KODIAK ISLAND AND SHELIKOF STRAIT ENVIRONMENTAL SENSITIVITY INDEX SUMMARY METADATA

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FILE DESCRIBES: Digital data for 1997 Kodiak Island and Shelikof Strait, Alaska Environmental Sensitivity Index Summary

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COMMENTS: Information was developed using the U.S. Federal Geographic Data Committee's Content Standards for Digital Geospatial Metadata, June 8, 1994. The numbering scheme matches the Metadata Standard in order to facilitate referencing definitions of the elements. The items in **bold** are required elements and the others are optional elements. The Spatial Data Transfer Standard (SDTS), ver. 03/92, was referenced to properly identify the geographic entities.

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1.0. IDENTIFICATION INFORMATION

1.1. CITATION

1.1.1. ORIGINATOR:

National Oceanic and Atmospheric Administration (NOAA), Office of Ocean Resources Conservation and Assessment, Seattle, Washington 98115; and Research Planning, Inc. (RPI), 1200 Park Street, Post Office Box 328, Columbia, South Carolina 29202

1.1.2. PUBLICATION DATE:

199708

1.1.4. TITLE:

Sensitivity of Coastal Environments and Wildlife to Spilled Oil: Kodiak Island and Shelikof Strait, Alaska

1.1.5. EDITION:

First

1.1.6. GEOSPATIAL DATA PRESENTATION FORM:

Maps

1.1.7. SERIES INFORMATION

1.1.7.1. SERIES NAME:

None

1.1.7.2. ISSUE IDENTIFICATION:

Kodiak Island and Shelikof Strait, Alaska

1.1.8. PUBLICATION INFORMATION

1.1.8.1. PUBLICATION PLACE:

Seattle, Washington

1.1.8.2. PUBLISHER:

NOAA, Office of Ocean Resources Conservation and Assessment

1.1.9. OTHER CITATION DETAILS:

Prepared by Research Planning, Inc., Columbia, South Carolina for the Hazardous Materials Response and Assessment Division, National Oceanic and Atmospheric Administration, Seattle, Washington

1.1.11. LARGER WORK CITATION:

None

1.2. DESCRIPTION

1.2.1. ABSTRACT:

This data set comprises the Environmental Sensitivity Index (ESI) maps for the shoreline of Kodiak Island and Shelikof Strait, Alaska. ESI data characterize estuarine environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats; sensitive biological resources; and human-use resources

1.2.2. PURPOSE:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources

1.3. TIME PERIOD OF CONTENT

1.3.1. TIME PERIOD INFORMATION

1.3.1.3. RANGE OF DATES/TIMES:

The intertidal habitats of Shelikof Strait were originally mapped during overflights and ground surveys conducted in 1983. The biological and human-use resources data were compiled by regional biologists in 1996 and 1997. The dates for these data vary and are documented in Section 2.5.1

1.4. STATUS

1.4.1. PROGRESS:

Complete

1.4.2. MAINTENANCE AND UPDATE FREQUENCY:

None planned

1.5. SPATIAL DOMAIN

1.5.1. BOUNDING COORDINATES

1.5.1.1. WEST BOUNDING COORDINATE:

-157.292

1.5.1.2. EAST BOUNDING COORDINATE:

-151.439

1.5.1.3. NORTH BOUNDING COORDINATE:
55.667

1.5.1.4. SOUTH BOUNDING COORDINATE:
58.995

1.6 KEYWORDS

1.6.1. THEME

1.6.1.1. THEME KEYWORD THESAURUS:
None

1.6.1.2. THEME KEYWORD:
Sensitivity maps; ESI; coastal resources; oil spill planning; and coastal zone management

1.6.2. PLACE

1.6.2.1. THESAURUS:
None

1.6.2.2. PLACE KEYWORD:
Kodiak Island; Shelikof Strait; Alaska

1.7. ACCESS CONSTRAINTS:

None

1.8. USE CONSTRAINTS:

DO NOT USE ESI MAPS FOR NAVIGATIONAL PURPOSES.
Besides the above warning, there are no use constraints on this data. Acknowledgment of NOAA, RPI, and other contributing sources listed in 1.11. would be appreciated in products derived from these data

1.11. DATA SET CREDIT:

This project was supported by the Alaska Department of Environmental Conservation, Alaska Chadux Corporation, Cook Inlet Regional Citizens Council, Cook Inlet Spill Prevention and Response, Inc., and Prince William Sound Regional Citizens Advisory Council. Robert Pavia, with NOAA's Hazardous Materials Response and Assessment Division, served as contract manager.

Nearly all of the data on the maps were provided in digital form from the Alaska Department of Natural Resources (DNR), the Kodiak Island Borough, and Alyeska's Graphical Resource Database. Contributions and helpful

suggestions were also provided by: Brad Smith, John Sease, and David Withrow, National Marine Fisheries Service; Claudia Slater, Mark Fink, and Jim McCullough, Alaska Department of Fish and Game; Richard McMahon and Dorothy Mortenson, Alaska DNR; Denny Zwiefelhofer, Angela Doroff, Vivian Mendenhall, John Nichols, and Catherine Berg, U.S. Fish and Wildlife Service; Joel Cusick, Buddy Goatcher, and Bud Rice, National Park Service; Linda Freed and Jim Woitel, Kodiak Island Borough; David O'Brien, EMCON Alaska; Alison Smith, Dames & Moore; and Susan Saupe, Cook Inlet RCAC. The data collection effort was coordinated by John Whitney, NOAA Scientific Support Coordinator, Anchorage, Alaska.

At RPI, Joe Holmes was the project cartographer. Jeffrey Dahlin was the project biologist and responsible for the collection of data. William Holton generated the map and digital products and coordinated system administration. Graphics were provided by Joe Holmes. Dot Zaino prepared the final text.

1.13. NATIVE DATA SET ENVIRONMENT:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO® (version 7.0.3) and ORACLE® RDBMS (version 6.0.36.1.1). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.09.01). The following files are included in the data set:

arc_lut.e00	bathymet.e00	birds.e00
biores.e00	breed.e00	esi.e00
fish.e00	hydro.e00	index.e00
invert.e00	mgt.e00	migrate.e00
m_mammal.e00	m_mampt.e00	nests.e00
pnts_lut.e00	poly_lut.e00	seasonal.e00
soc_dat.e00	soc_lut.e00	socecon.e00
sources.e00	species.e00	status.e00

The entire data set is approximately 50 megabytes.

2.0. DATA QUALITY INFORMATION

2.1. ATTRIBUTE ACCURACY

2.1.1. ATTRIBUTE ACCURACY REPORT:

The attribute accuracy is estimated to be "good" given the years of ESI experience, the data input methodology, the quality control review sessions, and the digital logical consistency checks.

2.2. LOGICAL CONSISTENCY REPORT:

The digitization of shoreline types, biological resources, and human-use resources is a complex and highly quality-controlled process. However, the data were digitized elsewhere and compiled for this project. Topological, geographical, and data attribute problems were corrected during the compilation process. All data layers use the shoreline as the geographic reference so that there are no digital discrepancies in the geographic coordinates. The shoreline and shoreline types were obtained in digital form from Alaska DNR. The shorelines were checked for topological and attribute accuracy for the following ESI classifications: 7 (exposed tidal flat); 8A (sheltered rocky shore); 9A (sheltered tidal flat); and 10A (marsh). The biological and human-use data were checked using both digital and on-screen procedures, plotted, and sent out for review by the regional specialists. The edited maps were updated, checked once again, and the final product plotted (at approximately 1:450,000 scale). A team of specialists reviewed the entire set of maps, checked all data, and made final edits.

To finalize the data checking process, each coverage is checked using a standardized form by two GIS personnel (a technician and the GIS manager), and each attribute database is checked using several programs that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies (such as dangles, unnecessary nodes, etc.), and ORACLE® to ARC/INFO® consistencies. A final review is made by the GIS manager, where data is written to tape and metadata is written.

2.3. COMPLETENESS REPORT:

The maps were intended to provide a regional overview of the environmentally sensitive resources of Kodiak Island and Shelikof Strait. The resources were selected based on their high sensitivity and vulnerability to

spilled oil or their special management status. Kodiak Island and Shelikof Strait are rich in biological resources and it was not possible to include all of the resources sensitive to oil. Species with widespread, ubiquitous distributions are not shown. Instead, the sensitive resources are depicted where they are most at risk. The following criteria were used: large numbers of individuals concentrated in a relatively small area; early life stages present in restricted areas; come ashore for birthing, resting, or molting; areas important to specific life stages or migration patterns; threatened or endangered; and a significant percentage of the population is likely to be exposed to oil during a spill.

Shoreline Habitat Mapping:

The shoreline and shoreline habitat were obtained in digital form from Alaska DNR. While the map products only display four shoreline types, all of the shoreline classifications are in the digital product. However, only the four shoreline types (exposed and sheltered tidal flats, sheltered rocky shores, and marshes) were checked and edited during the review process.

