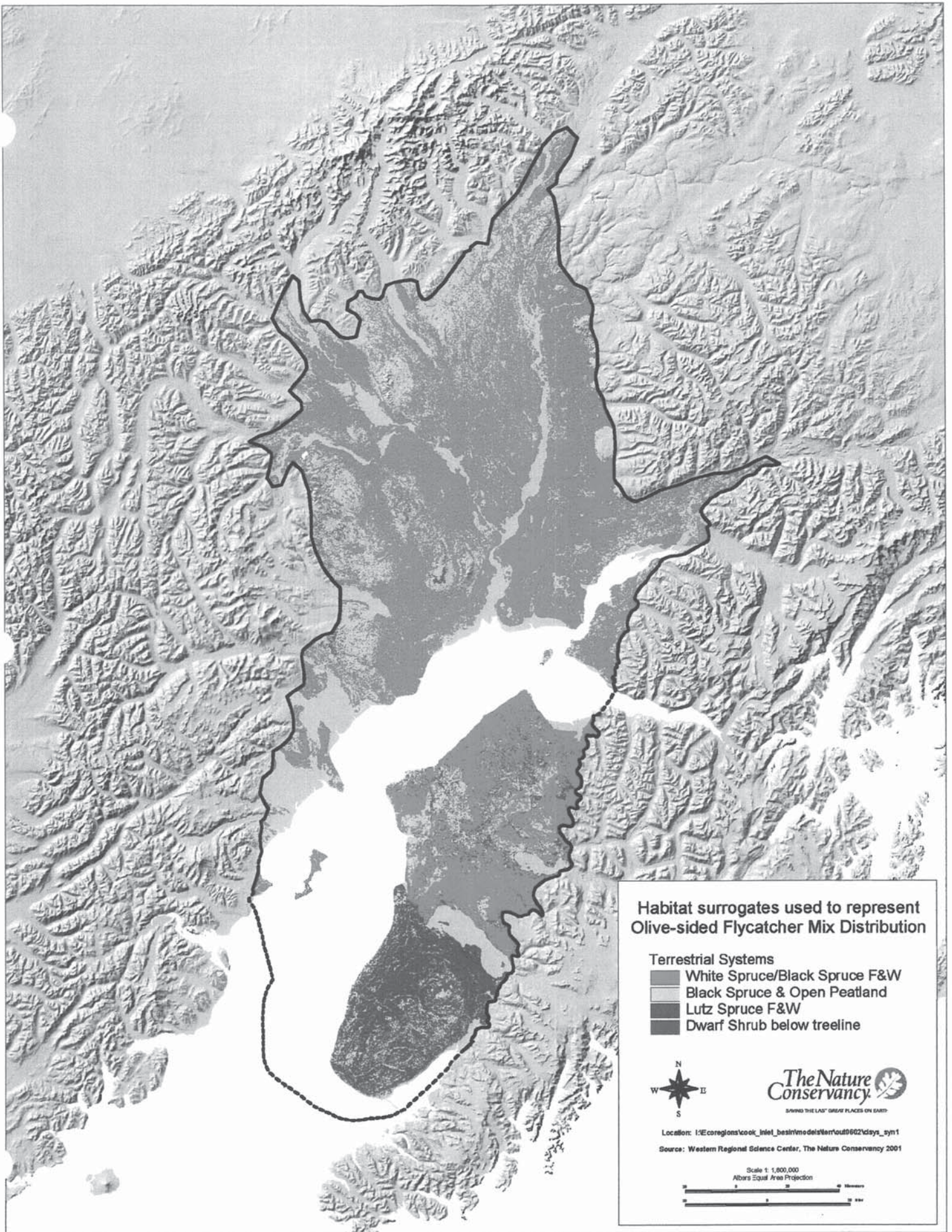


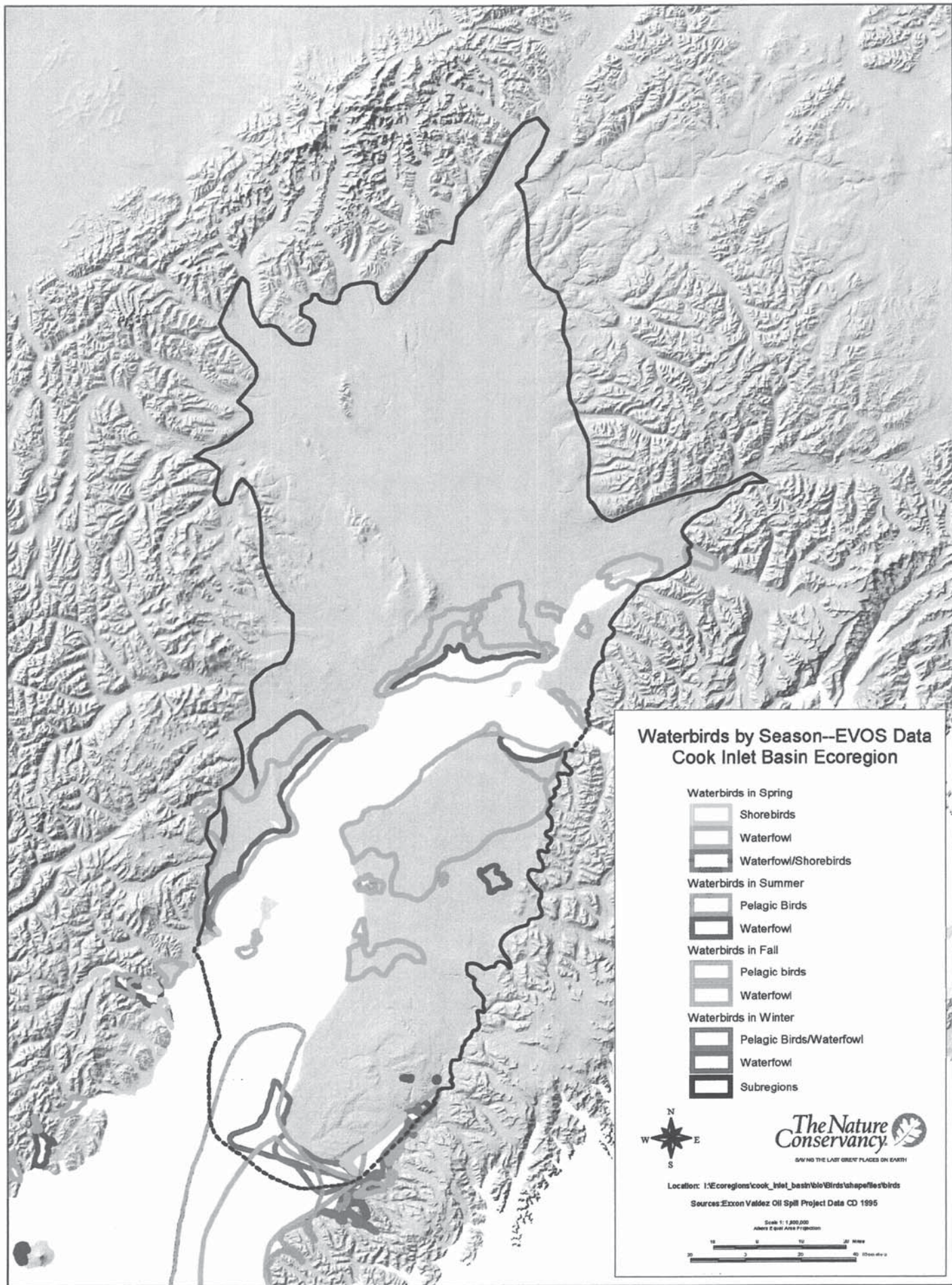
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I:\Ecoregions\cook_inlet_basin\models\terr\out\0602\ctsys_ym1

Sources: Expert recommended buffer around Hydro_c1
Western Regional Science Center, The Nature Conservancy 2001

Scale 1:1,800,000
Albers Equal Area Projection







**Waterbirds by Season--EVOS Data
Cook Inlet Basin Ecoregion**

- Waterbirds in Spring
 - Shorebirds
 - Waterfowl
 - Waterfowl/Shorebirds
- Waterbirds in Summer
 - Pelagic Birds
 - Waterfowl
- Waterbirds in Fall
 - Pelagic birds
 - Waterfowl
- Waterbirds in Winter
 - Pelagic Birds/Waterfowl
 - Waterfowl
 - Subregions



Location: I:\Ecoregions\cook_inlet_basin\birds\shapfiles\birds
Sources: Exxon Valdez Oil Spill Project Data CD 1995



