GEOGRAPHIC INFORMATION SYSTEM DATABASE DIRECTORY

ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS RESOURCE ANALYSIS SECTION

3601 'C' Street, P.O. Box 7-028 ANCHORAGE, ALASKA 99510

> Anchorage - (907)561-2020 Fairbanks - (907)474-7147

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> > > Ву

Merlin J. Wibbenmeyer

Graphics Prepared By:

Douglas Jones George Dickison

Other Major Reviewers and Contributors:

M. Scott Christy Jean Tam

This report has not been read by the Director, has not received official DGGS publication status, and should not be quoted as such.

This directory has been prepared in accordance with Alaska State Statutes 38.04.060 and 41.08.020 providing for the collection, analysis, inventory and distribution of data and information about the natural resources of the State of Alaska.

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INTRODUCTION

Natural Resource Databases:

The Department of Natural Resources has natural resource data, in automated format, covering a wide variety of topics including vegetation, soils, engineering geology, water bodies, geology, and topography for much of the state.

The Resource Analysis Section of the Division of Geological and Geophysical Surveys currently manages this resource data base. In addition to information management, sophisticated analysis can be performed.

Over \$1 million worth of computer hardware and software is available to conduct analyses. These facilities are simply an extensive "bag of tools", which when used in combination with data and staff expertise, provide customized solutions to resource questions.

At the heart of the section's facilities is the geographic information system.

A geographic information system is a complex data analysis system that manipulates and analyzes geographically referenced, or mapped, data. For instance, the data can be referenced to its position via latitude and longitude; meridian, township, range, and section; state plane coordinate system; or several other positioning systems.

This system is the <u>only</u> functional geographic information system in state government, and has been for 8 years. During this time, the state's natural resource data base has continued to expand. The 'Summary Map of Database Coverage', Map 1 on page 14, shows where resource data has been collected and automated throughout the state. While still not providing comprehensive statewide coverage, the automated information available from other agencies, on non-state-owned land, adds substantially to the overall information base.

Networks with other Systems:

While most of the analyses are performed on data that the Section manages, databases stored on other computer systems are also used. Within the Department of Natural Resources the geographic information system is networked to the Land Administration System and the Automated Drafting System. The geographic information system has also been actively networked with the following agencies for the last 8 years:

U.S. Forest Service

U.S. Bureau of Land Management

U.S. Geological Survey

U.S. Geological Survey-EROS Field Office

U.S. Soil Conservation Service

U.S. Fish & Wildlife Service

Alaska Department of Health & Social Services

Alaska Department of Fish & Game

Alaska Department of Administration-Mainframe Computer Network

Municipality of Anchorage

North Slope Borough

Using DNR's own information and that which is available through these networks, many customized information products can be provided.

What Information and Analysis Can Be Provide?:

Customized maps, graphics, and reports are the most common way of presenting analytical results, since user friendly products are emphasized. The types of analyses capabilities include:

Analyzing development alternatives. This can be a simple analysis based on only a few variables, or a complex analysis based on many variables. Examples include evaluating road locations relative to gravel supplies, identifying sand and gravel potential over large areas, or defining alternate access corridors.

Analyzing the potential for land settlement, timber harvest, mineral extraction, or other activities. This involves combining multiple layers of information and evaluating the results through an interpretive model. For example, the settlement potential on 3 million acres in the Copper River planning area was determined based on engineering geology, slope, elevation, land cover, and land ownership.

Modeling environmental processes and manmade activities. They can, for example, model fire protection logistics and alternatives, and the effect of protective structures such as breakwaters on wave transmission in small boat harbors.

Preparing customized graphics and reports that effectively display the results of analyses. This type of analyses includes compiling recreational visitor statistics, and summarizing forest inventories and mining claim activities. On occasion, graphics are produced for a variety of tasks, such as, publication graphics of budget analyses, or organizational staffing charts.

Examples of Customized Products:

The aforementioned products have been described in a general sense. The next few examples are specific projects that have been either completed or are currently being conducted. The major projects found in List 1 are a partial listing of the jobs completed over the past 8 years.

Tanana Valley State Forest Potential Timber Harvest (Figure 2)--Timber type and size class were combined with accessibility to provide a primary screening of potential harvest locations. These results were transmitted to the U.S. Forest Service in Ft. Collins, Colorado, to use a computer program to determine optimal harvest activities, such as scheduling quantities and locations.

Chuitna Area Development (Figure 3)--Phase I of this project, being performed in cooperation with the Kenai Peninsula Borough, is to identify potential sand and gravel sources that exist in the area around the Beluga Coal Field. These were determined from an analysis of digitized surficial

geology. Ownership, status and infrastructure will be incorporated to produce a map of accessible potential sand and gravel sites.

Ownership and Mining Claim Overlay (Figure 4)— Mineral claims were mapped on state-owned land relative to mineral potential. This demonstrates the ability to network DNR's Land Administration System (LAS) data with the geographic information system's natural resource data. Any data from LAS can be extracted by case type, case status, or case number.

Kenai Special Waste Site (Figure 5)--The Resource Analysis Section, in cooperation with a Kenai Peninsula Borough consultant, analyzed the geotechnical and environmental setting, slope, water bodies, proximity to roads, and ownership to map suitability for Special Waste sites within the borough. The accompanying map is only a part of the land area analyzed.

International Trade Database Network (Figure 6)--The purpose of the proposed International Trade Database Network is to provide computer access to existing information to local and foreign businesses. The information prepared for this database will be applicable to uses similar to the Chuitna Area Development or the Kenai Special Waste Site examples.

FIGURE 1 - LIST OF DATA APPLICATIONS AND ANALYSIS PROJECTS

The following is a list of major projects which the Resource Analysis Section has completed work on in the past 8 years. In addition to these projects, we provided hundreds of customized analyses to answer ad hoc resource management questions.

Resource Development Capability:

Beluga Coal Development
Tanana Valley State Forest Management Plan
Fish Creek Agricultural Management Plan
Delta II Agriculture Project

Project Siting Studies:

Knik Arm Crossing Study
Kenai Borough Special Waste Disposal
Siting Study
Willow Capital Site Plan
Tokositna Lodge Study
School Siting for The Matanuska Susitna

Borough
Transportation Corridor Siting for Susitna
Basin

Resource Management:

Susitna Area Plan Tanana Area Plan Copper River Area Plan Kuskokwim Area Plan Northwest Area Plan Hatcher Pass Management Plan Matanuaka Valley Моове Range Management Plan Deep Creek Management Plan Networking Land Administration Records Bristol Bay Cooperative Management Plan DNR FY80 Statewide Plan DNR FY81 Statewide Plan 1981 Native Allotments

Upland Navigability Study FY81

Resource Inventories:

Lands Unsuitable For Mining
Willow Subbasin River Basin Study
Susitna River Basin Study
Copper River Basin Study
Tanana River Basin Study
Cooperative Soil Surveys
Tanana Valley State Forest Inventory
Yakataga Forest Inventory

Haines State Forest Inventory

Developed Regional Natural Resource

Inventories

Resource Analysis:

Topographic

Anchorage Hillside Groundwater Study Identified Lands for State Selections Susitna Hydro Game Study Historic Forest Fire Occurrence Analysis Forest Fire Behavior Analysis Statistical Analysis for lio2 Survey Projecta Statewide Water Well Tracking System Analytical Support for Coastal Marine Boundary Program Graphic Support for Oil & Gas Lease Sales

Sites
Assess Natural Resource Values On Mental
Health Lands

of

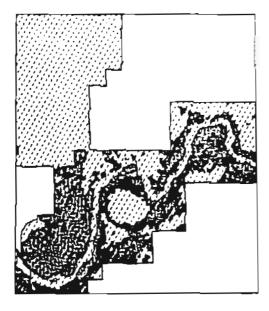
Archaeological

Analysis

State Recreational Park Site Interpretations

FIGURE 2 - TANANA VALLEY STATE FOREST PUBLIC REVIEW DRAFT: PROPOSED TIMBER HARVEST

PAIRBANTS D-6 QUADRANCLE



The laneau Valley Sigle Forest canidles 1.5 million acres in law management oreg stretching from Kentlishna to Tob. The resource date were obtained from source maps at a scale of 1:31,649 (2 inches to a mile). In order to distribute suitable herrest areas, a composir model which cambined accessibility subunits (arges accessible pill-sessen er winter only) with vigetalien types (species and size class) was opplied. The results of this analysis were entered into FORPLAN, a US forms Service optimization program which scheduled the hervest. The origin of the program is displayed in this map of proposed hervest areas.

LEGEMO :

- TO BE OFFERED FOR TIMBER SALES
- IN INC LONG TERM (200 YEARS)
- MOT COMONICALLY SUITABLE FOR

SCALE 1 : 250,004

RESOURCE ANALYSIS SECTION DIVISION OF WHING AND GEOLOGY OFFARINGHI OF MAIURAL RESOURCES FEBRUARY, 1987



FIGURE 3 - CHUITNA AREA DEVELOPMENT PLAN: SAND & GRAVEL POTENTIAL

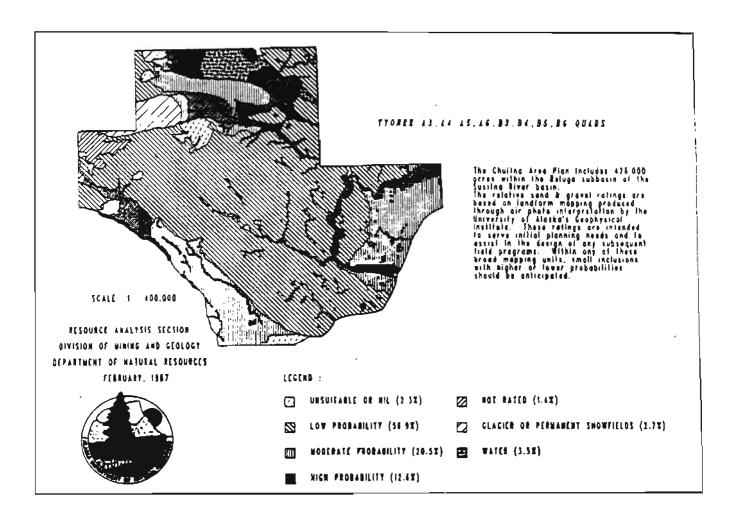


FIGURE 4 - MINERAL POTENTIAL & MINING CLAIM ACTIVITY ON STATE LANDS

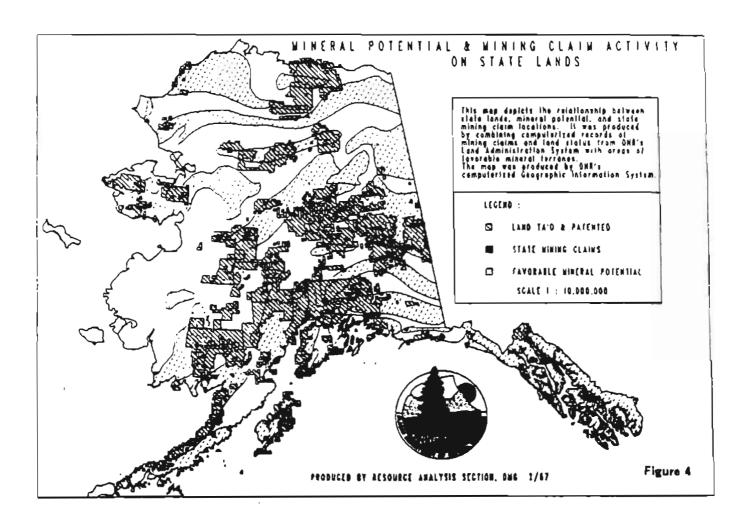


FIGURE 5 - KENAI WASTE DISPOSAL SITE SELECTION STUDY

FINAL MAP SHOWING MOST SUITABLE SITES

This map displays the results of a computer model run on the Kenal Quadrangle detabase to locate suitable areas for a special waste disposal site. Shown here is the area sufrayabling the lown of langle and bordering Cook Inlat.

the model combined a number of criteria including:

- . Geolochateal & environmental constraints
- * Limiting feeters such as aleps, water bedtes, glaciers
- * Proximity to roads
- · Land ownerthip

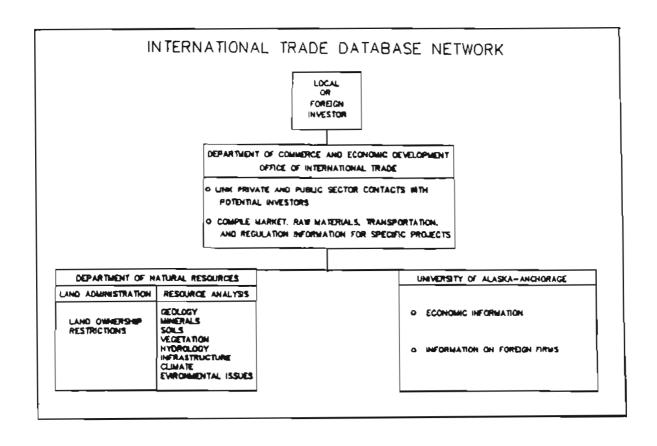


SCALE 1 - 440,808 PRODUCED BY RESOURCE ANALYSIS SECTION, ONC 2/87



- MALER MICHTA ZASTED
- B MODERATELY TO POORLY SUITED
- MICHLY SUISES
- M POORLY SUILE
- BOOCFATELY TO RIGHLY SUITED D VERY POORLY SUITED
- MODERATELY SUITED
- UMSUITABLE
- Figure 5

FIGURE 6 - INTERNATIONAL TRADE DATABASE NETWORK



This Directory:

This Geographic Information System Database Directory has been prepared to describe the data and information currently available, to increase the awareness of its availability, and to increase utilization of the information. This version of the directory has been summarized to keep it at a manageable size. If needed an automated version is also being developed and will eventually be available for micro-computer access on floppy disk in DBASE III format.