Prediction of the behavior and persistence of oil on intertidal habitats is based on an understanding of the dynamics of the coastal environments, not just the substrate type and grain size. The vulnerability of a particular habitat is an integration of the following factors:

1) Shoreline type (substrate, grain size, tidal elevation, origin)
2) Exposure to wave and tidal energy
3) Biological productivity and sensitivity
4) Ease of cleanup

All of these factors are used to determine the relative sensitivity of intertidal habitats. Key to the sensitivity ranking is an understanding of the relationships between: physical processes, substrate, shoreline type, product type, fate and effect, and sediment transport patterns. The intensity of energy expended upon a shoreline by wave action, boat wake, tidal action, and river currents directly affects the persistence of stranded oil. The need for shoreline cleanup activities is determined, in part, by the slowness of natural processes in removal of oil stranded on the shoreline.

These concepts have been used in the development of the ESI, which ranks shoreline environments as to their relative sensitivity to oil spills, potential

biological injury, and ease of cleanup. Generally speaking, areas exposed to high levels of physical energy, such as wave action and tidal currents, and low biological activity rank low on the scale, whereas sheltered areas with associated high biological activity have the highest ranking.

Sensitive Biological Resources:

These data denote the key biological resources that are most likely at risk in the event of an oil spill. Four major categories, or ELEMENTs, of biological resources were considered during the data compilation: birds, fish, invertebrates, and marine mammals.

The ELEMENTs generally correspond to the coverage or geographic data layer names. There are also six attribute, or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, that are used to store the complex biological data (Fig. 1). Each biological polygon coverage (BIRDS, FISH, INVERT, and M_MAMMAL) is linked to the Biological Resources table (BIORES) using the lookup table POLY_LUT and the items ID and RARNUM. Each biological point coverage (M_MAMPT and NESTS) is linked to the BIORES table using the lookup table PNTS_LUT and the items ID and RARNUM. Each biological arc coverage (FISH and MIGRATE) is linked to the BIORES table using the ARC_LUT and the items ID and RARNUM. ID is a concatenation of atlas number (57), element number (BIRD = 01, FISH = 02, INVERT = 07, M_MAMMAL = 04, and NESTS = 05), and unique record number. RARNUM is the resources at risk number and is determined for each unique combination of SPECIES_ID, SEASON_ID, CONC, G_SOURCE, S_SOURCE, and ELEMENT. The items in BIORES are: RARNUM, SPECIES_ID, CONC, SEASON_ID, G_SOURCE, S_SOURCE, ELEMENT, EL_SPE, and EL_SPE_SEA. SPECIES_ID is the numeric identifier of each species and is unique within each ELEMENT. CONC is the concentration of the species and can be descriptive (LOW, MEDIUM, HIGH, etc.) or an actual count of the number of individuals or nests associated with a polygon, point, or arc. SEASON_ID contains a numeric identifier for the unique monthly presence and life history characteristics of each species at a given location. There can be one seasonality record per species, or the same species can have different monthly presence or breeding activities at different sites. When this

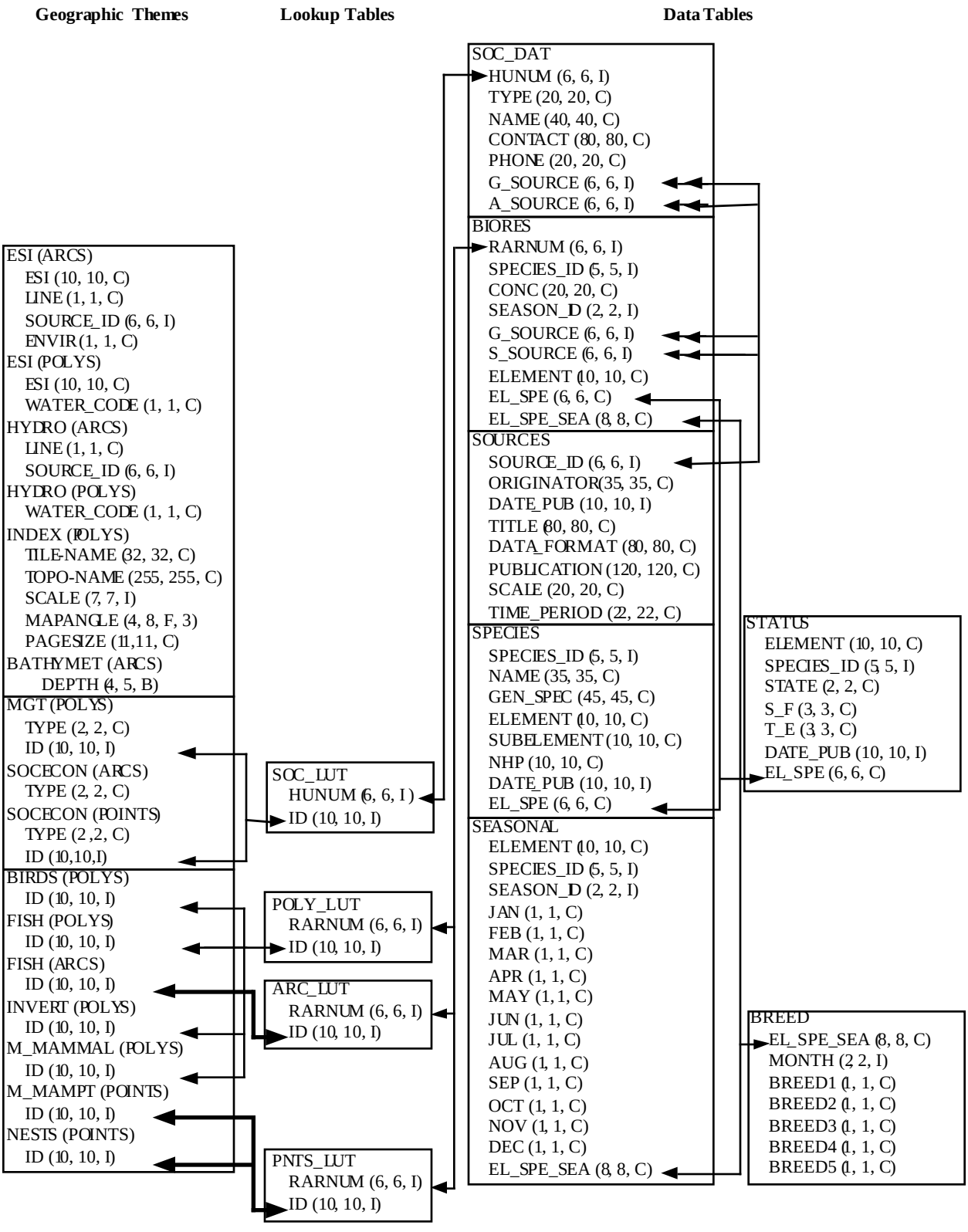

FIGURE 1. Relationship between biology coverages and attribute files.

occurs, a new record with a different SEASON_ID is referenced. G_SOURCE contains the SOURCE_ID for geographic information and S_SOURCE contains the SOURCE_ID for seasonality information. Both items link to the SOURCES data table. EL_SPE is a concatenation of ELEMENT and SPECIES_ID and links to the SPECIES and STATUS data tables and EL_SPE-SEA is a concatenation of ELEMENT, SPECIES_ID, and SEASON_ID and links to the SEASONAL and BREED data tables.

The SPECIES data table contains the SPECIES_ID (described above), common name (NAME), scientific name (GEN_SPEC), date the Natural Heritage Program (NHP) rankings was published (DATE_PUB), biological element (ELEMENT), biological subelement (SUBELEMENT), and the NHP global conservation status rank (NHP). The item SUBELEMENT refers to the grouping of the species:

ELEMENT	SUBELEMENT
BIRD	alcid
	diving
	gull_tern
	pelagic
	raptor
	shorebird
	waterfowl
FISH	anadromous
	kelp_sp
INVERTEBRATE	bivalve
MARINE MAMMAL	pinniped
	sea_otter
	seal
	whale

The STATUS data table contains records for each species that is threatened or endangered on state or federal lists. The items include: ELEMENT, SPECIES_ID, STATE (two-letter state abbreviations), S_F (state or federal status), T_E (threatened or endangered status), DATE_PUB, and EL_SPE.

The SEASONAL data table stores the monthly presence of each species where each month is defined as three-character monthly abbreviations and contains an “X” when present. The BIORES table is linked to the SEASONAL table using either the combination of SPECIES_ID, ELEMENT, and SEASON_ID items, or the item EL_SPE_SEA.

The BREED data table contains the life stage or life history data for each unique combination of ELEMENT, SPECIES_ID, and SEASON_ID (or EL_SPE_SEA), and up to 12 records (corresponding to each month of the year) can have different attributes and therefore separate records. The categories for each element of the items BREED1 through BREED5 are:

ELEMENT	BREED 1	BREED 2	BREED 3	BREED 4	BREED 5
BIRD	nesting	laying	hatching	fledging	
FISH	spawning	outmigration	larvae	juvenile	adults
INVERT	spawning	larvae	mating	juvenile	adults
M_MAMMAL	mating	calving	pupping	molting	

NOTE: There are no BREED variables for HABITATS.

The SOURCES data table contains metadata for each biological and human-use source listed in the ESI atlas. The items in SOURCES are: SOURCE_ID, ORIGINATOR (author), DATE_PUB (date of publication), TITLE (title of the data set), DATA_FORMAT (digital type, hardcopy maps, etc.), PUBLICATION (additional citation), SCALE (source scale denominator), and TIME_PERIOD (beginning and ending dates of original data collection). The SOURCES data table is linked to all biological and human-use data at the feature-level.

Human-Use Resources:

Several human-use, or socioeconomic, features are included in the summary maps. Entity points and complete chains (arcs) are digitized into the coverage SOCECON and managed area polygonal data are stored in the MGT coverage. Both data sets are linked to the data table SOC_DAT using the SOC_LUT lookup table and the items HUNUM and ID. ID is a concatenation of atlas number (57), element number (SOCECON = 10 and MGT = 11), and unique record number. HUNUM is the human-use number and is determined for each unique combination of TYPE, NAME, G_SOURCE, and A_SOURCE.

All features are attributed using the item TYPE and identify the type of feature:

Entity Points	
Feature	**TYPE**
Airport	A
Aquaculture	AQ
Community	CO
Marina	M
State Park	P
Complete Chains	
Feature	**TYPE**
Municipal Boundary	CB
Road	R
Set-net location	SN

Polygons	
Feature	**TYPE**
Community	CO
Management Area	MA
National Park	NP
State Park	P
Wildlife Refuge	WR

The table SOC_DAT contains the human-use number (HUNUM), feature type (TYPE), name of the facility (NAME), contact person (CONTACT), telephone number (PHONE), geographic source (G_SOURCE), and attribute source (A_SOURCE).

2.4. POSITIONAL ACCURACY

2.4.1. HORIZONTAL POSITIONAL ACCURACY

2.4.1.1. HORIZONTAL POSITIONAL ACCURACY REPORT:

The shoreline classification and hydrology data were digitized from U.S. Geological Survey (USGS) 1:63,360 topographic quadrangles. It is estimated that the ESI classification has a minimum mapping unit of 100 feet. The biological data sets are developed primarily using regional experts who estimate concentration areas. Unlike shorelines, which maintain relative spatial stability through time, the biological data by nature migrate across the landscape. Therefore, the 1:250,000 USGS quadrangles are used as a base map in gathering the data but the data have “fuzzy” boundaries which must be understood when utilizing this information.

2.5. LINEAGE

2.5.1. SOURCE INFORMATION:

Coverage or theme name: BATHYMET

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
National Ocean Service	1996	*Exxon Valdez* Oil Spill Database Summary – 20 Meter Contours	Digital arcs	Alaska DNR Land Records Information Section	250000	1990

2.5.1. SOURCE INFORMATION:

Coverage or theme name: BIRDS

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Alaska Department of Fish and Game	1996	Graphical Resource Database - Waterfowl Concentration Areas	Digital Polygons	Alyeska Pipeline Service Company, Anchorage, AK	250000	1983
McCullough, J., Alaska Department of Fish and Game	1997	Waterfowl Concentration Areas	Expert knowledge	N/A	N/A	N/A

2.5.1. SOURCE INFORMATION:

Coverage or theme name: ESI

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Alaska Department of Natural Resources	N/A	ESI Shoreline Classification	Digital arcs	N/A	24000	1996
Holton, W., Research Planning, Inc.	1997	Map Index	Digital polygons	NOAA	63360	1997
Research Planning, Inc.	1994	Cook Inlet Summary ESI	Digital arcs	NOAA HAZMAT	63360	1984

2.5.1. SOURCE INFORMATION:

Coverage or theme name: FISH

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Alaska Department of Fish and Game	1996	Graphical Resource Database - Herring Spawning Areas	Digital polygons	Alyeska Pipeline Service Company, Anchorage, AK	Unknown	Unknown
Alaska Department of Fish and Game	1996	*Exxon Valdez* Oil Spill Database - Catalog of Waters of Anadromous Fish	Digital arcs	Alaska DNR Land Records Information Section	63360	1996
McCullough, J., Alaska Department of Fish and Game	1997	Herring Spawning Areas	Expert knowledge	N/A	N/A	N/A

2.5.1. SOURCE INFORMATION:

Coverage or theme name: HYDRO

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
U.S. Minerals Management Service / NOAA	1996	*Exxon Valdez* Oil Spill Database Summary – ESI	Digital arcs and polygons	Alaska DNR Land Records Information Section	80000	1990
Alaska Department of Natural Resources	Unknown	Coastal Morphology / Environmental Sensitivity Index	Digital arcs	Alaska DNR	63360	1984
Kodiak Island Borough	1996	Coastal Boundary / Zoning Map	Digital arcs	Kodiak Island Borough Community Development Department	Unknown	Unknown
Alaska Department of Fish and Game	1996	*Exxon Valdez* Oil Spill Database Summary – Anadromous Streams	Digital arcs	Alaska DNR Land Records Information Section	63360	1994
U.S. Geological Survey	1996	Hydrography	Digital arcs	National Park Service Database Contact: Joel Cusick	63360	1995
Holton, W., Research Planning, Inc.	1997	Map Index	Digital polygons	NOAA	63360	1997
Research Planning, Inc.	1994	Cook Inlet Summary ESI	Digital arcs	NOAA HAZMAT	63360	1984

2.5.1. SOURCE INFORMATION:

Coverage or theme name: INDEX

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Holton, W., Research Planning, Inc.	1997	Map Index	Digital polygons	NOAA	63360	1997

2.5.1. SOURCE INFORMATION:

Coverage or theme name: INVERT

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Alaska Department of Fish and Game	1984	Habitat Management Guide, Southwest Region, Volume IV	Hardcopy maps	Alaska Department of Fish and Game, Anchorage, AK	250000	1983
McCullough, J., Alaska Department of Fish and Game	1997	Razor Clam Beds	Expert knowledge	N/A	N/A	N/A

2.5.1. SOURCE INFORMATION:

Coverage or theme name: MGT

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
National Park Service	1995	Administrative Boundaries	Digital polygons	Database Contact: Joel Cusick	63360	1989-1991
U.S. Fish and Wildlife Service	1997	Management Area Boundaries	Digital polygons	Database Contact: Doug Vandegraft	Unknown	Unknown

2.5.1. SOURCE INFORMATION:

Coverage or theme name: MIGRATE

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Smith, B., National Marine Fisheries Service	1997	Gray Whale Migration Periods	Expert knowledge	N/A	N/A	N/A

2.5.1. SOURCE INFORMATION:

Coverage or theme name: M_MAMMAL

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Alaska Department of Fish and Game/National Marine Fisheries Service	1996	Graphical Resource Database Alaska West: Harbor Seal Sites	Digital points and polygons	Alyeska Pipeline Service Company, Anchorage, AK	250000	1982-1983
Alaska Department of Fish and Game	1996	Graphical Resource Database Alaska West: Sea Otter Concentration Areas	Digital polygons	Alyeska Pipeline Service Company, Anchorage, AK	250000	1982-1983
Withrow, D., National Marine Fisheries Service	1997	Harbor Seal Location Survey	Expert knowledge	N/A	N/A	N/A
McCullough, J., Alaska Department of Fish and Game	1997	Harbor Seal Concentration Areas	Expert knowledge	N/A	N/A	N/A

2.5.1. SOURCE INFORMATION:

Coverage or theme name: M_MAMPT

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Alaska Department of Fish and Game	1996	Graphical Resource Database Alaska West: Sea Lion Sites	Digital points and polygons	Alyeska Pipeline Service Company, Anchorage, AK	250000	1982-1983
National Marine Fisheries Service	1996	Graphical Resource Database Alaska West: Whales	Digital polygons	Alyeska Pipeline Service Company, Anchorage, AK	Unknown	1996
Zwiefelhofer, D., U.S. Fish and Wildlife Service	1997	Sea Lion Concentration Areas	Expert knowledge	N/A	N/A	N/A
Goatcher, B., National Park Service	1997	Sea Lion Concentration Areas	Expert knowledge	N/A	N/A	N/A

2.5.1. SOURCE INFORMATION:

Coverage or theme name: NESTS

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
U.S. Fish and Wildlife Service	1996	*Exxon Valdez* Oil Spill Database Summary – Seabird Colonies	Digital points	Alaska DNR Land Records Information Section	Varies	1996
U.S. Fish and Wildlife Service	1996	Graphical Resource Database Alaska West: Bald Eagle Nest Sites	Digital points	Alyeska Pipeline Service Company, Anchorage, AK	Unknown	1989-1992