The Directory is laid out in three parts. Part I is an introduction and briefly describes the available database and automated geographic information system; it also contains examples of applications for which the information has been used. Part II describes how to use the directory to determine what information, or if the information you desire, is available; it also contains summary maps and charts to quickly determine if information is available.

Part III contains the descriptions of the individual data bases. It is divided into four sections: 'Local', 'Regional', 'Statewide', and 'Other'. The data found in these four sections are generally defined as follows:

- a. Statewide: Coverage is statewide and the information is very general. For example, broad questions such as, What are the general soil characteristics or, swamp versus non-swamp, of land owned by the state?, could be examined with this type of data.
- b. Regional: Large geographic areas (5 50 million acres) with more specific information than generalized Statewide coverage, usually compiled at a 1:250,000 or smaller less detailed scale than 'Local' coverage. For example, potential road corridors for a region could be identified with this information as a first cut evaluation.
- c. Local: Localized geographic areas (40,000 to 5,000,000 acres) with more specific information than Regional coverage, usually compiled at 1:63,360 or larger more detailed scale than 'Regional' coverage. For example, specific sites for land disposals could be determined with this level of information.
- d. Other: These databases are ones which we have access through other agencies, usually areas not owned or managed by state agencies.

Each database is described in terms of a set of standard characteristics such as scale, resolution, source agency and so forth. In addition, each database is accompanied with a map illustrating the exact location of the database: therefore you can visually check the area of coverage by database.

For more information contact the Resource Analysis Section, Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys, P.O. Box 107028, Anchorage, Alaska 99510-7028, located at 3601 'C' Street, in the Frontier Building.

HOW TO USE THIS GUIDE

Basic Procedure:

- f. Select the level of information you want by reviewing the 'Summary of Database Coverage' in CHART I. If 'Statewide' or 'Other' levels are chosen, turn to those sections of the directory, pages 85 and 91 respectively. If 'Regional' or 'Local' levels are chosen, turn to the 'Summary of Local Database Coverage' (CHART 2, page 17) or 'Summary of Regional Database Coverage' (CHART 3, page 19).
- 2. Review the area headings found at the top of the 'Summary' chart you selected in Step 1; sclect the geographical location name which corresponds with the area you are most interested in. You may also want to refer to the database coverage locations map facing each summary to verify which database boundary covers your area of interest.
- 3. Having selected a database by name, turn to the 'Table of Contents' and get the page number for your selection. Check the location map that accompanies each database description to re-verify that you are looking at the database that applies to your area of interest.
- 4. Review the characteristics and the data topics listed for the database you selected to see if your information is available. If it is not, check with the Resource Analysis Section to see if any additional information has been acquired. If it is available, contact the Section to set a time to review, use or obtain a specific version of the information. Detailed documentation is available that describes sources, methods used, and contents for each database.
- 5. Contact the Resource Analysis Section (Jean Tam) through the Department of Natural Resources central phone number 561-2020.

Example Search:

Someone looking for information about vegetation would proceed as follows:

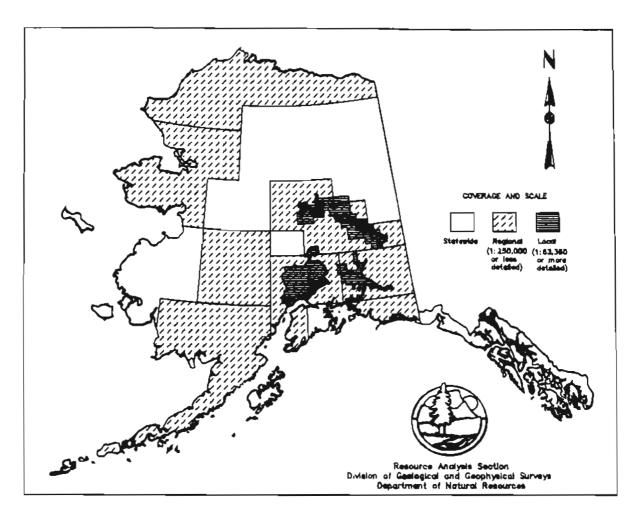
- 1. Go to the 'Summary of Database Coverage' and look for vegetation on the
- 2. Reading across the chart, he would learn that there is information available, and that it is available 'Regional(ly)', 'Local(ly)', and from 'Other' agencies or sources. Next select a level of information based on the descriptions of those types of coverage as described earlier.

3. Next:

a. If either 'Statewide' or 'Other' levels of coverage are selected turn to the 'Table of Contents', get the page number for the level selected and go to that section in the directory. b. If 'Regional' coverage is selected, turn to the 'Summary of Regional Database Coverage', page 19, and (reading across the top of the chart) select the region which appears to correspond with the location in the state that you are interested in. To identify the boundaries of each region, review the 'Map of Database Coverage' on the facing page, page 18.

Continuing with our example, vegetation is available for all regions listed. Selecting, for example, the Bristol Bay region, one would turn to the 'Table of Contents' and locate the page number for the Bristol Bay database, page 51, that comes under the heading 'Regional Coverage' and the subtopic heading of 'Bristol Bay'. Go to that page number and section in the directory.

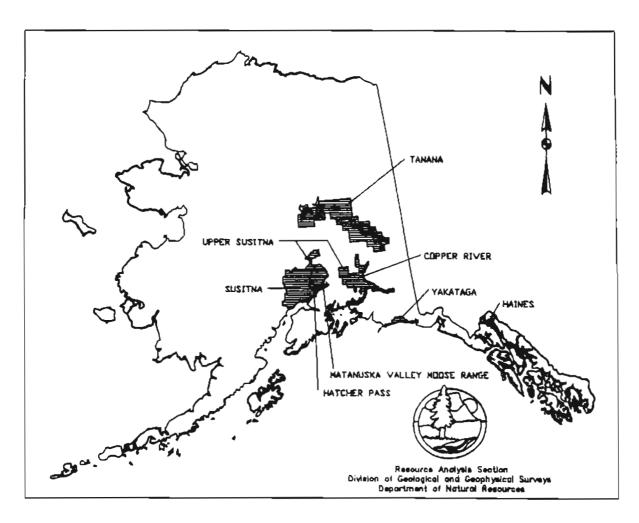
- c. If 'Local' coverage is selected, turn to the 'Summary of Local Database Coverage', page 17, and (reading across the top of the chart) select the 'Local' area which appears to correspond with the location in the state that you are interested in. To identify the boundaries of each 'Local' area, review the 'Map of Database Coverage' on the facing page, page 16.
- 4. Once you have selected a particular level of coverage, a specific database, and turned to it in the directory, review the accompanying map that shows more specific database locations.
- 5. Review the description of the characteristics of the database. If they do not meet your requirements for detail, and you have not selected 'Local' coverage, go to the 'Local' section of the 'Table of Contents' and get the page number of the 'Local' area which corresponds to your area of interest. Again review the map facing the 'Summary of Local Database Coverage' if you are not sure of the location of your area of interest.
- 6. Having arrived at a database that appears to have the characteristics you are interested in, review the data topics list to see if your interest, in this example 'vegetation', is available. Remember the summary charts are just summaries, they do not necessarily depict the current status of available information.
- 7. Call or visit the Resource Analysis Section to determine if any new information is available which is not yet in the directory, and to set up a schedule for reviewing, using, or having information prepared for you.



MAP 1 - SUMMARY OF DATABASE COVERAGE

CHART 1-SUMMARY OF DATABASE COVERAGE

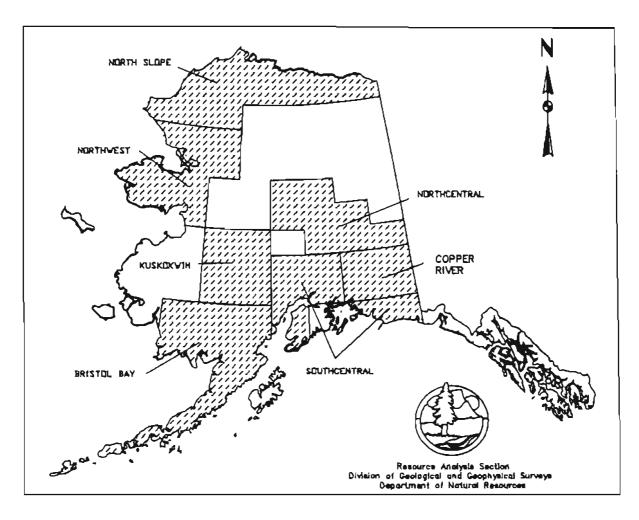
ASPECT		STATEWIDE	REGIONAL	AREA	OTHER
COAL	ASPECT	*	*		*
ELEVATION	BIBLIOGRAPHY		*	*	*
FISH AND GAME FLOOD ZONE GEOLOGIC CONSTRAINTS GEOLOGY, ENGINEERING GEOLOGY, GENERAL HISTORIC AND ARCHAEOLOGIC SITES HYDROLOGY INFRASTRUCTURE LAND RECORDS LAND STATUS LAND USE MINERAL POTENTIAL MINERAL POTENTIAL MINERALS OIL AND GAS PHYSIOGRAPHIC PROVINCE POLITICAL AND ADMINISTRATIVE UNITS RECREATION USE ROADS SLOPE SOIL SUBSISTENCE TOWNSHIP GRID * * * * * * * * * * * * * *	COAL		*	*	
FLOOD ZONE	ELEVATION	*	*	*	*
GEOLOGIC CONSTRAINTS GEOLOGY, ENGINEERING GEOLOGY, GENERAL HISTORIC AND ARCHAEOLOGIC SITES HYDROLOGY INFRASTRUCTURE LAND RECORDS LAND STATUS LAND USE MINERAL POTENTIAL MINERALS MODELS OIL AND GAS PHYSIOGRAPHIC PROVINCE POLITICAL AND ADMINISTRATIVE UNITS RECREATION USE ROADS SLOPE SUBSISTENCE TOWNSHIP GRID * * * * * * * * * * * * * * *	FISH AND GAME		*		*
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HYDROLOGY	GEOLOGY, GENERAL		*	*	
INFRASTRUCTURE	HISTORIC AND ARCHAEOLOGIC SITES		*		
LAND RECORDS	HYDROLOGY	*	*	*	*
LAND STATUS	INFRASTRUCTURE	*	*	*	*
LAND USE	LAND RECORDS	*	*	*	*
MINERAL POTENTIAL MINERALS * * * MODELS OIL AND GAS PHYSIOGRAPHIC PROVINCE POLITICAL AND ADMINISTRATIVE UNITS QUAD BOUNDARIES RECREATION USE ROADS * * * * * * * * * * * * * *	LAND STATUS	*	*	*	*
MINERALS	LAND USE		*	*	*
MODELS * * * * OIL AND GAS * * * * PHYSIOGRAPHIC PROVINCE * POLITICAL AND ADMINISTRATIVE UNITS * * * QUAD BOUNDARIES * RECREATION USE * * SLOPE * * * SUBSISTENCE * TOWNSHIP GRID * * * TRAILS * * *	MINERAL POTENTIAL		*	•	*
OIL AND GAS PHYSIOGRAPHIC PROVINCE POLITICAL AND ADMINISTRATIVE UNITS QUAD BOUNDARIES RECREATION USE ROADS * * * * SLOPE * * SUBSISTENCE TOWNSHIP GRID * * * * * * * * * * * * * *	MINERALS		*	*	*
PHYSIOGRAPHIC PROVINCE POLITICAL AND ADMINISTRATIVE UNITS * * * * QUAD BOUNDARIES RECREATION USE ROADS	MODELS		*	*	*
POLITICAL AND ADMINISTRATIVE UNITS * * * * QUAD BOUNDARIES *	OIL AND GAS		*	*	*
QUAD BOUNDARIES * RECREATION USE * ROADS * * * SLOPE * * * SOIL * * * SUBSISTENCE * * * TOWNSHIP GRID * * * TRAILS * * *	PHYSIOGRAPHIC PROVINCE		*		
RECREATION USE *	POLITICAL AND ADMINISTRATIVE UNITS	*	*	*	*
ROADS * <td>QUAD BOUNDARIES</td> <td>*</td> <td></td> <td></td> <td></td>	QUAD BOUNDARIES	*			
SLOPE * * * * SOIL * * * SUBSISTENCE * * * TOWNSHIP GRID * * * TRAILS * * *	RECREATION USE		*		
SOIL * * * SUBSISTENCE * * * TOWNSHIP GRID * * * * TRAILS * * * *	ROADS	*	*	*	*
SUBSISTENCE * TOWNSHIP GRID * * * TRAILS * * * *	SLOPE	*	*	*	*
TOWNSHIP GRID * * * TRAILS * * * *	SOIL	*	*	*	
TRAILS * * * *	SUBSISTENCE		*		
	TOWNSHIP GRID	*	*	*	
VEGETATION * * *	TRAILS	*	*	*	*
	VEGETATION		*	*	*



MAP 2 - LOCAL DATABASE COVERAGE

CHART 2-SUMMARY OF LOCAL DATABASE COVERAGE

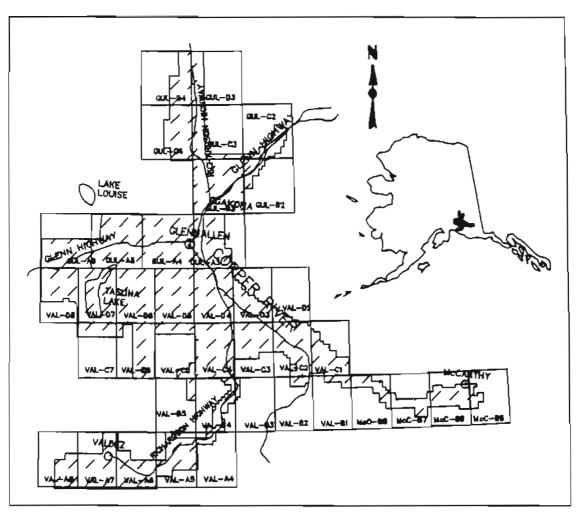
	C 0 P E	HAIN	H A T C	M A T A	S U S T	T A N A	UPPER	Y A K A
	R	S S	H	N U	Ň	N A		T A
	R.		R	S K A	A		S U	G A
ASPECT						_* _		
BIBLIOGRAPHY								*
COAL				*	*			
ELEVATION				Ů	*	*		*
FISH AND GAME					*			
FLOOD ZONE				*	*			
GEOLOGIC CONSTRAINTS			*	*	*			
GEOLOGY, ENGINEERING	*		1	*	*	*	*	
GEOLOGY, GENERAL					坤	*	*	
HISTORIC & ARCHAEOLOGIC SITES					*			
HYDROLOGY			*	*	*	*	*	
INFRASTRUCTURE				*	*	*		
LAND RECORDS		*		*	*		*	
LAND STATUS		*	*			*	*	\vdash
LAND USE			*		*		*	
MINERAL POTENTIAL				*				
MINERALS			<u> </u>		*	ļ.,	<u> </u>	
MODELS					*	*	*	
OIL AND GAS			<u> </u>	*		ļ		igwdown
PHYSIOGRAPHIC PROVINCE			<u> </u>		*			
POLICTICAL & ADMINISTRATIVE UNITS		*	*			ļ.,	1	
QUAD BOUNDARIES	*	*	*	*		*	*	*
RECREATION USE					<u> </u>		ļ	\bot
ROADS		<u> </u>	ļ	*	*	*	—	
SLOPE		ļ	<u> </u>	*	*	*	*	*
SOIL	*	*	*		*	*	├	*
SUBSISTENCE			 _ _ _		*	 	\downarrow	
TOWNSHIP GRID	*	*	*	*	*	*	*	*
TRAILS	*	ļ	*	*	*	4		1
VEGETATION	*	*	*	*	*	*	*	*



MAP 3 - REGIONAL DATABASE COVERAGE

CHART 3-SUMMARY OF REGIONAL DATABASE COVERAGE

	SRISTOL BAY	COPPER R.	E - E XOXUCX	202110271241	NORTH SLOPE	NORTH¥EST	SOUTHCENTRAL
ASPECT	*	*	*	*	*	*	*
BIBLIOGRAPHY	*	*	*	*	*	*	*
COAL	*	*	*	*	*	*	*
ELEVATION	*	*	*	*	*	*	*
FISH AND GAME	*	*	*	*	*	*	*
FLOOD ZONE	*	*	*	*	*	*	*
GEOLOGIC CONSTRAINTS	*	*	*	*	*	*	*
GEOLOGY, ENGINEERING	*	*	*	*	*	*	*
GEOLOGY, GENERAL	*	*	*	*	*	*	*
HISTORIC & ARCHAEOLOGIC SITES	*	*	*	*	*	*	*
HYDROLOGY	*	*	*	*	*	*	*
INFRASTRUCTURE	*	*	*	*	*	*	*
LAND RECORDS	*	*	*	*	*	*	*
LAND STATUS	*	*	*	*	*	*	*
LAND USE	*	*	*	*	*	*	*
MINERAL POTENTIAL		*	*	*	*	*	*
MINERALS	*	*	-	*	*	*	*
MODELS	*		*	*	*	*	*
OIL AND GAS	*	*	*	*	*	*	*
PHYSIOGRAPHIC PROVINCE	*	-		*	*	*	*
POLICTICAL & ADMINISTRATIVE UNITS	*	*	*	*	*	*	*
QUAD BOUNDARIES	*	*	*	*	*	*	*
RECREATION USE	*	*	*	*		*	*
ROADS	*	*	*	*	*	*	*
SLOPE	*	*	*	*	*	*	*
SOIL	*	-	 	*	*	*	*
SUBSISTENCE	*	*	*	*	*	*	*
TOWNSHIP GRID	*	*	*	*	*	*	*
TRAILS	*	*	*	-	•	*	*
<u>VEGETATION</u>	7	⊥ *			7	7	₩



MAP 4-LOCAL DATABASE COVERAGE FOR COPPER RIVER

NAME: COPPER RIVER

DESCRIPTION: This database was developed primarily for the Copper River Area Plan. It includes data at two scales 1:250,000 and 1:63,360. The areas of high interest, mapped at the 1:63,360 scale, are primarily state owned lands in the central basin and along major roads. Geology and vegetation are the main topics mapped at the detailed scale. The coverage for other data topics are available at the less-detailed 'Regional' database type scale of 1:250,000. Detailed soils information is also available for a small selected area 'Area 612 Soils Survey' as funded by the U.S. Soil Conservation Service.

<u>SCALE</u>: 1:63,360

RESOLUTION: 20 - 40 acres

STATUS: Manual maps and automated files complete

DATE: 1984(Compiled & some interpretation)

DOCUMENTATION: Copper River Technical User's Guide, ADNR-DGGS-Resource

Analysis Section;

Copper River Basin Area Plan.

Copper River Basin Area Plan Resource Element Reports,

ADNR-DL&W Resource Allocation Section.

Copper River Area Land Cover Mapping Project - Final

Report, U.S.G.S.-EROS Field Office for ADNR-DGGS

Resource Analysis Section.

SOURCE AGENCY: ADNR, as prepared by AGRA the contractor, and USSCS.

CONTACT: ADNR-DGGS, Resource Analysis Section

OUADRANGLE COVERAGE:

GULKANA - A3-6, B2-3, C2-4, D3-4

McCARTHY - B5-8

VALDEZ - A4-8, B1-5, C1-7, D2-8

DATA TOPICS:

(See the REGIONAL COVERAGE section for Copper River for a more detailed listing of information available for this region.)

GEOLOGY, ENGINEERING Landform

QUADRANGLE BOUNDARIES (See Statewide Coverage)

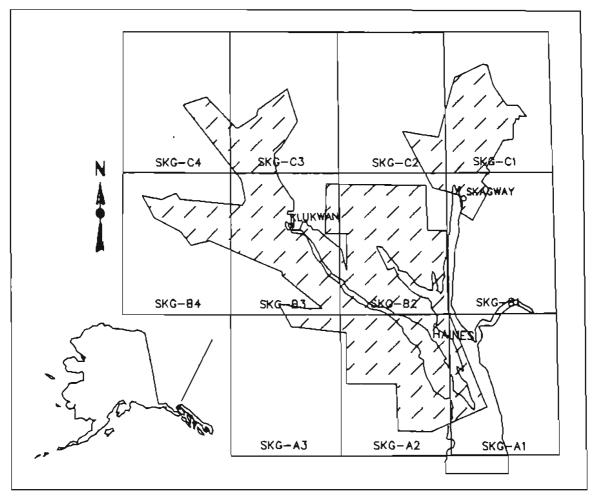
SOILS

Soil Map Unit (Area 612 USSCS mapping)

TOWNSHIP SECTION GRID (See Statewide Coverage)

TRAILS

VEGETATION (Landcover)
Herbaceous
Shrubs
Trees, (individual canopy closure)
(Relative Size and species name)



MAP 5-LOCAL DATABASE COVERAGE FOR HAINES

NAME: HAINES

<u>DESCRIPTION</u>: This database consists of forest inventory data collected in cooperation with the U.S. Soil Conservation Service. The data was primarily developed for managing the Haines State Forest.

SCALE: 1:31,680

RESOLUTION: 10 acres

STATUS: Manual maps complete, automation in progress

<u>DATE</u>: 1984

DOCUMENTATION: Draft Soil Forestry Interpretation Progress Report Haines

Area Alaska, October 1984, U.S.D.A. Soil Conservation

Service, and

Unpublished Soil Survey of Haines Area Alaska, February,

1985, U.S.D.A. Soil Conservation Service.

SOURCE AGENCY: Developed by contractor for ADNR, and in cooperation with

U.S. Soil Conservation Service.

CONTACT: ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

SKAGWAY - A1, A2, A3

B1, B2, B3, B4 C1, C2, C3

DATA_TOPICS:

LAND RECORDS

LAND STATUS

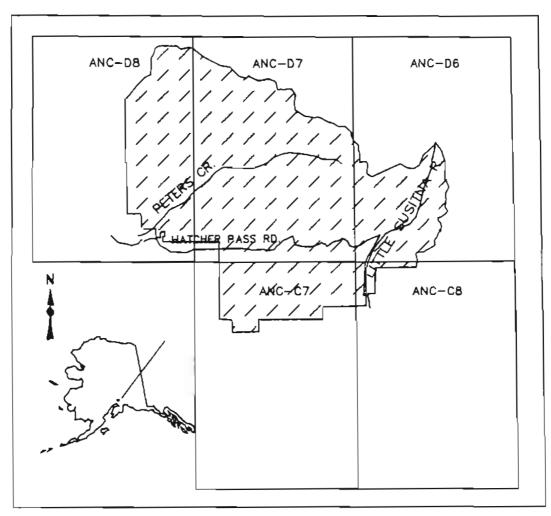
POLITICAL AND ADMINISTRATIVE BOUNDARIES

QUADRANGLE BOUNDARIES (See Statewide Coverage)

SOILS

TOWNSHIP SECTION GRID (See Statewide Coverage)

VEGETATION (Landcover)
Timber Type Maps



MAP 6-LOCAL DATABASE COVERAGE FOR HATCHER PASS

HATCHER PASS NAME:

DESCRIPTION: This data was developed for the management planning of the Hatcher Pass Management Unit of the Susitna Area Plan. The data is incomplete and prepared in a non-standard format. Most of the data is existing information reinterpreted for this planning activity. However, new hydrography was developed for snow conditions, new vegetation information was developed to evaluate grazing and timber resources, and new engineering geology mapping was done for the central road corridor. See the description of the Susitna Basin for other 'Local' data available for the area. See the 'Regional Coverage' section for a description of less detailed information available for this area.

SCALE:

1:31,680

RESOLUTION:

10 acres

STATUS:

Some manual maps complete. See the description of 'Susitna Basin' for explanation of automated data available. See

also 'Regional Coverage' for 'Southcentral'.

DATE:

1985

DOCUMENTATION:

Engineering Geology of Hatcher Pass Management Region,

ADNR-DGGS-Engineering Geology Section;

Hatcher Pass Management Plan, ADNR-DL&W Southcentral

Region.

SOURCE AGENCY: U.S. Soil Conservation Service, ADNR-DL&W

CONTACT:

ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

ANCHORAGE - C6, C7, D6, D7, D8

DATA TOPICS:

POLITICAL & ADMINISTRATIVE BOUNDA-GEOLOGICAL CONSTRAINTS

GEOLOGY, ENGINEERING QUADRANGLE BOUNDARIES (See State-

> wide Coverage)

HYDROGRAPHY

SNOW SURVEYS

SOILS

LAND RECORDS TOWNSHIP SECTION GRID (See State-

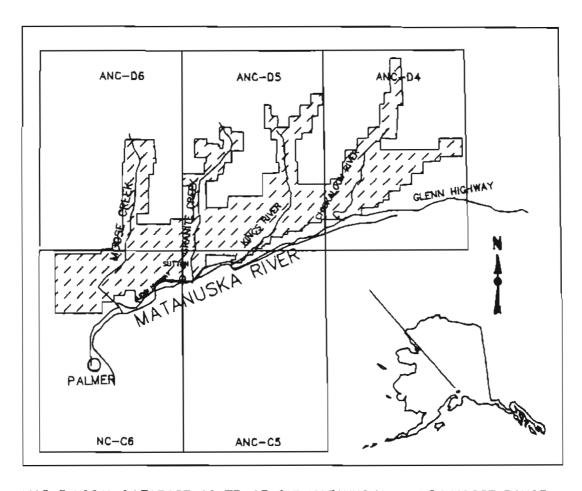
wide Coverage)

LAND STATUS

TRAILS

LAND USE

VEGETATION (Landcover)



MAP 7-LOCAL DATABASE COVERAGE FOR MATANUSKA VALLEY MOOSE RANGE

NAME: MATANUSKA VALLEY MOOSE RANGE

DESCRIPTION: This database was developed in cooperation with USDA-SCS and ADF&G primarily to complete the management plan for the Moose Range as mandated by the Alaska legislature. The data consisted of using some existing information prepared by SCS river basin studies; however, photo interpretation of engineering geology and vegetation was also done. See the 'Regional Coverage' for less detailed information available for this area.