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Alaska Department of Fish and Game	1997	Bald Eagle Nest Sites	Expert knowledge	N/A	N/A	N/A

2.5.1. SOURCE INFORMATION:

Coverage or theme name: SOCECON

2.5.1.1. SOURCE CITATION

2.5.1.1.1 Originator	2.5.1.1.2 Publication Date	2.5.1.1.4 Title	2.5.1.1.6 Geospatial Data Presentation Form	2.5.1.1.8 Publication Information	2.5.1.2 Source Scale Denominator	2.5.1.4 Source Time Period
Kodiak Island Borough	1996	Graphical Resource Database Alaska West: Hatchery Sites	Digital points	Alyeska Pipeline Service Company, Anchorage, AK	Unknown	Unknown
Kodiak Island Borough	1996	Coastal Boundary/ Zoning Map	Digital arcs	Kodiak Island Borough Community Development Department	Unknown	Unknown
Kodiak Island Borough	1996	Graphical Resource Database Alaska West: Communities	Digital points	Alyeska Pipeline Service Company, Anchorage, AK	Unknown	Unknown
U.S. Geological Survey	N/A	U.S. Geological Survey 1:250,000 Topographic Quadrangles	Hardcopy maps	U.S. Geological Survey, Reston, VA	250000	Varies
Alaska Department of Transportation and Public Facilities	1996	Graphical Resource Database Alaska West: Small Boat Harbors	Digital points	Alyeska Pipeline Service Company, Anchorage, AK	Unknown	1995

2.5.2. PROCESS STEP

2.5.2.1. PROCESS DESCRIPTION:

The collection of the basemap data, biological resources, and human-use resources was a complex and highly quality controlled process. The first layer of information collected was the shoreline (ESI). The collected data were checked for completeness (for ESI classifications 7 through 10), topological, and logical consistency and then plotted. Any errors in the shoreline classification were updated prior to digitization of biological and human-use layers. All data use the shoreline as the geographic reference so that there are no slivers in the geographic layers. The biological information was collected, synthesized against the shoreline, checked using both digital and on-screen procedures, plotted, and sent out for review by the regional specialists. The edited maps were updated, checked once again, and plotted at a final map scale of 1:450,000. A team of specialists reviewed the entire series of maps, checked all data, and made final edits. A final quality control check for topological consistency, rules for geography, and database to geography correspondence were performed and reported to the GIS manager.

2.5.2.3. PROCESS DATE:

199701-199708

2.5.2.6. PROCESS CONTACT

2.5.2.6.1. CONTACT PERSON PRIMARY

2.5.2.6.1.1. CONTACT PERSON:

Jill Petersen

2.5.2.6.1.2. CONTACT ORGANIZATION:

NOAA HMRAD

2.5.2.6.3. CONTACT POSITION:

GIS Manager

2.5.2.6.4. CONTACT ADDRESS

2.5.2.6.4.1. ADDRESS TYPE:

Physical Address

2.5.2.6.4.2. ADDRESS:
7600 Sand Point Way, N.E.
Bin C15700

2.5.2.6.4.3. CITY:
Seattle

2.5.2.6.4.4. STATE OR PROVINCE:
W A

2.5.2.6.4.5. POSTAL CODE:
98115

2.5.2.6.5. CONTACT VOICE TELEPHONE:
(206) 526-6944

2.5.2.6.7. CONTACT FACSIMILE TELEPHONE:
(206) 526-6329

2.5.2.6.8. CONTACT ELECTRONIC MAIL ADDRESS:
jill_petersen@hazmat.noaa.gov.us

3.0. SPATIAL DATA ORGANIZATION INFORMATION

3.2. DIRECT SPATIAL REFERENCE METHOD:

Vector

3.3. POINT AND VECTOR OBJECT INFORMATION

3.3.1. SDTS TERMS DESCRIPTION:

3.3.1.1. SDTS POINT AND VECTOR OBJECT TYPE, and

3.3.1.2. POINT AND VECTOR OBJECT COUNT:

Theme	Universe Polygon	GT-Polygons	Area Points	Complete Chains	Line Segments	Label Points	Entity Points	Nodes
BATHYMET				1,203	179,362			8340
BIRDS	1	127	127	272	55,175			221
ESI	1	1,214	1,214	8,044	239,848			7,925
FISH	1	1,134	1,134	2845	174,285			3,208
HYDRO	1	5,085	5,085	7,090	381,695	180		7,046
INDEX	1	1	1	4	4			4
INVERT	1	140	140	142	9,637			142
MGT	1	1,263	1,263	1,533	141,947			1,480
MIGRATE				6	1,546			66
M_MAMMAL	1	4,278	4,278	4,744	262,842			4,606
M_MAMPT							49	
NESTS							2,040	
SOCECON				49	5,232		24	187

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4.0. SPATIAL REFERENCE INFORMATION

4.1. HORIZONTAL COORDINATE SYSTEM DEFINITION

4.1.1. GEOGRAPHIC

4.1.1.1. LATITUDE RESOLUTION:

0.00005

4.1.1.2. LONGITUDE RESOLUTION:

0.00005

4.1.1.3. GEOGRAPHIC COORDINATE UNITS:

Decimal Degrees

4.1.4. GEODETIC MODEL

4.1.4.1. HORIZONTAL DATUM NAME:

North American Datum of 1983

4.1.4.2. ELLIPSOID NAME:

GRS 1980

4.1.4.3. SEMI-MAJOR AXIS:

6,378,206.4

4.1.4.4. DENOMINATOR FLATTENING RATIO:

294.98

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5.0. ENTITY AND ATTRIBUTE INFORMATION

5.1. DETAILED DESCRIPTION: ARC_LUT

Lookup table to link biology arc data layers to BIORES data table.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	RARNUM	integer
	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

RARNUM

5.1.2.2. ATTRIBUTE DEFINITION:

An identifier that links to the BIORES data table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4. ATTRIBUTE DOMAIN VALUES:

5.1.2.4.1. ENUMERATED DOMAIN:

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

344
372
373
375
401

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

An identifier that links to the FISH data layer. The values range from 0100002-08

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4. ATTRIBUTE DOMAIN VALUES:

Values are a concatenation of atlas number (57), element number (02), and unique record number 00001 through N)

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1. DETAILED DESCRIPTION: BATHYMET

The data layer BATHYMET contains arcs representing bathymetric contour intervals. This data layer does not match the shoreline and, in some places, the contours intersect with land. For the purposes of this project, the data set was left as is

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Complete Chain	DEPTH	binary

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

DEPTH

5.1.2.2. ATTRIBUTE DEFINITION:

An integer denoting bathymetric depth in meters

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

National Ocean Service

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
-20	20 meter bathymetric contour
-80	80 meter bathymetric contour
-120	120 meter bathymetric contour

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

National Ocean Service

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

ordered

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5.1. DETAILED DESCRIPTION: BIORES

The data table BIORES contains the attributes necessary for linking to spatial data layers and data tables.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	RARNUM	integer
	SPECIES_ID	integer
	CONC	character
	SEASON_ID	integer
	G_SOURCE	integer
	S_SOURCE	integer
	ELEMENT	character
	EL_SPE	character
	EL_SPE_SEA	character

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

RARNUM

5.1.2.2. ATTRIBUTE DEFINITION:

An identifier that links to the POLY_LUT, PNTS_LUT, and ARC_LUT lookup tables

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:
SPECIES_ID

5.1.2.2. ATTRIBUTE DEFINITION:
Numeric identifier for each species and is unique within each ELEMENT and refers to a nationwide ESI species list maintained at RPI and NOAA

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:
CONC

5.1.2.2. ATTRIBUTE DEFINITION:
Relative concentration or actual count of a species at a specific location. Field is blank if no data is available

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
See SOURCES for each data layer given in Section 2

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:
SEASON_ID

5.1.2.2. ATTRIBUTE DEFINITION:
Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location. There can be one seasonality record per species, or the same species can have different monthly presence or breeding activities at different sites. When this occurs, a new record with a different SEASON_ID is referenced. The concatenation of ELEMENT, SPECIES_ID, and SEASON_ID links to the SEASONAL data table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:
G_SOURCE

5.1.2.2. ATTRIBUTE DEFINITION:
Geographic source identifier that links to the SOURCES data table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:
S_SOURCE

5.1.2.2. ATTRIBUTE DEFINITION:
Seasonality source identifier that links to the SOURCES data table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:
ELEMENT

5.1.2.2. ATTRIBUTE DEFINITION:
Major categories of biological data

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
BIRD	Birds
FISH	Fish
INVERT	Invertebrates
M_MAMMAL	Marine Mammals

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

EL_SPE

5.1.2.2. ATTRIBUTE DEFINITION:

Concatenation of the ELEMENT and SPECIES_ID

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4. ATTRIBUTE DOMAIN VALUES:

5.1.2.4.1. ENUMERATED DOMAIN:

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

B00008
B00010
B00036
B00041
B00046
B00047
B00048
B00049
B00050
B00051
B00068
B00076
B00079
B00080
B00081
B00084
B00096
B00099
B00100
B00101
B00102
B00103
B00104

ENUMERATED DOMAIN VALUE:

B00105
B00106
B00111
B00129
B00273
B01003
B01008
B01021
F00066
F01022
I00028
M00001
M00002
M00007
M00026

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
EL_SPE_SEA

5.1.2.2. ATTRIBUTE DEFINITION:
Concatenation of the ELEMENT, SPECIES_ID, and SEASON_ID

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4. ATTRIBUTE DOMAIN VALUES:

5.1.2.4.1. ENUMERATED DOMAIN:

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

B0000801
B0001001
B0003601
B0004101
B0004601

ENUMERATED DOMAIN VALUE:

B0004701
B0004801
B0004901
B0005001
B0005101
B0006801
B0007601
B0007602
B0007901
B0008001
B0008101
B0008401
B0009601
B0009901
B0010001
B0010101
B0010201
B0010301
B0010401
B0010501
B0010601
B0011101
B0012901
B0027301
B0027303
B0100301
B0100302
B0100303
B0100304
B0100305
B0100306
B0100307
B0100308
B0100801
B0102101
B0102102
B0102103
F0006601

ENUMERATED DOMAIN VALUE:

F0102201
I0002801
M0000101
M0000102
M0000201
M0000701
M0002601
M0002602

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1. DETAILED DESCRIPTION: BIRDS

The data layer BIRDS contains the polygons with bird species. The polygons represent concentration areas for waterfowl. Waterfowl populations are highest during the spring migration in April and May and during the arrival of the summer breeding population.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
GT-Polygons	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the POLY_LUT table. ID is a concatenation of atlas number (57), element number (1), and record number. ID values of zero are holes in polygons and do not contain information

The following BIRDS species are found in the bird coverage:

SPECIES ID	NAME
273	Geese
1,003	Waterfowl
1,021	Ducks

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

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5.1. DETAILED DESCRIPTION: BREED

The data table BREED identifies the life stages, by month, for each species.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	EL_SPE_SEA	character
	MONTH	integer
	BREED1	character
	BREED2	character
	BREED3	character
	BREED4	character
	BREED5	character

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

EL_SPE_SEA

5.1.2.2. ATTRIBUTE DEFINITION:

Concatenation of the first character of the ELEMENT, SPECIES_ID, and SEASON_ID. Links to BIORES and SEASONAL data tables. If a species has any different monthly presence or breeding activity, a new seasonality record is used to accommodate the variable nature of the species across the study area. There can be up to 12 records (representing each month) for each seasonality for each species

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

MONTH

5.1.2.2. ATTRIBUTE DEFINITION:

Two-digit calendar month when the species is present

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1	January
2	February
3	March
4	April
5	May
6	June
7	July
8	August
9	September
10	October
11	November
12	December

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

BREED1

5.1.2.2. ATTRIBUTE DEFINITION:

The BREED items contain “Y” for occurring and “N” for not occurring. Species’ breeding or life stage information for BREED1:

if EL_SPE_SEA contains “B” then BREED1 = nesting;
if EL_SPE_SEA contains “F” then BREED1 = spawning;
if EL_SPE_SEA contains “I” then BREED1 = spawning;
if EL_SPE_SEA contains “M” then BREED1 = mating
Only BIRD (“B”) and FISH (“F”) species have BREED1 activities occurring in these data

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
N	Not occurring
Y	Occurring

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

BREED2

5.1.2.2. ATTRIBUTE DEFINITION:

The BREED items contain “Y” for occurring and “N” for not occurring. Species’ breeding or life stage information for BREED2:

if EL_SPE_SEA contains “B” then BREED2 = laying;

if EL_SPE_SEA contains “F” then BREED2 = outmigration;

if EL_SPE_SEA contains “I” then BREED2 = larvae;

if EL_SPE_SEA contains “M” then BREED2 = calving

No species have BREED2 activities in these data

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
N	Not occurring

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

BREED3

5.1.2.2. ATTRIBUTE DEFINITION:

The BREED items contain "Y" for occurring and "N" for not occurring. Species' breeding or life stage information for BREED3:

if EL_SPE_SEA contains "B" then BREED3 = hatching;

if EL_SPE_SEA contains "F" then BREED3 = larvae;

if EL_SPE_SEA contains "I" then BREED3 = mating;

if EL_SPE_SEA contains "M" then BREED3 = pupping

Only M_MAMMAL ("M") species have BREED3 activities occurring in these data

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
N	Not occurring
Y	Occurring

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

BREED4

5.1.2.2. ATTRIBUTE DEFINITION:

The BREED items contain "Y" for occurring and "N" for not occurring. Species' breeding or life stage information for BREED4:

if EL_SPE_SEA contains "B" then BREED4 = fledging;

if EL_SPE_SEA contains "F" then BREED4 = juvenile;

if EL_SPE_SEA contains "I" then BREED4 = juvenile

if EL_SPE_SEA contains "M" then BREED4 = molting

Only M_MAMMAL ("M") species have BREED4 activities occurring in these data

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
N	Not occurring
Y	Occurring

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

BREED5

5.1.2.2. ATTRIBUTE DEFINITION:

The BREED items contain “Y” for occurring, “N” for not occurring, and “-” when not applicable. Species’ breeding or life stage information for BREED5:
if EL_SPE_SEA contains “F” then BREED5 = adults;
if EL_SPE_SEA contains “I” then BREED5 = adults
No species have BREED5 activity in these data

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
N	Not occurring
-	Not applicable

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

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5.1. DETAILED DESCRIPTION: ESI

The data layer ESI contains arc (Complete Chains) and polygonal (GT-Polygons) features for the ESI shoreline classification and is based on *Environmental Sensitivity Index Guidelines, Version 2.0* (Halls, J., J. Michel, S. Zengel, and J. Dahlin, 1996, Hazardous Materials Response and Assessment Division, NOAA).

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Complete Chain	ESI	character
	LINE	character
	SOURCE_ID	integer
	ENVIR	character
GT-Polygons	ESI	character
	WATER_CODE	character

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ESI

5.1.2.2. ATTRIBUTE DEFINITION:

The item ESI contains values according to the ESI ranking of the shorelines and polygons. The ESI rankings progress from low to high susceptibility to oil spills. In many cases, the shorelines are also ranked with multiple codes such as 10A/8B. The first number is the most landward shoreline type, marsh, with sheltered, solid man-made structures being the shoreline type closest to the water. Only shoreline types of 7 through 10 were reviewed for accuracy and accepted by the regional specialists.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1A	Exposed Rocky Shores
1A/2A	Exposed Rocky Shores/Exposed Wave-cut Platform in Bedrock, Mud, or Clay
1A/5	Exposed Rocky Shores/Mixed Sand and Gravel Beaches
1A/6A	Exposed Rocky Shores/Gravel Beaches
1A/7	Exposed Rocky Shores/Exposed Tidal Flats
1B	Exposed, Solid Man-made Structures
2A	Exposed Wave-cut Platform in Bedrock, Mud, or Clay
2A/1A	Exposed Wave-cut Platform in Bedrock, Mud, or Clay/Exposed Rocky Shores
2A/5	Exposed Wave-cut Platform in Bedrock, Mud, or Clay/Mixed Sand and Gravel Beaches
2A/5/7	Exposed Wave-cut Platform in Bedrock, Mud, or Clay/Mixed Sand and Gravel Beaches/Exposed Tidal Flats
2A/6A	Exposed Wave-cut Platform in Bedrock, Mud, or Clay/Gravel Beaches
2A/7	Exposed Wave-cut Platform in Bedrock, Mud, or Clay/Exposed Tidal Flats
2A/8A	Exposed Wave-cut Platform in Bedrock, Mud, or Clay/Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay
2A/9A	Exposed Wave-Cut Platform in Bedrock, Mud, or Clay/Sheltered Tidal Flats
3A	Fine- to Medium-grained Sand Beaches
3A/7	Fine- to Medium-grained Sand Beaches/Exposed Tidal Flats
4	Coarse-grained Sand Beaches
4/7	Coarse-grained Sand Beaches/Exposed Tidal Flats
4/9A	Coarse-grained Sand Beaches/Sheltered Tidal Flats
5	Mixed Sand and Gravel Beaches
5/2A	Mixed Sand and Gravel Beaches/Exposed Wave-cut Platform in Bedrock, Mud, or Clay
5/7	Mixed Sand and Gravel Beaches/Exposed Tidal Flats
5/9A	Mixed Sand and Gravel Beaches/Sheltered Tidal Flats
5/10A	Mixed Sand and Gravel Beaches/Salt-Marsh
6A	Gravel Beaches