<u>\$CALE</u>: 1:31,680

RESOLUTION: 10 acres

STATUS: Manual maps complete

DATE: 1985

DOCUMENTATION: Engineering Geology of the Matanuska Valley Moose Range

Area, ADNR-DGGS-Engineering Geology Section;

Matanuska Valley Moose Range Management Plan, ADNR-DL&W-Re-

source Allocation Section.

SOURCE AGENCY: ADNR, SCS, and ADF&G

CONTACT: ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

ANCHORAGE - C5, C6 D4, D5, D6

DATA TOPICS:

COAL

LAND STATUS

MINERAL POTENTIAL

FLOOD ZONES

OIL & GAS POTENTIAL GEOLOGICAL CONSTRAINTS

Avalanche zones QUADRANGLE BOUNDARIES

Unstable ground
Faults ROADS

GEOLOGY, ENGINEERING SLOPE (See Statewide Coverage)

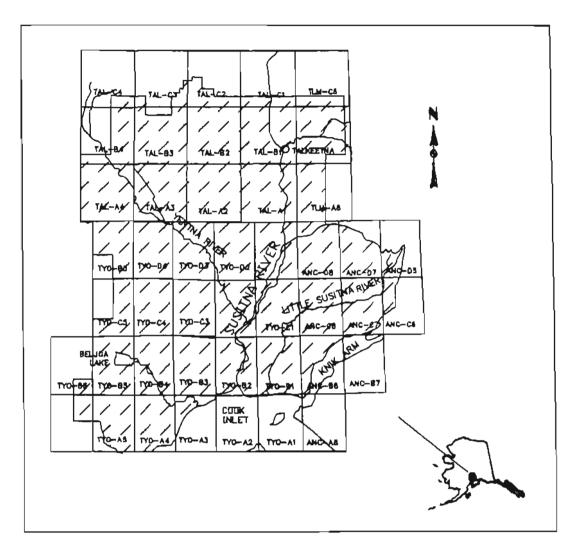
Sand & Gravel Potential

TOWNSHIP SECTION GRID (See

HYDROGRAPHY Statewide Coverage)

INFRASTRUCTURE TRAILS

LAND RECORDS VEGETATION (Landcover)



MAP 8 LOCAL DATABASE COVERAGE FOR SUSITNA BASIN

NAME: SUSITNA BASIN (BELUGA, TALKEETNA, WILLOW)

DESCRIPTION: This database was developed in cooperation with the Conservation Service River Basin Studies Program. The information consisted primarily of a compilation of existing information with some reinter-Vegetation mapping through interpretation of air pretation for economics. photos and field inventory plots has provided a substantial land cover inven-

SCALE:

1:63,360

RESOLUTION:

2-10 acres

STATUS:

Manual maps and automated files complete

DATE:

1980 - 1982

DOCUMENTATION: Final Report: Computerized Geographic Information System Talkeetna and Beluga Subbasins; Susitna River Basin, Alaska, and ESRI.

Subbasin Land Capability/Suitability Final Report: Willow Analysis, ESRI for ADNR-DGGS-Resource Analysis Section.

Susitna River Basin Study - Alaska: Willow Subbasin, Final Report,

Identifying Wildlife Lands: Fish and Wildlife Analysis For the Susitna River Basin Study: Final Report, and

Susitna River Basin Study - Alaska; USDA Investigations and Analyses, Summary Report U.S. Dept. of Agriculture in cooperation with State of Alaska and U.S. Fish and Wildlise Service.

Susitna River Basin Study Cultural Resource Assessment of <u> Willow - Talkeetna - Beluga Areas, March 1983, U.S.</u> Dept. of Agriculture in cooperation with State of Alaska.

The Susitna cooperative River Basin Study Economic Development Analysis; Talkeetna Subbasin prepared by U.S. Dept. of Agriculture (USSCS) for ADNR.

USSCS, ESRI. SOURCE AGENCY:

CONTACT:

ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

ANCHORAGE - A8, B7-8, C6-8, D6-8 TALKEETNA - A1-4, B1-4, C2-4 TALKEETNA MOUNTAINS - A6, B6, C6 TYONEK - A1-6, B1-6, C1-5, D1-4,6

DATA TOPICS:

COAL

ELEVATION (See Statewide Coverage)
Elevation Province

FISH AND GAME
Anadromous Fish Stream Surveys

FLOOD ZONE

GEOLOGIC CONSTRAINTS

Faults
Unstable ground
Voicano
Tsunami & Avalanche Zones

GEOLOGY, ENGINEERING

GEOLOGY, GENERAL

HISTORIC AND ARCHAEOLOGICAL SITES

HYDROLOGY

Stream Order
Stream Periodicity
Stream Origin (Glacial, Nonglacial)
Stream Condition (Braided, Nonbraided)

INFRASTRUCTURE

Transmission Line
Pipelines
Settlements
Cemetery
Airport
Navigation Facility
Hydroelectric Generation Site

LAND RECORDS

LAND STATUS

General Land Ownership School And Mental Health Grant Lands Subdivisions - Quadrangle Based

LAND USE

Scenic/Special Places

MINERALS

Mineral Terrane

MODELS

Soil Drainage

Soil Limitations for Dwellings

Range Resources

Specific Slope from Soils

Forest Resources

Groundwater Availability

Economic Agriculture/Forestry

Important Farmland

Important Grazing Lands (Potential)-Talkeetna Subbasin

Land Capability for Accessed Large Lot Residential Development-Talkeetna Subbasin

Land Capability for Moderate/High Density Residential Development

Land Capability for Low Density Remote residential Development

Erosion Potential

Moose Habitat

General Habitat

Wetlands Matrix-Talkeetna Subbasin

Wetlands II-Talkeetna Subbasin

Wetlands Matrix-Beluga Subbasin

Road Suitability-Talkeetna Subbasin

Corner Locations-Talkeetna Subbasin

Road Suitability-Beluga Subbasin

PHYSIOGRAPHIC PROVINCE

POLITICAL & ADMINISTRATIVE UNITS

Municipality-Borough Number/Name

Special National Designation

National System Type

National System Type Number/Name

Census Areas and Subareas

U.S. Military Facility

QUADRANGLE BOUNDARIES (See Statewide Coverage)

ROADS

Road Characteristics

Railroad

SLOPE (See Statewide Coverage)

SOIL

Major Land Resource Area (MLRA)

Soil Map Unit

SUBSISTENCE

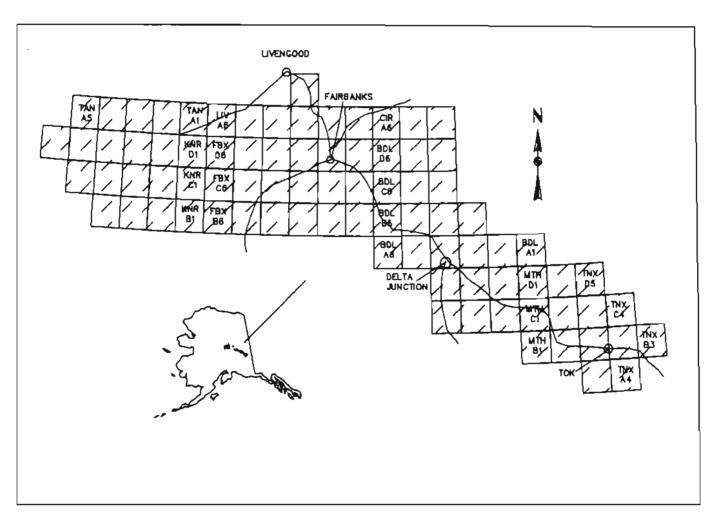
TOWNSHIP SECTION GRID (See Statewide Coverage)

TRAILS

Access
Iditarod National Historic Trail

VEGETATION (Landcover)

Vegetation-Primary Call Vegetation-Secondary Call Vegetation-Tertiary Call Vegetation-Quaternary Call



MAP 9-LOCAL DATABASE COVERAGE FOR TANANA

LOCAL COVERAGE

NAME: TANANA

<u>DESCRIPTION</u>: This database was developed in cooperation with the U.S.D.A. Soil Conservation Service as part of their river basin studies. This particular study however came after the Tanana Area Plan development but before Tanana State Forest Plan completion. Consequently, this database has a strong orientation toward forest inventory and management. This project is still in progress. Less detailed information is available through regional databases.

SCALE:

1:31,680

RESOLUTION:

5 acres

STATUS:

Mapping completed, automated files complete for state

forest area.

DATE:

1984 - 1987

DOCUMENTATION: Draft report

Draft report Tanana River Basin Study, U.S.D.A. Soil

Conservation Service;

Draft Tanana State Forest Plan, ADNR-DF-Northcentral Region

Division of Forestry.

Tanana Basin Area Plan element reports, ADNR-DL&W-Resource

Allocation Section.

SOURCE AGENCY:

U.S. Soil Conservation Service

CONTACT:

ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

BIG DELTA - A1-6, B3-6, C4-6, D4-6

CIRCLE - A4-6

FAIRBANKS - B1-6, C1-6, D1-6

KANTISHNA RIVER - B1-4, C1-5, D1-6

LIVENGOOD - A1-6, B3

MOUNT HAYES - B1, C1-4, D1-4 TANACROSS - A4-5, B3-6, C4-6, D5-6

TANANA - A1-5

DATA TOPICS:

ASPECT (Also see Statewide Coverage)

ELEVATION

GEOLOGY, ENGINEERING

GEOLOGY, GENERAL Bedrock Geology

HYDROLOGY

Stream Net

INFRASTRUCTURE

Pipelines
Settlements
Airport
Navigation Facility
Hydroelectric Generation Site

LAND RECORDS ('See Statewide Coverage')

LAND STATUS ('See Statewide Coverage')
General Land Ownership
School And Mental Health Grant Lands
Subdivisions - Quadrangle Based

MODELS

Wetlands

QUADRANGLE BOUNDARIES (See Statewide Coverage)

ROADS

Road Characteristics Railroad

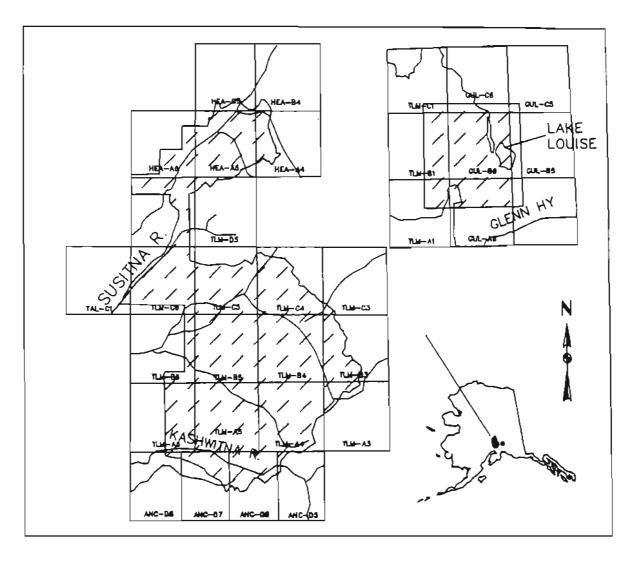
SLOPE (Also see Statewide Coverage)

SOIL

Soil Map Unit

TOWNSHIP SECTION GRID (See Statewide Coverage)

VEGETATION (Landcover)



MAP 10 - LOCAL DATABASE COVERAGE FOR UPPER SUSITNA

LOCAL COVERAGE

NAME: UPPER SUSITNA

<u>DESCRIPTION</u>: This data basin is part of the U.S.D.A. Soil Conservation Service River Basins Studies for the Susitna Basin, however the detail and number of data elements provided for this portion is substantially less. This information comes primarily from a compilation of existing information as well as some original photo interpretive work on geology and vegetation. See 'Southcentral' under the 'Regional Database Coverage' for additional information available for this area.

<u>SCALE</u>: 1:63,360

RESOLUTION: 80 acres

STATUS: Manual maps and automated files complete

<u>DATE</u>: 1983

DOCUMENTATION: Final Report, Computerized Geographic Information System,

Upper Susitna, Susitna River Basin, Alaska, ESRI for

USDA-FS.

SOURCE AGENCY: U.S. Soil Conservation Service interpretations and compita-

tion of existing data.

CONTACT: ADNR-DGGS, Resource Analysis Section

OUADRANGLE COVERAGE:

ANCHORAGE - D5-8 HEALY - A4-6, B4-5 TALKEETNA - C1

TALKEETNA MOUNTAINS - A3-6, B3-6, C3-6, D5-6

DATA TOPICS:

GEOLOGY, ENGINEERING Landform

GEOLOGY, GENERAL Landform

HYDROLOGY (See 'Regional Coverage' for 'Southcentral')
STREAM NET

LAND RECORDS (See 'Regional Coverage' for 'Southcentral')

LAND STATUS (See 'Regional Coverage' (or 'Southcentral')

LAND USE (Sec 'Regional Coverage' for 'Southcentral') Scenic/Special Places

MODELS

Range suitability
Forest suitability
Erosion Hazard
Dense urban potential
Low Density Urban potential

QUADRANGLE BOUNDARIES (See Statewide Coverage)

SLOPE (Also see 'Statewide Coverage')

TOWNSHIP SECTION GRID (Also see 'Statewide Coverage')

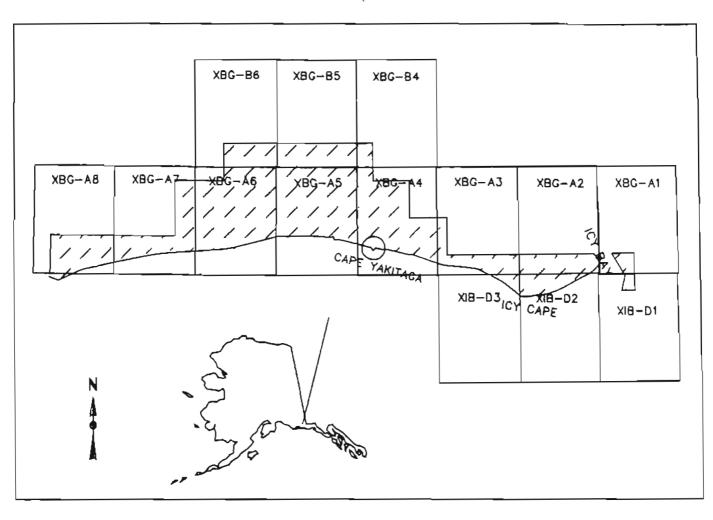
VEGETATION (Landcover)

Vegetation-Primary Call

Vegetation-Secondary Call

Vegetation-Tertiary Call

Vegetation-Quaternary Call



MAP 11-LOCAL DATABASE COVERAGE FOR YAKATAGA

LOCAL COVERAGE

NAME: YAKATAGA

This database is based on extensive field measurements and air DESCRIPTION: photo interpretation for forest inventory. The scale and data elements included lend themselves mainly to forest management applications.

SCALE:

1:31.680

RESOLUTION:

5 acres

STATUS:

Manual maps and orthophotos complete, automation in

progress.

DATE:

1984

DOCUMENTATION: Field Plot Records.

SOURCE AGENCY:

Natural Divisions Alaska Department of Resources. of

Geological & Geophysical Surveys, and Forestry

CONTACT:

ADNR-DGGS, Resource Analysis

OUADRANGLE COVERAGE:

BERING GLACIER - A1-8, B4-6

ICY BAY - D1-3

DATA TOPICS:

BIBLIOGRAPHY

ELEVATION

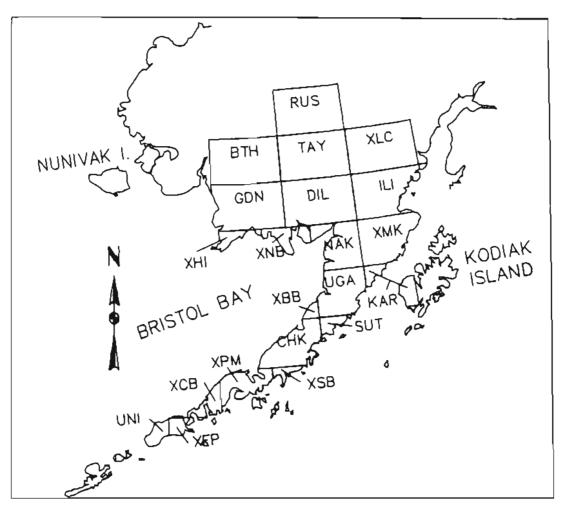
QUADRANGLE BOUNDARIES (See Statewide Coverage)

SLOPE (Also see Statewide Coverage)

SOILS/ENGINEERING GEOLOGY (This is a hybrid of soils and landforms)

TOWNSHIP SECTION GRID (Sec Statewide Coverage)

VEGETATION (Landcover) Timber Stand Typing



MAP 12-REGIONAL DATABASE COVERAGE FOR BRISTOL BAY

NAME: BRISTOL BAY

DESCRIPTION: This database contains data from two cooperative projects. The first cooperative project involved the U.S.G.S. EROS Field Office, the U.S. Fish and Wildlife Service and ADNR to map vegetation in the Bristol Bay Region using LANDSAT imagery. This project has extensive field data available. The second cooperative project was the result of the Bristol Bay Cooperative Management Plan mandated by Congress; the cooperators were ADNR, USF&WS, and ADF&G. The cooperative geographic information system database was developed for use in performing analysis and assessments of the protection, management, and development potential of resources in the region. This second project was divided so that fish and wildlife information was mapped at 1:250,000 scale and all other data mapped at 1:500,000 scale.

SCALE: 1:250,000 and 1:500,000

RESOLUTION: 5 acres (LANDSAT only), 640 acres for 1:250,000

scale, and 1,000 acres for everything else

STATUS: Manual maps and automated files available

DATE: 1982

DOCUMENTATION: Bristol Bay Mapping Program Final Report, Environmen-

tal Systems Research Institute for ADNR-DTS and DL&W;

User's Guide For Bristol Bay Land Cover Maps,

Bristol Bay area Plan For State Lands.

Bristol Bay Area Plan Resource Element Reports, ADNR-

DRD Resource Planning Section.

Bristol Bay Cooperative Management Plan, U.S.D.I. Fish

and Wildlife Service, ADNR, and ADF&F; and

Other unpublished technical reports.

SOURCE AGENCY: Alaska Department Natural Resources

CONTACT: ADNR-DGGS, Resource Analysis Section

QUADRANGLE LIST:

AFOGNAK LAKE CLARK
BETHEL MOUNT KATMAI

BRISTOL BAY
CHIGNIK
COLDBAY
DILLINGHAM
FALSE PASS
GOODNEWS BAY

NAKNEK
NUSHAGAK
PORT MOLLER
RUSSIAN MISSION
STEPOVAK BAY
SUTWIK ISLAND

HAGEMEISTER ISLAND TAYLOR MOUNTAINS

ILIAMNA UGASHIK KARLUK UNIMAK

KUSKOKWIM BAY

DATA TOPICS:

ASPECT (See Statewide Coverage)

BIBLIOGRAPHY

COAL

Isolated Coal Resource Sites And Underground Mines Coal Resource Areas Coal Leases Coal Prospecting Permit Application Coal Mining Permits

ELEVATION (See Statewide Coverage)

Elevation Province

FISH AND GAME

Anadromous Fish Stream Surveys
Anadromous Fish Type
Fresh Water Fish Species Distribution
Salmon Type
Sport Fishing Pressure
Sport Fishing By Fish Type
Brown Bear Concentration Along Fish Streams
Raptors Use Areas
Onshore/Nearshore Biological Resources
Offshore Biological Resources
Wild Trout Management Waterbodies

FLOOD ZONE

GEOLOGIC CONSTRAINTS

Faults
Unstable ground
Volcano
Tsunami & Avalanche Zones

GEOLOGY, ENGINEERING

Quadrangle Based Landform Surficial Geology

GEOLOGY, GENERAL

General Geology Source-Statewide General Geology Unit-Statewide

HISTORIC AND ARCHAEOLOGICAL SITES

HYDROLOGY

Stream Order Stream Periodicity Stream Origin (Glacial, Nonglacial) Stream Condition (Braided, Nonbraided)
USGS Hydrologic Units
ADNR STORET Watershed Units
Ocean Domain/Zones of Upwelling
Ocean Bottom Sediment
Ocean Maximum Probable Extent of Ice Edge: Mid-March
Waterbody Navigability
Waterbody Negotiable By Watercraft
Thermal Springs

INFRASTRUCTURE

Transmission Line Pipelines Settlements Cemetery Airport

LAND RECORDS

LAND STATUS

General Land Ownership School And Mental Health Grant Lands Subdivisions - Quadrangle Based

LAND USE

Scenic/Special Places

MINERALS

Mineral Terrane
Favorable Mineral Resource Areas
Mineral Deposits and Occurrences
Surface Min/Quarry and Underground Mine Entrance

MODELS

Many single application models were run for the planning team.

OIL AND GAS

Oil and Gas Wells
Oil and Gas Well Status
Oil and Gas Fields
Offshore Oil & Gas Basins

PHYSIOGRAPHIC PROVINCE

Climate Zones
Physiographic Province
Topographic Character & Situation

POLITICAL & ADMINISTRATIVE UNITS

Municipality-Borough Number/Name Special National Designation National System Type National System Type Number/Name State System Type
State System Type Number/Name
Other Public and Private Reserves
Census Areas and Subarcas
U.S. Military Facility
Public Waterbody Easement
Motorized Boat Corridor

QUADRANGLE BOUNDARIES (See Statewide Coverage)

RECREATION USE

ROADS

Road Characteristics

SLOPE (See Statewide Coverage)

SOIL

Major Land Resource Area (MLRA) Soil Map Unit

SUBSISTENCE

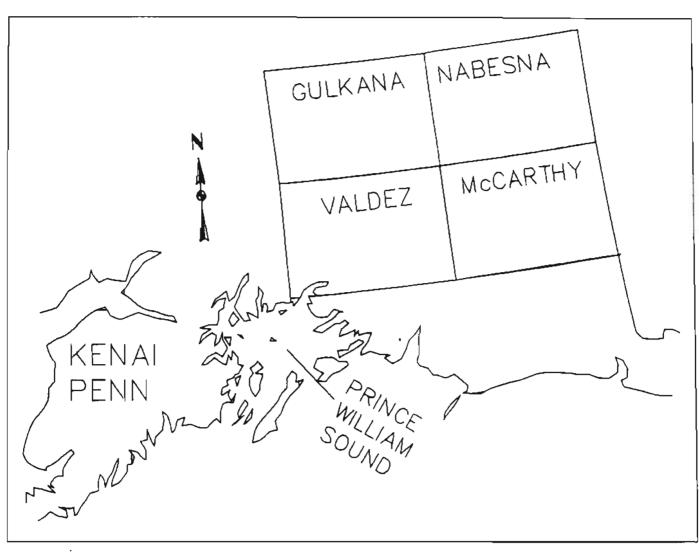
TOWNSHIP SECTION GRID (See Statewide Coverage)

TRAILS

Access
Iditarod National Historic Trail

VEGETATION (Landcover)

Vegetation Modifier
Vegetation-Primary Call
Vegetation-Secondary Call
Vegetation Community (LANDSAT Based)



MAP 13-REGIONAL DATABASE COVERAGE FOR COPPER RIVER

NAME: COPPER RIVER

DESCRIPTION: This database was developed primarily for the Copper River Area Plan. It includes data at two scales 1:250,000 and 1:63,360. The areas of high interest, mapped at the 1:63,360 scale, are primarily state owned lands in the central basin and along major roads. The topics mapped at the level are primarily engineering geology and vegetation; these can be reviewed under 'Local Database Coverage For Copper River'. Vegetation information is also available regionwide from classified LANDSAT data.

SCALE: 1:250,000

RESOLUTION: 160 acres, (320-640 Geology)

STATUS: Manual maps and automated files complete

DATE: 1984(Compiled & some interpretation)

DOCUMENTATION: Copper River Technical User's Guide, ADNR-DGGS-

Resource Analysis Section; Copper River Basin Area Plan,

Copper River Basin Area Plan Resource Element Reports,

ADNR-DL&W Resource Allocation Section.

SOURCE AGENCY: ADNR, as prepared by AGRA under contract.

CONTACT: ADNR-DGGS, Resource Analysis Section

OUADRANGLE COVERAGE:

GULKANA NABESNA McCARTHY VALDEZ

DATA TOPICS:

ASPECT (See Statewide Coverage)

BIBLIOGRAPHY

ELEVATION

FISH AND GAME (Contact ADF&G Habitat Division)

GEOLOGIC CONSTRAINTS

Faults

Unstable ground

Flood, Volcano, Tsunami & Avalanche Zones

GEOLOGY, ENGINEERING Landform

GEOLOGY, GENERAL

HISTORIC AND ARCHAEOLOGICAL SITES

HYDROLOGY

Stream Order
Stream Origin (Glacial, Nonglacial)
USGS Hydrologic Units
ADNR STORET Watershed Units

INFRASTRUCTURE

Transmission Line
Pipelines
Settlements
Airport
Navigation Facility
Hydroelectric Generation Site

LAND RECORDS (See 'Statewide Coverage')

LAND STATUS (Also see 'Statewide Coverage')
General Land Ownership
School And Mental Health Grant Lands
Subdivisions - Quadrangle Based

LAND USE

MINERALS

Mineral Terrane
Favorable Mineral Resource Areas
Mineral Deposits and Occurrences
Surface Min/Quarry and Underground Mine Entrance

OIL AND GAS

POLITICAL & ADMINISTRATIVE UNITS

Municipality-Borough Number/Name Special National Designation Other Public and Private Reserves U.S. Military Facility

QUADRANGLE BOUNDARIES (Sec Statewide Coverage)

RECREATION USE

ROADS

Road Characteristics Railroad SLOPE (See Statewide Coverage)

SOIL

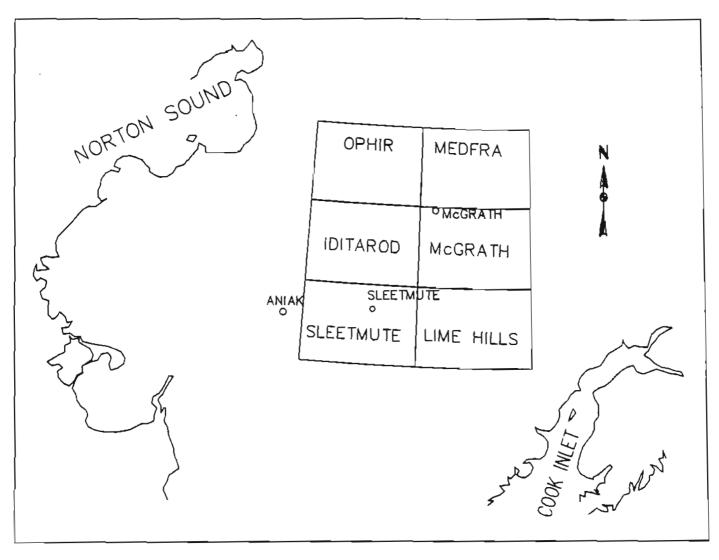
(Hybrid interpretation from engineering geology)

TOWNSHIP SECTION GRID (Sec Statewide Coverage)

TRAILS

VEGETATION

Landcover, (5 acre resolution, habitat orientation)



MAP 14-REGIONAL DATABASE COVERAGE FOR KUSKOKWIM

NAME: KUSKOKWIM

DESCRIPTION: This database consists of several independent data elements. Vegetation information exists at the 1:250,000 scale for all quads in the database derived from the BLM fire fuels mapping. It is currently being automated. More detailed vegetation information is available from classified LANDSAT images developed from three agencies, USF&WS, BLM, and DNR. Various other information, shown on the summary matrix at the beginning of this directory, was mapped at 1:250,000 scale on most state owned lands, and at 1:63,360 scale in corridors primarily along major rivers.