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
6A / 2A	Gravel Beaches / Exposed Wave-cut Platform in Bedrock, Mud, or Clay
6A / 5	Gravel Beaches / Mixed Sand and Gravel Beaches
6A / 7	Gravel Beaches / Exposed Tidal Flats
6A / 9A	Gravel Beaches / Sheltered Tidal Flats
7	Exposed Tidal Flats
7 / 5	Exposed Tidal Flats / Mixed Sand and Gravel Beaches
8A	Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay
8A / 5 / 9A	Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay / Mixed Sand and Gravel Beaches / Sheltered Tidal Flats
8A / 6A	Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay / Gravel Beaches
8A / 9A	Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay / Sheltered Tidal Flats
8A / 10A	Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay / Salt-Marsh
9A	Sheltered Tidal Flats
9A / 5	Sheltered Tidal Flats / Mixed Sand and Gravel Beaches
9A / 6A	Sheltered Tidal Flats / Gravel Beaches
9A / 7	Sheltered Tidal Flats / Exposed Tidal Flats
9A / 8A	Sheltered Tidal Flats / Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay
9A / 10A	Sheltered Tidal Flats / Salt-Marsh
10A	Salt-Marsh
10A / 2A	Salt-Marsh / Exposed Wave-cut Platform in Bedrock, Mud, or Clay
10A / 5	Salt-Marsh / Mixed Sand and Gravel Beaches
10A / 5 / 7	Salt-Marsh Mixed Sand and Gravel Beaches / Exposed Tidal Flats
10A / 5 / 9A	Salt-Marsh / Mixed Sand and Gravel Beaches / Sheltered Tidal Flats
10A / 6A	Salt-Marsh / Gravel Beaches
10A / 7	Salt-Marsh / Exposed Tidal Flats
10A / 8A	Salt-Marsh / Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay
10A / 8A / 9A	Salt-Marsh / Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay / Sheltered Tidal Flats

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
10A/9A	Salt-Marsh/Sheltered Tidal Flats
U	Unranked

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
ordered

5.1.2.1. ATTRIBUTE LABEL:
LINE

5.1.2.2. ATTRIBUTE DEFINITION:
Type of geographic feature

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
F	Flat
H	Hydro
M	Marsh
S	Shoreline

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:
SOURCE_ID

5.1.2.2. ATTRIBUTE DEFINITION:
Data source for the ESI

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1	ADNR shoreline with ESI attributes
2	Cookinlet ESI Summary Maps
6	Digitized from scanned topos

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

ENVIR

5.1.2.2. ATTRIBUTE DEFINITION:

Regional environment

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
E	Estuarine

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

WATER_CODE

5.1.2.2. ATTRIBUTE DEFINITION:

Specifies a polygon as either water or land

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
L	Land
W	Water

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1. DETAILED DESCRIPTION: FISH

The data layer FISH contains polygons and arcs for fish species.

The polygons represent Pacific herring spawning areas. Pacific herring spawn in mass during May to mid-June, congregating near shallow beaches and outcrops. The northern Shelikof Strait and the coast of Kodiak Island provide important rearing, feeding, and over-wintering habitat.

The arcs represent anadromous fish bearing streams within the area.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Complete Chains	ID	integer
GT-Polygons	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the POLY_LUT lookup table for polygon features or ARC_LUT lookup table for arc features. ID is a concatenation of atlas number (57), element number (2), and record number. ID values of zero are holes in polygons or arcs that do not contain information

The following FISH species are found in the atlas:

SPECIES ID	NAME
66	Pacific herring
1022	Anadromous fish

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

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5.1. DETAILED DESCRIPTION: HYDRO

The data layer HYDRO contains polygonal water and land features as well as linear features for rivers and streams.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
GT-Polygons	WATER_CODE	character
Complete Chains	LINE	character
	SOURCE_ID	integer

The LINE, SOURCE_ID, and WATER_CODE attributes are the same as in the ESI data layer. The HYDRO data layer contains all annotation used in producing the atlas. The annotation features are categorized into three subclasses in order to simplify the mapping and quality control procedures: geog or geographic features; soc or socio-economic features; and hydro or water features.

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

WATER_CODE

5.1.2.2. ATTRIBUTE DEFINITION:

Specifies a polygon as either water or land

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
L	Land
W	Water

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

LINE

5.1.2.2. ATTRIBUTE DEFINITION:

Type of geographic feature

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
H	Hydrography or stream features
I	Index
S	Shoreline

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

SOURCE_ID

5.1.2.2. ATTRIBUTE DEFINITION:

Data source for the ESI

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1	ADNR shoreline
2	Cookinlet Summary Maps
3	Kodiak Island Borough shoreline
4	ADFG anadromous streams
5	NPS hydrography
6	Atlas index coverage

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1. DETAILED DESCRIPTION: INDEX

The data layer INDEX contains the map or polygon boundaries for the map area.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
GT-Polygons	TILE-NAME	character
	TOPO-NAME	character
	SCALE	integer
	MAPANGLE	floating point
	PAGESIZE	character

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

TILE-NAME

5.1.2.2. ATTRIBUTE DEFINITION:

The TILE-NAME contains the map number according to the specified layout of the atlas.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

1

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

TOPO-NAME

5.1.2.2. ATTRIBUTE DEFINITION:

The TOPO-NAME contains the descriptive name of the area being mapped.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

Kodiak Island and Shelikof Strait

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:
SCALE

5.1.2.2. ATTRIBUTE DEFINITION:
SCALE contains the value of the denominator of the scale at which the map is plotted in the final map product

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:
450,000

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:
MAPANGLE

5.1.2.2. ATTRIBUTE DEFINITION:
MAPANGLE contains a value to rotate the final map product so that it is situated straight up and down on the page

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:
0.000

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:
nominal

5.1.2.1. ATTRIBUTE LABEL:

PAGESIZE

5.1.2.2. ATTRIBUTE DEFINITION:

PAGESIZE contains the value of the width and height of the map in the final map product

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

31.5,38

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

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5.1. DETAILED DESCRIPTION: INVERT

The data layer INVERT contains polygons representing Razor clam beds.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
GT-Polygons	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the POLY_LUT lookup table. ID is a concatenation of atlas number (57), element number (7), and record number. ID values of zero are holes in polygons and do not contain information.

The following INVERT species are found in the atlas:

SPECIES ID	NAME
28	Pacific razor clam

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

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5.1. DETAILED DESCRIPTION: MGT

The data layer MGT contains the managed area polygons.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
GT-Polygons	TYPE	character
	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

TYPE

5.1.2.2. ATTRIBUTE DEFINITION:

Identifies polygons with a socio-economic, or human-use, feature. This attribute allows direct access to the type of feature instead of linking to the more detailed SOC_DAT table. Where there are overlapping areas, a precedence was used (where national wildlife refuges took precedence over parks) to identify the type of feature. However, all data are listed in SOC_DAT

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
CO	Community
MA	Management Area
NP	National Park
P	State/Regional Park
WR	Wildlife Refuge

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the SOC_LUT table and from there to the SOC_DAT data table. ID is a concatenation of atlas number (57), element number (11), and record number

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1. DETAILED DESCRIPTION: MIGRATE

The data layer MIGRATE contains arcs representing migration routes for gray whales.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Complete Chains	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the ARC_LUT lookup table. ID is a concatenation of atlas number (57), element number (4), and record number

The following M_MAMMAL species are found in the MIGRATE data layer:

SPECIES ID	NAME
26	Gray whale

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

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5.1. DETAILED DESCRIPTION: M_MAMMAL

The data layer M_MAMMAL contains polygons representing concentration areas for harbor seals and sea otters.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
GT-Polygons	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the POLY_LUT table. ID is a concatenation of atlas number (57), element number (4), and record number. ID values of zero are holes in polygons and do not contain information

The following M_MAMMAL species are found in the Georgia ESI atlas:

SPECIES ID	NAME
2	Harbor seal
7	Sea otter

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

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5.1. DETAILED DESCRIPTION: M_MAMPT

The data layer M_MAMPT contains points representing concentration areas for sea lions.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Entity Points	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the PNTS_LUT lookup table. ID is a concatenation of atlas number (57), element number (4), and record number

The following M_MAMMAL species are found in the M_MAMPT data layer:

SPECIES ID	NAME
1	Northern (stellar) sea lion

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

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5.1. DETAILED DESCRIPTION: NESTS

The data layer NESTS contains entity points representing bald eagle nesting sites and seabird colony sites.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Entity Points	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the PNTS_LUT lookup table. ID is a concatenation of atlas number (57), element number (5), and record number.