SCALE: 1:250,000 and 1:63:360

RESOLUTION: Vegetation at 5 (Landsat) - 640 (airphoto interpretation)

acres, other data elements were mapped at 10 - 160 acres.

STATUS: Some manual maps and some automated data files available.

DATE: 1986

DOCUMENTATION: Kuskokwim Arca Plan Elements, ADNR-DL&W Resource Allocation

Section.

SOURCE AGENCY: USF&WS, BLM, ADNR

CONTACT: ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

IDITAROD MT. McKINLEY*

LAKE CLARK* OPHIR

LIME HILLS RUSSIAN MISSION*

McGRATH SLEETMUTE
MEDFRA TALKEETNA*
TAYLOR MTS.*

DATA TOPICS:

ASPECT (See Statewide Coverage)

BIBLIOGRAPHY

COAL

ELEVATION

^{*} These quads have only a very small portion with information and therefore are not included in the facing map.

FISH AND GAME Anadromous Fish Stream Surveys

FLOOD ZONE

GEOLOGIC CONSTRAINTS

Faults
Unstable ground
Volcano
Tsunami & Avalanche Zones

GEOLOGY, ENGINEERING

Quadrangle Based Landform Surficial Geology

GEOLOGY, GENERAL

HISTORIC AND ARCHAEOLOGICAL SITES

HYDROLOGY STREAM NET

INFRASTRUCTURE

Transmission Line Pipelines Settlements Airport

LAND RECORDS

LAND STATUS

General Land Ownership School And Mental Health Grant Lands Subdivisions - Quadrangle Based

LAND USE

MINERAL POTENTIAL

Minerals
Mineral Deposits and Occurrences
Surface Min/Quarry and Underground Mine Entrance

OIL AND GAS
Oil and Gas Wells

POLITICAL & ADMINISTRATIVE UNITS

QUADRANGLE BOUNDARIES (See Statewide Coverage)

RECREATION USE

ROADS

Road Characteristics SLOPE (See Statewide Coverage)

SUBSISTENCE

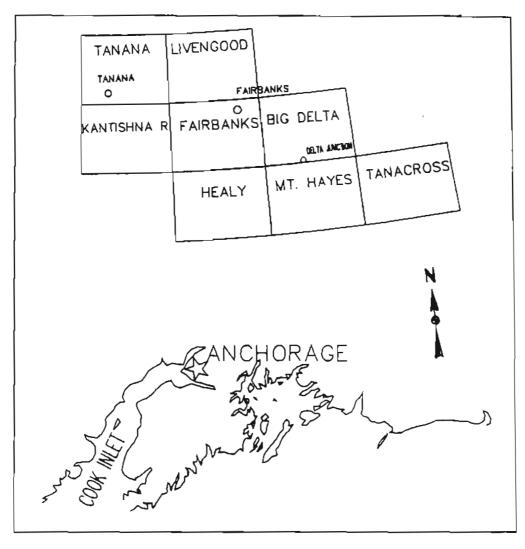
TOWNSHIP SECTION GRID (See Statewide Coverage)

TRAILS

Access
Iditarod National Historic Trail

VEGETATION (Landcover)

Fire Fuels Mapping Vegetation Community (LANDSAT Based)



MAP 15-REGIONAL DATABASE COVERAGE FOR NORTHCENTRAL

NAME: NORTHCENTRAL

<u>DESCRIPTION</u>: The information included in this database was compiled as part of the Alaska Land and Resource Mapping Program. This program involved the systematic preparation, mapping and automation of natural resources data in a standardized approach for data classification and resolution. this standardization provides a consistent interpretation of the individual data elements as they apply to different areas throughout the state. Data coverage includes areas from Healy to north of Fairbanks and then east including Delta and Tok areas.

SCALE: 1:250,000

RESOLUTION: 160 acres for land status, 640 acres for other elements.

STATUS: Manual maps and automated data files available.

DATE: 1982-1985

DOCUMENTATION: Alaska Land and Resource Mapping Program; Final Report---

Volume I 'System Design and Development',

Volume 2 'Data Base Users Guide', and

Volume 3 'Auxillary Information', prepared by ESRI for

ADNR-DGGS Resource Analysis Section.

SOURCE AGENCY: ADNR, as prepared by R&M, ESRI, and Dowl Engineers consul-

tants under contract.

CONTACT: ADNR-DGGS, Resource Analysis Section

OUADRANGLE COVERAGE:

BIG DELTA KANTISHNA RIVER

FAIRBANKS MT. HAYES
HEALY TANACROSS
LIVENGOOD TANANA

DATA TOPICS:

ASPECT (See Statewide Coverage)

BIBLIOGRAPHY

COAL

Isolated Coal Resource Sites And Underground Mines

Coal Resource Areas

Coal Leases

Coal Prospecting Permit Application

Coal Mining Permits

ELEVATION (See Statewide Coverage)

Elevation Province

FISH AND GAME

Anadromous Fish Stream Surveys
Anadromous Fish Type
Fresh Water Fish Species Distribution
Salmon Type
Sport Fishing Pressure
Sport Fishing By Fish Type
Brown Bear Concentration Along Fish Streams
Raptors Use Areas
Onshore/Nearshore Biological Resources
Offshore Biological Resources
Wild Trout Management Waterbodies

FLOOD ZONE

GEOLOGIC CONSTRAINTS

Faults
Unstable ground
Volcano
Tsunami & Avalanche Zones

GEOLOGY, ENGINEERING

Quadrangle Based Landform (Terraine Units)

GEOLOGY, GENERAL

General Geology Source-Statewide General Geology Unit-Statewide

HISTORIC AND ARCHAEOLOGICAL SITES

HYDROLOGY

Stream Order
Stream Periodicity
Stream Origin (Glacial, Nonglacial)
Stream Condition (Braided, Nonbraided)
USGS Hydrologic Units
ADNR STORET Watershed Units
Ocean Domain/Zones of Upwelling
Ocean Bottom Sediment
Ocean Maximum Probable Extent of Ice Edge: Mid-March
Waterbody Navigability
Waterbody Negotiable By Watereraft
Thermal Springs

INFRASTRUCTURE

Transmission Line Pipelines Settlements Cemetery Airport

LAND RECORDS (See 'Statewide Coverage')

LAND STATUS (Also see 'Statewide Coverage')
General Land Ownership
School And Mental Health Grant Lands
Subdivisions - Quadrangle Based

LAND USE

Scenic/Special Places
Special National Designation

MINERAL POTENTIAL

MINERALS

Mineral Terrane
Favorable Mineral Resource Areas
Mineral Deposits and Occurrences
Surface Min/Quarry and Underground Mine Entrance

MODELS

Permafrost Wetlands Groundwater Availability Geologic Hazards

OIL AND GAS

Oil and Gas Wells
Oil and Gas Well Status
Oil and Gas Fields
Offshore Oil & Gas Basins

PHYSIOGRAPHIC PROVINCE

Climate Zones
Physiographic Province
Topographic Character & Situation

POLITICAL & ADMINISTRATIVE UNITS

Municipality-Borough Number/Name Special National Designation National System Type National System Type Number/Name State System Type Number/Name State System Type Number/Name Other Public and Private Reserves Census Areas and Subareas U.S. Military Facility

Abandoned Mine Land Problem Areas Public Waterbody Easement Motorized Boat Corridor

QUADRANGLE BOUNDARIES (See Statewide Coverage)

RECREATION USE

ROADS

Road Characteristics Railroad

SLOPE (See Statewide Coverage)

SOIL

Major Land Resource Area (MLRA) Soil Map Unit

SUBSISTENCE

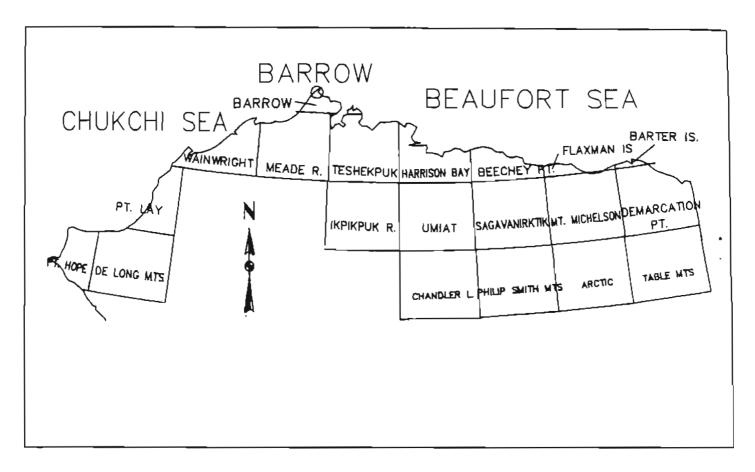
TOWNSHIP SECTION GRID (See Statewide Coverage)

TRAILS

Access

VEGETATION (Landcover)

Vegetation Modifier Vegetation-Primary Call Vegetation-Secondary Call



MAP 16-REGIONAL DATABASE COVERAGE FOR THE NORTH SLOPE

NAME: NORTH SLOPE

<u>DESCRIPTION</u>: This database was developed as a result of a cooperative agreement between the North Slope Borough (NSB) and the ADNR. Originally all twenty five quads north of the line of 68 degrees north latitude were to be completed. At this time only twenty of the quads have been completed. This project was only 1 of a 3 part NSB database development program. There are also other data available at 1:63,360 scale for the Prudhoe Bay Industrial Area and other select areas, as well as 1:12,000 scale information for the community development areas. Five of the twenty quads that have been completed are only stored at the North Slope Borough GIS facility; however, access is available from the ADNR facility.

SCALE: 1:250,000

RESOLUTION: 640 acres

STATUS: Manual maps and automated files complete

DATE: 1982-1985(Compiled)

DOCUMENTATION: Alaska Land and Resource Mapping Program; Final Report---

Volume 1 'System Design and Development',

Volume 2 'Data Base Users Guide', Volume 3 'Auxillary Information', and

Supplementary Volume 'North Slope Data Base', prepared by

Environmental Systems Research Institute for NSB and

ADNR.

SOURCE AGENCY: Compiled by contractor for cooperative agreement between

ADNR and NSB.

CONTACT: ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

ARCTIC*

BARROW

BARTER ISLAND

PHILIP SMITH MTS.*

BEECHY POINT POINT HOPE CHANDLER LAKE* POINT LAY

DELONG MOUNTAINS SAGAVANIRKTOK*

DEMARCATION POINT TABLE MTS.*
FLAXMAN ISLAND TESHEKPUK

HARRISON BAY UMIAT

IKPIKPUK RIVER WAINWRIGHT

^{*} Quads with data coverage available from the North Slope Borough; this data can be run on the DNR GIS.

DATA TOPICS:

ASPECT (See Statewide Coverage)

BIBLIOGRAPHY

COAL

Isolated Coal Resource Sites And Underground Mines
Coal Resource Areas
Coal Leases
Coal Prospecting Permit Application
Coal Mining Permits

ELEVATION (See Statewide Coverage) Elevation Province

FISH AND GAME

Anadromous Fish Stream Surveys
Anadromous Fish Type
Fresh Water Fish Species Distribution
Salmon Type
Sport Fishing Pressure
Sport Fishing By Fish Type
Raptors Use Areas
Onshore/Nearshore Biological Resources
Offshore Biological Resources
Wild Trout Management Waterbodies

FLOOD ZONE

GEOLOGIC CONSTRAINTS

Faults
Unstable ground
Voicano

GEOLOGY, ENGINEERING

Quadrangle Based Landform Surficial Geology

GEOLOGY, GENERAL

General Geology Source-Statewide General Geology Unit-Statewide

HISTORIC AND ARCHAEOLOGICAL SITES

HYDROLOGY

Stream Order Stream Periodicity Stream Origin (Glacial, Nonglacial) Stream Condition (Braided, Nonbraided) USGS Hydrologic Units ADNR STORET Watershed Units
Ocean Domain/Zones of Upwelling
Ocean Bottom Sediment
Ocean Maximum Probable Extent of Ice Edge: Mid-March
Waterbody Navigability
Waterbody Negotiable By Watercraft
Thermal Springs

INFRASTRUCTURE

Transmission Line Pipelines Settlements Cemetery Airport

LAND RECORDS (See 'Statewide Coverage')

LAND STATUS (Also see 'Statewide Coverage')
General Land Ownership
School And Mental Health Grant Lands
Subdivisions - Quadrangle Based

LAND USE

Scenic/Special Places Special National Designation

MINERAL POTENTIAL

MINERALS(Caution should be used with this interpretation)
Mineral Terrane
Favorable Mineral Resource Areas
Mineral Deposits and Occurrences
Surface Min/Quarry and Underground Mine Entrance

OIL AND GAS

Oil and Gas Wells
Oil and Gas Well Status
Oil and Gas Fields
Offshore Oil & Gas Basins

PHYSIOGRAPHIC PROVINCE

Climate Zones
Physiographic Province
Topographic Character & Situation

POLITICAL & ADMINISTRATIVE UNITS

Municipality-Borough Number/Name Special National Designation National System Type National System Type Number/Name State System Type State System Type Number/Name Other Public and Private Reserves
Census Areas and Subareas
U.S. Military Facility
Abandoned Mine Land Problem Areas
Public Waterbody Easement
Motorized Boat Corridor

QUADRANGLE BOUNDARIES (See Statewide Coverage)

ROADS

Road Characteristics Railroad

SLOPE (See Statewide Coverage)

SOIL

Major Land Resource Area (MLRA) Soil Map Unit

SUBSISTENCE

TOWNSHIP SECTION GRID (See Statewide Coverage)

TRAILS

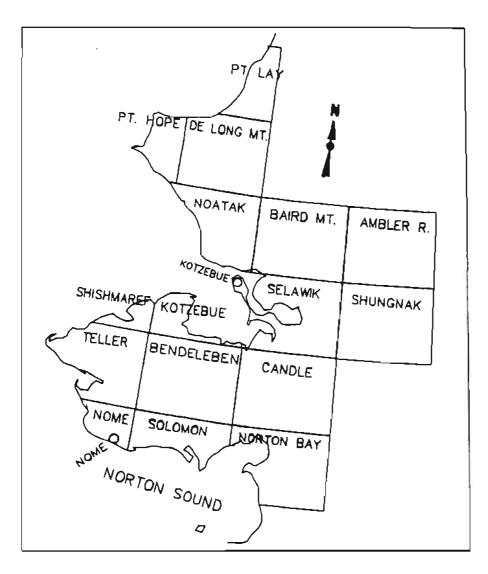
Access

VEGETATION (Landcover)

Vegetation Modifier

Vegetation-Primary Call

Vegetation-Secondary Call



MAP 17-REGIONAL DATABASE COVERAGE FOR NORTHWEST ALASKA

NAME: NORTHWEST (SEWARD PENINSULA)

This database has varied and incomplete coverage for some data DESCRIPTION: This database was developed for the Northwest Area Plan which elements. included quads covered by the North Slope regional database. The vegetation data consists of complete coverage for quads on the Seward Peninsula and was mapped at a scale of 1:63,360 and published at 1:125,000 scale by the U.S. Soil Other vegetation information was developed on state Conservation Service. lands only, primarily at a scale of 1:63,360, however a portion in the Noatak quad was done at 1:250,000 scale. Mineral Potential was developed for the first time in this database, its coverage is project wide, including the Some of the other data elements cover the entire region, (North Slope) quads. while the remaining elements are cover only state owned lands.

SCALE: 1:63,360, 1:125,000, and 1:250,000

RESOLUTION: 5 to 1,000 acres

STATUS: Mapped and portions automated

DATE: 1984-1985

DOCUMENTATION: Engineering Geology of Northwest Resource Mapping Project

Area, ADNR-DGGS-Engineering Geology Section.

Northwest Cultural Resources Report PDF 85-42L, ADNR-DGGS-

Archaeology Section,

Technical guide For Vegetation/Landcover Mapping of Selected Portions of Northwest Alaska Planning Area,

PDF 85-421, ADNR-DGGS-Resource Analysis Section.

<u>SOURCE AGENCY</u>: Compiled by ADNR-DGGS staff, US-SCS and ADF&G.

CONTACT: ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

AMBLER RIVER NORTON BAY BAIRD MOUNTAINS (POINT HOPE) BENDELEBEN (POINT LAY) CANDLE SELAWIK (DELONG MOUNTAINS) SHISHMAREF KOTZEBUE SHUNGNAK NOATAK SOLOMON NOME TELLER

⁽⁾ Indicates quads found in the North Slope data base.

DATA TOPICS:

ASPECT (See Statewide Coverage)

BIBLIOGRAPHY

COAL

ELEVATION

FISH AND GAME

Anadromous Fish Stream Surveys
Anadromous Fish Type
Fresh Water Fish Species Distribution
Salmon Type
Sport Fishing Pressure
Sport Fishing By Fish Type

GEOLOGIC CONSTRAINTS

Faults
Unstable ground
Flood Zones

GEOLOGY, ENGINEERING

GEOLOGY, GENERAL Landform

HISTORIC AND ARCHAEOLOGICAL SITES

HYDROLOGY

Stream Order
USGS Hydrologic Units
ADNR STORET Watershed Units

INFRASTRUCTURE

Settlements Airport

LAND RECORDS

LAND STATUS

General Land Ownership School And Mental Health Grant Lands Subdivisions - Quadrangle Based

LAND USE

Scenic/Special Places

MINERAL POTENTIAL

MINERALS

Mineral Terrane

Mineral Deposits and Occurrences

Surface Min/Quarry and Underground Mine Entrance

OIL AND GAS

Oil and Gas Potential

PHYSIOGRAPHIC PROVINCE

Climate Zones

Physiographic Province

Topographic Character & Situation

POLITICAL & ADMINISTRATIVE UNITS

Municipality-Borough Number/Name Special National Designation

QUADRANGLE BOUNDARIES (See Statewide Coverage)

RECREATION USE

ROADS

Road Characteristics

SLOPE (See Statewide Coverage)

SUBSISTENCE

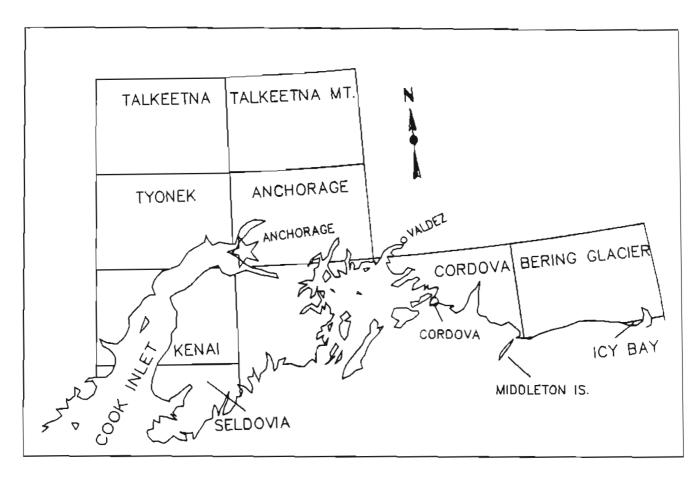
TOWNSHIP SECTION GRID (See Statewide Coverage)

TRAILS

Access

Iditarod National Historic Trail

VEGETATION (Landcover)



MAP 18-REGIONAL DATABASE COVERAGE FOR SOUTHCENTRAL ALASKA

REGIONAL COVERAGE

NAME: SOUTHCENTRAL

<u>DESCRIPTION</u>: The information included in this database was compiled as part of the Alaska Land and Resource Mapping Program. This program involved the systematic preparation, mapping and automation of natural resources data in a standardized approach for data classification and resolution. This standardization provides a consistent interpretation of the individual data elements as they apply to different areas throughout the state.

<u>SCALE</u>: 1:250,000

RESOLUTION: 160 (Land Status), 640 acres (All other data elements).

STATUS: Manual maps and automated files complete

DATE: 1982 (Compiled)

DOCUMENTATION: Alaska Land and Resource Mapping Program: Final Report,

Volume 1 'System Design and Development';

Volume 2 'Data Base Users Guide';

Volume 3 'Auxillary Information' prepared by ESRI for ADNR-

DGGS-Resource Analysis Section.

SOURCE AGENCY: ADNR

CONTACT: ADNR-DGGS, Resource Analysis Section

QUADRANGLE COVERAGE:

ANCHORAGE MIDDLETON ISLAND

BERING GLACIER SELDOVIA
CORDOVA TALKEETNA

ICY BAY TALKEETNA MOUNTAIN

KENAI TYONEK

DATA TOPICS:

ASPECT (See Statewide Coverage)

BIBLIOGRAPHY

COAL

Isolated Coal Resource Sites And Underground Mines

Coal Resource Areas

Coal Leases

Coal Prospecting Permit Application

Coal Mining Permits

ELEVATION (See Statewide Coverage) Elevation Province

FISH AND GAME

Anadromous Fish Stream Surveys
Anadromous Fish Type
Fresh Water Fish Species Distribution
Salmon Type
Sport Fishing Pressure
Sport Fishing By Fish Type
Brown Bear Concentration Along Fish Streams
Raptors Use Areas
Onshore/Nearshore Biological Resources
Offshore Biological Resources
Wild Trout Management Waterbodies

FLOOD ZONE

GEOLOGIC CONSTRAINTS

Faults
Unstable ground
Volcano
Tsunami & Avalanche Zones

GEOLOGY, ENGINEERING

Quadrangle Based Landform

GEOLOGY, GENERAL

General Geology Source-Statewide General Geology Unit-Statewide

HISTORIC AND ARCHAEOLOGICAL SITES

HYDROLOGY

Stream Order
Stream Periodicity
Stream Origin (Glacial, Nonglacial)
Stream Condition (Braided, Nonbraided)
USGS Hydrologic Units
ADNR STORET Watershed Units
Ocean Domain/Zones of Upwelling
Ocean Bottom Sediment
Ocean Maximum Probable Extent of Ice Edge: Mid-March
Waterbody Navigability
Waterbody Negotiable By Watercraft
Thermal Springs

INFRASTRUCTURE

Transmission Line Pipelines Settlements Cemetery Airport

LAND RECORDS

LAND STATUS

General Land Ownership
School And Mental Health Grant Lands
Subdivisions - Quadrangle Based

LAND USE

Scenic/Special Places
Special National Designation

MINERAL POTENTIAL

MINERALS

Mineral Terrane
Favorable Mineral Resource Areas
Mineral Deposits and Occurrences
Surface Min/Quarry and Underground Mine Entrance

MODELS

Interpreted Wetlands Potential Groundwater Availability Visual Variety Class Erosion Potential Flood Hazard Geologic Hazards and Constraints Ecological Sensitivity Wildland Fire Hazard Soil Drainage Surface Engineering Constraints and Limitations New Town Capability Methanol Plant Capability New Town Suitability Methanol Plant Suitability Roads Capability/Suitability Transmission Lines Capability/Suitability Roads - Optimum Route Evaluation Existing Coal Lease Lands Hazards/Constraints Potential Coal Lease Lands Hazards/Constraints Potential Geothermal Lease Lands Hazards/Constraints Potential Coal Lease Lands Capability/Suitability Potential Geothermal Lease Lands Capability/Suitability

OIL AND GAS

Oil and Gas Wells
Oil and Gas Well Status
Oil and Gas Fields

Offshore Oil & Gas Basins

PHYSIOGRAPHIC PROVINCE

Climate Zones
Physiographic Province
Topographic Character & Situation

POLITICAL & ADMINISTRATIVE UNITS

Municipality-Borough Number/Name
Special National Designation
National System Type
National System Type Number/Name
State System Type
State System Type Number/Name
Other Public and Private Reserves
Census Areas and Subareas
U.S. Military Facility
Abandoned Mine Land Problem Areas
Public Waterbody Easement
Motorized Boat Corridor

QUADRANGLE BOUNDARIES (See Statewide Coverage)

RECREATION USE

ROADS

Road Characteristics Railroad

SLOPE (See Statewide Coverage)

SOIL

Major Land Resource Area (MLRA) Soil Map Unit

SUBSISTENCE

TOWNSHIP SECTION GRID (See Statewide Coverage)

TRAILS

Access

Iditarod National Historic Trail

VEGETATION (Landcover)

Vegetation Modifier Vegetation-Primary Call Vegetation-Secondary Call Vegetation Community (LANDSAT Based)

STATEWIDE COVERAGE

STATEWIDE COVERAGE

NAME: STATEWIDE

<u>DESCRIPTION</u>: This section of the data directory contains a list and a brief description of various data elements that have been acquired for the ADNR Geographic Information System. These particular data bases tend to be of a general detail one would expect to find associated with a statewide type of coverage. They are listed by data topic rather than topics within a database because the characteristics of the individual data topics are unique in each case.

CONTACT: DNR-DMGGS, Resource Analysis

DATA TOPICS: Slope, Aspect, Elevation

<u>DESCRIPTION</u>: DNR has data available for many of the 1:250,000 scale quadrangles throughout the state; others are available for purchase from U.S. Geological Survey at minimal cost. The elevation data was derived by digitizing the elevation contours from the 1:250,000 scale U.S.G.S. quadrangles. The slope and aspect were subsequently derived through computerized modeling algorithms.

SCALE: Acquired at 1:250,000 scale.

RESOLUTION: Contour interval of source map.

STATUS: Manual maps and automated files complete.