The following species are found in the NESTS coverage:

SPECIES ID	NAME
8	Double-crested cormorant
10	Pelagic cormorant
36	Glaucous-winged gull
41	Mew gull
46	Common murre
47	Pigeon guillemot
48	Marbled murrelet
49	Cassin's auklet
50	Rhinoceros auklet
51	Tufted puffin
68	Black oystercatcher
76	Bald eagle
79	Cormorant
80	Arctic tern
81	Horned puffin
84	Parakeet auklet
96	Leach's storm-petrel
99	Red-faced cormorant
100	Black-legged kittiwake
101	Aleutian tern
102	Fork-tailed storm-petrel
103	Common eider

SPECIES ID	NAME
104	Murre
105	Thick-billed murre
106	Ancient murrelet
111	Least auklet
129	Northern fulmar
1008	Terns

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:

nominal

5.1. DETAILED DESCRIPTION: PNTS_LUT

Lookup table to link NESTS and M_MAMPT to the BIORES data table.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	RARNUM	integer
	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:
RARNUM

5.1.2.2. ATTRIBUTE DEFINITION:
An identifier that links to the BIORES lookup table. The values range from 1-406 and there can be multiple values of RARNUM for each unique ID value

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
ID

5.1.2.2. ATTRIBUTE DEFINITION:
An identifier that links to the NESTS and M_MAMPT coverages

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

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5.1. DETAILED DESCRIPTION: POLY_LUT

Lookup table to link biology polygon data layers to the BIORES data table.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	RARNUM	integer
	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:
RARNUM

5.1.2.2. ATTRIBUTE DEFINITION:
An identifier that links to the BIORES lookup table. The values range from 376-410 and there can be multiple values of RARNUM for each unique ID value

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
ID

5.1.2.2. ATTRIBUTE DEFINITION:
An identifier that links to the BIRDS, FISH, INVERT, and M_MAMMAL biology data layers

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

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5.1. DETAILED DESCRIPTION: SEASONAL

The data table SEASONAL specifies the month when each species is present.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	ELEMENT	character
	SPECIES_ID	integer
	SEASON_ID	integer
	JAN	character
	FEB	character
	MAR	character
	APR	character
	MAY	character
	JUN	character
	JUL	character
	AUG	character
	SEP	character
	OCT	character
	NOV	character
	DEC	character
	EL_SPE_SEA	character

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ELEMENT

5.1.2.2. ATTRIBUTE DEFINITION:

Major categories of biological data

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
BIRD	Birds
FISH	Fish
INVERT	Invertebrates
M_MAMMAL	Marine Mammals

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
SPECIES_ID

5.1.2.2. ATTRIBUTE DEFINITION:
Numeric identifier for each species and is unique within each element and refers to a nationwide ESI species list maintained at RPI and NOAA

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
SEASON_ID

5.1.2.2. ATTRIBUTE DEFINITION:
Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location. There can be one seasonality record per species, or the same species can have different monthly presence or breeding activities at different sites. When this occurs, a new record with a different SEASON_ID is referenced

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:
JAN

5.1.2.2. ATTRIBUTE DEFINITION:
Present in January

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:
FEB

5.1.2.2. ATTRIBUTE DEFINITION:
Present in February

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:
MAR

5.1.2.2. ATTRIBUTE DEFINITION:
Present in March

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:
APR

5.1.2.2. ATTRIBUTE DEFINITION:
Present in April

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	**5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:**
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

MAY

5.1.2.2. ATTRIBUTE DEFINITION:

Present in May

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	**5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:**
X	Present

DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

JUN

5.1.2.2. ATTRIBUTE DEFINITION:

Present in June

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

JUL

5.1.2.2. ATTRIBUTE DEFINITION:

Present in July

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

AUG

5.1.2.2. ATTRIBUTE DEFINITION:

Present in August

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

SEP

5.1.2.2. ATTRIBUTE DEFINITION:

Present in September

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

OCT

5.1.2.2. ATTRIBUTE DEFINITION:

Present in October

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

NOV

5.1.2.2. ATTRIBUTE DEFINITION:

Present in November

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

DEC

5.1.2.2. ATTRIBUTE DEFINITION:

Present in December

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
X	Present

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

EL_SPE_SEA

5.1.2.2. ATTRIBUTE DEFINITION:

Concatenation of the first character of the ELEMENT, SPECIES_ID, and SEASON

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

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5.1. DETAILED DESCRIPTION: SOC_DAT

The data table SOC_DAT contains the human-use attributes and links to the data layers MGT and SOCECON using the SOC_LUT lookup table.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	HUNUM	integer
	TYPE	character
	NAME	character
	CONTACT	character
	PHONE	character
	G_SOURCE	integer
	A_SOURCE	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

HUNUM

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the SOC_LUT lookup table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique link

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:

TYPE

5.1.2.2. ATTRIBUTE DEFINITION:

Identifies the feature type

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
AIRPORT	Airport
AQUACULTURE	Aquaculture Site
COMMUNITY	Community
MARINA	Marina
NATIONAL PARK	National Park
PARK	Park
WILDLIFE REFUGE	Wildlife Refuge

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

NAME

5.1.2.2. ATTRIBUTE DEFINITION:

The feature name

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

Afognak Island State Park
Akhiok
Akhiok Landing Strip
Alaska Maritime National Wildlife Refuge
Alaska Peninsula National Wildlife Refuge
Becharof National Wildlife Refuge
Buskin River State Recreation Area
Chiniak
Karluk
Karluk Landing Strip
Katmai National Park

ENUMERATED DOMAIN VALUE:

Kodiak
Kodiak Airport
Kodiak City Float
Kodiak National Wildlife Refuge
Kodiak St. Herman's Boat Harbor
Kodiak St. Paul Boat Harbor
Kitoi Bay Hatchery
Larsen Bay
Larsen Bay Landing Strip
Marmot Island Special Use Area
McNeil River State Game Sanctuary
Old Harbor
Old Harbor Dock
Old Harbor Float
Old Harbor Landing Strip
Ouzinkie
Ouzinkie Landing Strip
Pasaqshak State Recreation Site
Port Lion Small Boat Harbor
Port Lions
Pillar Bay Hatchery
Shuyak State Park
Tugidak Island Critical Habitat Area
Woody Island State Recreation Site

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

CONTACT

5.1.2.2. ATTRIBUTE DEFINITION:

Contact person

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
PHONE

5.1.2.2. ATTRIBUTE DEFINITION:
Telephone number

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
G_SOURCE

5.1.2.2. ATTRIBUTE DEFINITION:
Geographic source identifier that links to the SOURCES data table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	**5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:**
1-N	Unique link

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
A_SOURCE

5.1.2.2. ATTRIBUTE DEFINITION:
Attribute source identifier that links to the SOURCES data table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique link

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

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5.1. DETAILED DESCRIPTION: SOC_LUT

Lookup table to link SOC_DAT to SOCECON and MGT data layers.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	HUNUM	integer
	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:
HUNUM

5.1.2.2. ATTRIBUTE DEFINITION:
A unique identifier that links to the SOC_DAT data table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
ID

5.1.2.2. ATTRIBUTE DEFINITION:
A unique identifier that links to the SOCECON or MGT data layers. ID is a concatenation of the atlas number (53), element number (SOCECON = 10 and MGT = 11), and record number

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

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5.1. DETAILED DESCRIPTION: SOCECON

The data layer SOCECON contains the entity points and complete chains for the human-use data.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Complete Chains	TYPE	character
Entity Points	TYPE	character
	ID	integer

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

TYPE

5.1.2.2. ATTRIBUTE DEFINITION:

Identifies a line or point with a socio-economic, or human-use, feature. This attribute allows direct access to the type of feature instead of linking to the more detailed SOC_DAT table

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
A	Airport (Point)
AQ	Aquaculture (Point)
CB	Municipal Boundary (Chain)
CO	Community (Point)
HS	Historical Site (Point)
M	Marina (Point)
P	State/Regional Park (Point)
R	Road
SN	Set-Net Site (Chain)

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:

ID

5.1.2.2. ATTRIBUTE DEFINITION:

A unique identifier that links to the SOC_LUT table. ID is a concatenation of atlas number (57), element number (10), and record number

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1. DETAILED DESCRIPTION: SOURCES

The data table SOURCES contains the primary sources used to create the ESI atlas.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	SOURCE_ID	integer
	ORIGINATOR	character
	DATE_PUB	integer
	TITLE	character
	DATA_FORMAT	character
	PUBLICATION	character
	SCALE	character
	TIME_PERIOD	character

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

SOURCE_ID

5.1.2.2. ATTRIBUTE DEFINITION:

Source identifier that links to G_SOURCE, S_SOURCE (IN BIORES), and A_SOURCE (IN SOC_DAT)

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
ORIGINATOR

5.1.2.2. ATTRIBUTE DEFINITION:
Author of the data set

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
DATE_PUB

5.1.2.2. ATTRIBUTE DEFINITION:
Date of data collection or publication

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	**5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:**
1-N	The first two integers are the month and the last four are the year. If month is unknown, only the four-digit year is entered

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
TITLE

5.1.2.2. ATTRIBUTE DEFINITION:
Title of the source data set or document

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Originator who provided data, or RPI for personal interviews with resource experts