DATE: Variable, 1948 - 1979

DOCUMENTATION:

SOURCE AGENCY: U.S. Geological Survey

DATA TOPICS:

Hydrography Trails

Infrastructure Political & Admini-Roads strative Units

DESCRIPTION: These data are the USGS Geodata DLG data that are available for purchase from USGS. They are derived from the sectional maps of the 1970 National Atlas of the United States of America. Selective updating of the sectional maps was done before the digitizing operations. The atlas data was derived from the following sources: Bureau of the Census, Administering Federal agencies, Interstate Commerce Commission, LANDSAT imagery, National Oceanic and Atmospheric Administration Sectional Aeronautical Charts, Federal Aviation Administration, and U.S.D.I. Geological Survey maps.

SCALE: 1:2.000,000

RESOLUTION: Unknown

STATUS: Automated files complete

DATE: Revised 1979-80

<u>DOCUMENTATION</u>: U.S.G.S. Circular 895-D; "Digital Line Graphs From 1:2,000,000 Scale Maps."

SOURCE AGENCY: U.S. Geological Survey, National Cartographic Information Center

DATA TOPICS: Land Records, Land Status

<u>DESCRIPTION</u>: Land Records and Land Status information are available statewide from the DNR Land Administration System and the Bureau of Land Management (ALMRS) Alaska Land & Mineral Records System. LAS records can be displayed in any combination of case type, case status, and file type/file number.

SCALE: Can be reproduced at any scale.

RESOLUTION: Section or 640 acres generally, however resolution will

vary with the land status map. Some sections have been enlarged in scale in order to portray complex land admini-

stration situations.

STATUS: Automated files complete

DATE: Current and Updated

DOCUMENTATION: N/A

SOURCE AGENCY: U.S.D.I. Bureau of Land Management, Alaska

Department of Natural Resources

DATA TOPICS: Township Grid

<u>DESCRIPTION</u>: This is a mathematical protraction based on BLM protractions that can be applied to any map projection. It includes township and section boundaries.

SCALE: Any scale

RESOLUTION: Mathematically precise.

STATUS: Automated files complete

DATE: Current

DOCUMENTATION: N/A

SOURCE AGENCY: U.S.D.I. Bureau of Land Management

DATA TOPICS: Quadrangle Boundaries

<u>DESCRIPTION</u>: This is a mathematical protraction that can be applied to any map projection. It includes 1:250,000 and 1:63:350 scale quadrangle boundaries.

SCALE: Any scale.

RESOLUTION: The maximum resolution is the exact boundary of the

quadrangle base map. This can be displayed or mapped at

any scale with accuracy equal to the original map.

STATUS: Automated files complete

DATE: Current

DOCUMENTATION: N/A

SOURCE AGENCY: U.S.D.I. Bureau of Land Management

DATA TOPICS: Soils

<u>DESCRIPTION</u>: This database was compiled for the purpose of doing broad scale planning and management. It contains soils mapping done for the Exploratory Soil Survey. Use of this information for site specific decisions should be supplemented by specific investigations according to the projected land or resource use.

SCALE: 1:1,000,000

STATUS: Automated files complete

DATE: 1979

DOCUMENTATION: Exploratory Soil Survey of Alaska

SOURCE AGENCY: U.S.D.A. Soil Conservation Service

OTHER COVERAGE

OTHER COVERAGE

NAME: U.S. FOREST SERVICE

This database resides at the U.S. Forest Service Region 10 DESCRIPTION: office and the Forestry Sciences Laboratory. The data is primarily for the national forests contained within the boundaries of Alaska.

SCALE:

1:15,840

RESOLUTION:

5 acres

STATUS:

Manual maps and automated files complete

DATE:

Various

DOCUMENTATION:

SOURCE AGENCY:

U.S. Forest Service

CONTACT:

Initial contact can be made to ADNR-DGGS, subsequent contact may be required of the specific Forestry Service

office with the pertinent information.

DATA TOPICS:

LAND RECORDS

LAND STATUS

MODELS

VEGETATION (Landcover)

OTHER COVERAGE

NAME: U.S. FISH & WILDLIFE SERVICE NATIONAL WILDLIFE REFUGES

DESCRIPTION: This data resides at the U.S. Fish and Wildlife Service and was developed primarily for the management of the sederal wildlife refuges. The data is limited to the boundaries of the refuge. The automated data is compatible with DNR's GIS and can be transferred here for analysis.

SCALE:

1:63,360, and 1:250,000

RESOLUTION:

10 acres

STATUS:

Mapped and automated

DATE:

1982 - 1986

DOCUMENTATION:

SOURCE AGENCY: U.S.F.&W.S.

CONTACT:

Initial contact can be made to the ADNR-DGGS, Resource

Analysis Section. Subsequent contact may be required with

the U.S.F.&W.S.

DATA TOPICS:

ELEVATION

FISH & GAME

HYDROGRAPHY

INFRASTRUCTURE

LAND RECORDS

LAND STATUS

QUADRANGLE BOUNDARIES (See Statewide Coverage)

ROADS

SLOPE (See Statewide Coverage)

TRAILS

VEGETATION

Landcover (LANDSAT with habitat orientation)

GLOSSARY

- ADF&G Alaska Department of Fish and Game
- ADNR Alaska Department of Natural Resources
- AGRA Arctic Geo Resource Associates
- ALMRS Alaska Land and Mineral Records System, administrative record system of the U.S.D.I. Bureau of Land Management.
- Aspect Information which designates the North, East, South, West, or degrees of variation within those cardinal directions of sloping land surface. These can in most cases be presented in 2 degree intervals.
- Bibliography A list of documented references used to prepare the database.
- BLM U.S. Department of Interior, Bureau of Land Management
- Coal Information about the location of coal deposits, and in many instances, information about quantity and grade could be acquired and related to the deposit locations.
- Contact. The agency to call for information about the database, or data topic.
- Date Date the database was completed, or the period during which it was developed.
- DGGS Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys.
- DL&W Alaska Department of Natural Resources, Division of Land and Water.
- Documentation Technical reports related to the specific database. In some instances related documents are also listed; these can usually be distinguished from technical documents by their name, such as a planning report.
- DRD Alaska Department of Natural Resources, Division of Research and Development. This division is no longer in existence, it was disbanded in June 1983.
- DTS Alaska Department of Natural Resources, Division of Technical Services, this division was disbanded in January 1986.
- Elevation Information about the elevation or height above sca level for various locations for which it is available. Most of this data comes from the Digital Elevation Model data derived from the U.S. Geological Survey 1:250,000 scale quadrangle maps of Alaska.
- ESRI Environmental Systems Research Institute, a private firm which was contracted to complete some of the database mapping and automation work.
- Fish and Game Information related to fish populations, species, habitat, or game populations, species, and habitat, that is available through networking with the Alaska Department of Fish and Game, Habitat Division.
- Flood Zone Information about zones which are periodically flooded by excess river or stream runoff.
- Geological Constraints Information about areas of soil slumping, faults, high river banks with erosion, avalanches and other significant geologic forces which may present environmental or physical constraints to uses of the land surface.

- Geology, Engineering Information about the material composition of the top 25 feet of the earths surface. This information is most useful for determining land surface uses such as construction site evaluations for stability or building materials, limitations to land uses such as permafrost, suitability/capability evaluations for land settlement, and so forth.
- Geology, General Basic information on bedrock sublayers, formation name, rock age and general geologic characteristics.
- GIS Geographic Information System, generally refers to the use of computer supported mapped information, which is geographically referenced to the surface of the earth. This is basically natural resource information in the case of the ADNR-DGGS Resource Analysis Section GIS.
- Historic and Archaeologic Sites Information about the location of known historic or archaeological sites in Alaska. This is proprietary information and can only be viewed by people with a need to know. For specific information on its availability contact the Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation.
- Hydrography Information about the river and stream network present in a geographic area. In some instances this includes water quantity and quality information.
- Infrastructure Information about man made structures, developments or communities.
- Land Records Information about the historical and current owners, permits, designated land classifications. This information is nearly all contained either on the Alaska Department of Natural Resources Land Administration System or the U.S.D.I. Bureau of Land Management ALMRS land record system. This information is networked with the ADNR GIS and can then be integrated with other natural resource information present on the system.
- LANDSAT Information derived from orbital satellite images. This information usually refers to classified satellite images depicting surface land cover, in particular it is usually depicting vegetation land cover conditions.
- Land Status Information about land ownership. This information is networked in from the ADNR Land Administration system, or the BLM ALMRS land record system. See 'Land Record' above. Custom land status maps prepared for each ALMRS database are also included.
- Land Use Information that has been mapped showing the types of existing land uses found in a particular location, such as berry picking, skiing, horse back riding and so forth. This information is not a duplication of the ADF&G hunting and fishing use information. For a total picture of land use, both ADF&G and ADNR GIS 'Land Use' information should be reviewed.
- Local Coverage Refers to the areal coverage of a particular type of database. Local refers to localized geographic areas of Alaska covering an area in size ranging from 40,000 acres to 5,000,000 acres. This type of coverage is usually mapped at a scale of 1:63,360 or larger scale, or more detailed than 'Regional' type coverage.

- Mineral Potential Information about the likelihood of the presence of minerals in a geographic location. This information is a composite estimated based on approximately 15 different geologic factors per location.
- Minerals Information about specific substances generally defined as minerals in the traditional geologic sense. This information will usually include location, type, and in some cases general references to quality.
- MLRA Major Land Resource Areas, a land classification designation assigned by the U.S. Soil Conservation Service to areas having similar soil series designations.
- Models Information about specific models developed for specific databases. Models are simulations of real life situations based on past or know characteristics associated with a specific activity or instance. In the case of the ADNR GIS, a model is usually a computerized statistical or map overlay simulation of known resource characteristics or environmental factors used to determine land suitability/capability for a proposed land use. In addition to the models listed many customized models were developed for DNR's area and management planning process.
- NSB North Slope Borough.
- Oil and Gas Information about potential oil and gas resources. Due to the sensitive nature of this type of information, the level of information presented in the GIS is very general and does not contain proprietary or specific quantification of oil and gas resources.
- Other Coverage Refers to the areal coverage of a particular type of database. These databases are ones for which the ADNR GIS have access through other agencies, usually areas not owned or managed by state agencies.
- PDF 'Public Data File' refers to a particular series of reports maintained by DGGS.
- Physiographic Province Information about a broad categorization of the various regions of Alaska. The classification is based on generalized physical, geologic, or biologic characteristics such as temperature, elevation, geologic land forms, and vegetation composition.
- Political & Administrative Units Information about generally artificial boundaries that are applied to areas of Alaska for various management purposes. Examples are elections district boundaries, borough boundaries, education district boundaries, municipal boundaries, park boundaries and so forth.
- Quad Boundaries Computerized locational information depicting the quadrangle boundaries of 1:63,360 or 1:250,000 scale U.S.G.S. series maps.
- Quadrangle Coverage The area of coverage of a database as it corresponds to the quadrangle boundaries of 1;63,360 or 1:250,000 scale U.S.G.S. series maps.
- Recreation Use Information about current land uses which relate to recreational land uses, such as skiing areas, sledding areas, scenic viewing, hiking, etc.
- Regional Coverage Refers to the areal coverage of a particular type of database. Regional refers to large geographic areas of Alaska covering an area in size ranging from 5,000,000 to 50,000,000 acres.

- This type of coverage is usually mapped at a scale of 1:250,000 or smaller scale, or less detailed than 'Local' type coverage and more specific information than 'Statewide' type of coverage.
- Resolution Refers to the relative detail of the database in terms of the minimum size of the smallest area defined in the database. A resolution of 40 acres means the smallest areas delimited on the map is 40 acres.
- R & M Consultants Resource mapping and engineering consultants.
- Roads Information about the transportation routes found in a particular area or database.
- Scale Describes the relationship of the mapped information displayed as a ratio to the true size on the ground. For example, 1:63,360 means that 1 inch on the map corresponds to 63,360 inches on the ground.
- SCR-DL&W Alaska Department of Natural Resources, Southcentral Region, Division of Land and Water.
- Slope Information about the orientation of the earth's surface to a true level or zero attitude plane. This information in the ADNR GIS is usually derived from the Digital Elevation Model data generated from the U.S.G.S. 1:250,000 scale map topographic (elevation) information, general expressed as a proportioned percent ranging from 0 to 1000. It can be portrayed in 2 degree intervals.
- Soil Information about soil series classifications applied to the various soils of Alaska. These classifications can usually be cross-referenced with a soil description about the specific properties, composition, and moisture content of the soil class. These descriptions can be obtained from the U.S.D.A. Soil Conservation Service.
- Source Agency The agency who generated the information, or had the database, or data topics developed.
- Status Refers to the relative state of completion that a particular database is in. For example, is the database mapping done, but the automation not done; or is both the mapping and automation work been completed.
- Subsistence Information about the human uses of fish and/or wildlife species and populations by native Alaskans. This information is available from the ADF&G Subsistence Division, and can be networked with the ADNR GIS.
- Township Grid Computerized locational information about the range, township, section grid used for legal land ownership descriptions as it is portrayed in the State of Alaska. This grid can be portrayed on any data base which has established locational registration.
- Trails Information about trails and the condition of their use as found in areas of Alaska as covered by the various databases.
- USDA-FS U.S. Department of Agriculture, Forest Service.
- USSCS U.S. Department of Agriculture, Soil Conservation Service.
- Vegetation Information about the species and composition of vegetation found in various areas of Alaska. In many cases this includes a quantification of the timber resources such as tree size and quality.