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

DATA_FORMAT

5.1.2.2. ATTRIBUTE DEFINITION:

The format of the source data set

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

Digital Arcs
Digital Points
Digital Points and Polygons
Digital Polygons
Expert Knowledge
Hardcopy Maps

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

PUBLICATION

5.1.2.2. ATTRIBUTE DEFINITION:

Additional citation information

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

SCALE

5.1.2.2. ATTRIBUTE DEFINITION:

Source scale denominator

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:ordinal

5.1.2.1. ATTRIBUTE LABEL:
TIME_PERIOD

5.1.2.2. ATTRIBUTE DEFINITION:
Date(s) of data collection

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1. DETAILED DESCRIPTION: SPECIES

The data table SPECIES identifies all species used in the ESI atlas.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	SPECIES_ID	integer
	NAME	character
	GEN_SPEC	character
	ELEMENT	character
	SUBELEMENT	character
	NHP	character
	DATE_PUB	integer
	EL_SPE	character

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

SPECIES_ID

5.1.2.2. ATTRIBUTE DEFINITION:

Numeric identifier for each species and is unique within each element and refers to a nationwide ESI species list maintained at RPI and NOAA

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:

NAME

5.1.2.2. ATTRIBUTE DEFINITION:

Species common name

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

Aleutian tern
Anadromous fish
Ancient murrelet
Arctic tern
Bald eagle
Black oystercatcher
Black-legged kittiwake
Cassin's auklet
Common eider
Common murre
Cormorant
Double-crested cormorant
Ducks
Fork-tailed storm-petrel
Geese
Glaucous-winged gull
Gray whale
Harbor seal
Horned puffin
Leach's storm-petrel
Least auklet
Marbled murrelet
Mew gull
Murre
Northern (Steller) sea lion
Northern fulmar
Pacific herring
Pacific razor clam
Parakeet auklet
Pelagic cormorant
Pigeon guillemot
Red-faced cormorant

ENUMERATED DOMAIN VALUE:

Rhinoceros auklet
Sea otter
Terns
Thick-billed murre
Tufted puffin
Waterfowl

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

GEN_SPEC

5.1.2.2. ATTRIBUTE DEFINITION:

Species scientific name

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

Aethia psittacula
Aethia pusilla
Brachyramphus marmoratus
Cepphus columba
Cerorhinca monocerata
Clupea pallasi
Enhydra lutris
Eschrichtius robustus
Eumetopias jubatus
Fratercula cirrhata
Fratercula corniculata
Fulmarus glacialis
Haematopus bachmani
Haliaeetus leucocephalus
Larus canus
Larus glaucescens
Oceanodroma furcata

ENUMERATED DOMAIN VALUE:

Oceanodroma leucorhoa
Phalacrocorax auritus
Phalacrocorax pelagicus
Phalacrocorax sp.
Phalacrocorax urile
Phoca vitulina
Ptychoramphus aleuticus
Rissa tridactyla
Siliqua patula
Somateria mollissima
Sterna aleutica
Sterna paradisaea
Synthliboramphus antiquus
Uria aalge
Uria lomvia
Uria sp.

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
ELEMENT

5.1.2.2. ATTRIBUTE DEFINITION:
Biological element

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
BIRD	Birds
FISH	Fish
INVERT	Invertebrates
M_MAMMAL	Marine Mammals

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

SUBELEMENT

5.1.2.2. ATTRIBUTE DEFINITION:

Species subgroup

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

alcid
anadromous
bivalve
diving
gull_tern
kelp_sp
pelagic
pinniped
raptor
sea_otter
shorebird
waterfowl
whale

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

NHP

5.1.2.2. ATTRIBUTE DEFINITION:

Natural Heritage Program global ranking

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

NHP

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
G3	Vulnerable
G4	Apparently Secure
G5	Secure
G5?	Secure (inexact rank)

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
NHP

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:ordered

5.1.2.1. ATTRIBUTE LABEL:
DATE_PUB

5.1.2.2. ATTRIBUTE DEFINITION:
Date of NHP listing

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
0	Not NHP listed in this project
71996	Date of NHP list
31997	

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
EL_SPE

5.1.2.2. ATTRIBUTE DEFINITION:
Concatenation of the first character of the ELEMENT and SPECIES_ID

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1-N	Unique number

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

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5.1. DETAILED DESCRIPTION: STATUS

The data table STATUS identifies the species that are listed as either threatened or endangered on state or federal lists.

5.1.1. ENTITY TYPES:

5.1.1.1. ENTITY TYPE LABEL:	5.1.1.2. ENTITY TYPE DEFINITION:	
Attributes	ELEMENT	character
	SPECIES_ID	integer
	STATE	character
	S_F	character
	T_E	character
	DATE_PUB	integer
	EL_SPE	character

5.1.2. ATTRIBUTES:

5.1.2.1. ATTRIBUTE LABEL:

ELEMENT

5.1.2.2. ATTRIBUTE DEFINITION:

Major categories of biological data

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
M_MAMMAL	Marine Mammals

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT: nominal

5.1.2.1. ATTRIBUTE LABEL:
SPECIES_ID

5.1.2.2. ATTRIBUTE DEFINITION:
Numeric identifier for each species and is unique within each element and refers to a nationwide ESI species list maintained at RPI and NOAA

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
1	Species ID = 1

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:
STATE

5.1.2.2. ATTRIBUTE DEFINITION:
Two-letter state abbreviation

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
AK	Alaska

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:
Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

S_F

5.1.2.2. ATTRIBUTE DEFINITION:

State and Federal status

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
F	Federally listed

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

USFWS

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

T_E

5.1.2.2. ATTRIBUTE DEFINITION:

Threatened and endangered status

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:
E	Federal endangered

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

USFWS

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

DATE_PUB

5.1.2.2. ATTRIBUTE DEFINITION:

Date of threatened or endangered status

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:

031997

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

5.1.2.1. ATTRIBUTE LABEL:

EL_SPE

5.1.2.2. ATTRIBUTE DEFINITION:

Concatenation of the first character of the ELEMENT and SPECIES_ID and links to BIORES, SPECIES, and SEASONAL databases

5.1.2.3. ATTRIBUTE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.4.1.1. ENUMERATED DOMAIN VALUE:	**5.1.2.4.1.2. ENUMERATED DOMAIN VALUE DEFINITION:**
M_00001	Marine Mammal, Specis ID = 1

5.1.2.4.1.3. ENUMERATED DOMAIN VALUE DEFINITION SOURCE:

Research Planning, Inc.

5.1.2.5. ATTRIBUTE UNITS OF MEASUREMENT:nominal

6.0. DISTRIBUTION INFORMATION

6.1. DISTRIBUTOR

6.1.1. CONTACT PERSON PRIMARY

6.1.1.1. CONTACT PERSON:

John Kaperick

6.1.1.2. CONTACT ORGANIZATION:

NOAA

6.1.4. CONTACT ADDRESS

6.1.4.1. ADDRESS TYPE:

Physical Address

6.1.4.2. ADDRESS:

7600 Sand Point Way N.E., Bin C15700

6.1.4.3. CITY:

Seattle

6.1.4.4. STATE OR PROVINCE:

W A

6.1.4.5. POSTAL CODE:

98115

6.1.5. CONTACT VOICE TELEPHONE:

(206) 526-6400

6.1.7. CONTACT FACSIMILE TELEPHONE:

(206) 526-6329

6.2. RESOURCE DESCRIPTION:

ESI Summary Maps for Kodiak Island and Shelikof Strait, Alaska

6.3. DISTRIBUTION LIABILITY:

Although this data has been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

6.5. CUSTOM ORDER PROCESS

Contact NOAA for distribution options (see 6.1.1.).

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7.0. METADATA REFERENCE INFORMATION

7.1. METADATA DATE:
19980120

7.2. METADATA REVIEW DATE:
19980120

7.4. METADATA CONTACT

7.4.1. CONTACT PERSON PRIMARY

7.4.1.1. CONTACT PERSON:
Jill Petersen

7.4.1.2. CONTACT ORGANIZATION:
NOAA HMRAD

7.4.3. CONTACT POSITION:
GIS Manager

7.4.4. CONTACT ADDRESS

7.4.4.1. ADDRESS TYPE:
Physical Address

7.4.4.2. ADDRESS:
7600 Sand Point Way, N.E., Bin C15700

7.4.4.3. CITY:
Seattle

7.4.4.4. STATE OR PROVINCE:
Washington

7.4.4.5. POSTAL CODE:
98115

7.4.5. CONTACT VOICE TELEPHONE:
(206) 526-6944

7.4.7. CONTACT FACSIMILE TELEPHONE:
(206) 526-6329

7.4.8. CONTACT ELECTRONIC MAIL ADDRESS:
jill_petersen@hazmat.noaa.gov.us

7.5. METADATA STANDARD NAME:
Content Standards for Digital Geospatial Metadata

7.6. METADATA STANDARD VERSION:
19940608

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