

Smart Communities
need Smart Data



Alaska Geospatial Council GeoPortal Technical Working Group

Presented at the Alaska Smart Communities Forum February 7, 2017

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People · Systems · Data



2006-2012



www.alaskamapped.org

Alaska Statewide Digital Mapping Initiative

Primary goals:

1. Acquire new and better maps for Alaska, and
2. Make existing map products more easily available.

ALASKA
DEPARTMENT OF
COMMERCE,
COMMUNITY,
AND ECONOMIC
DEVELOPMENT

Alaska Department of
Military & Veterans Affairs



UNIVERSITY
of ALASKA
Many Traditions One Alaska

Alaska Department of
Natural Resources



Alaska Department of
Fish and Game



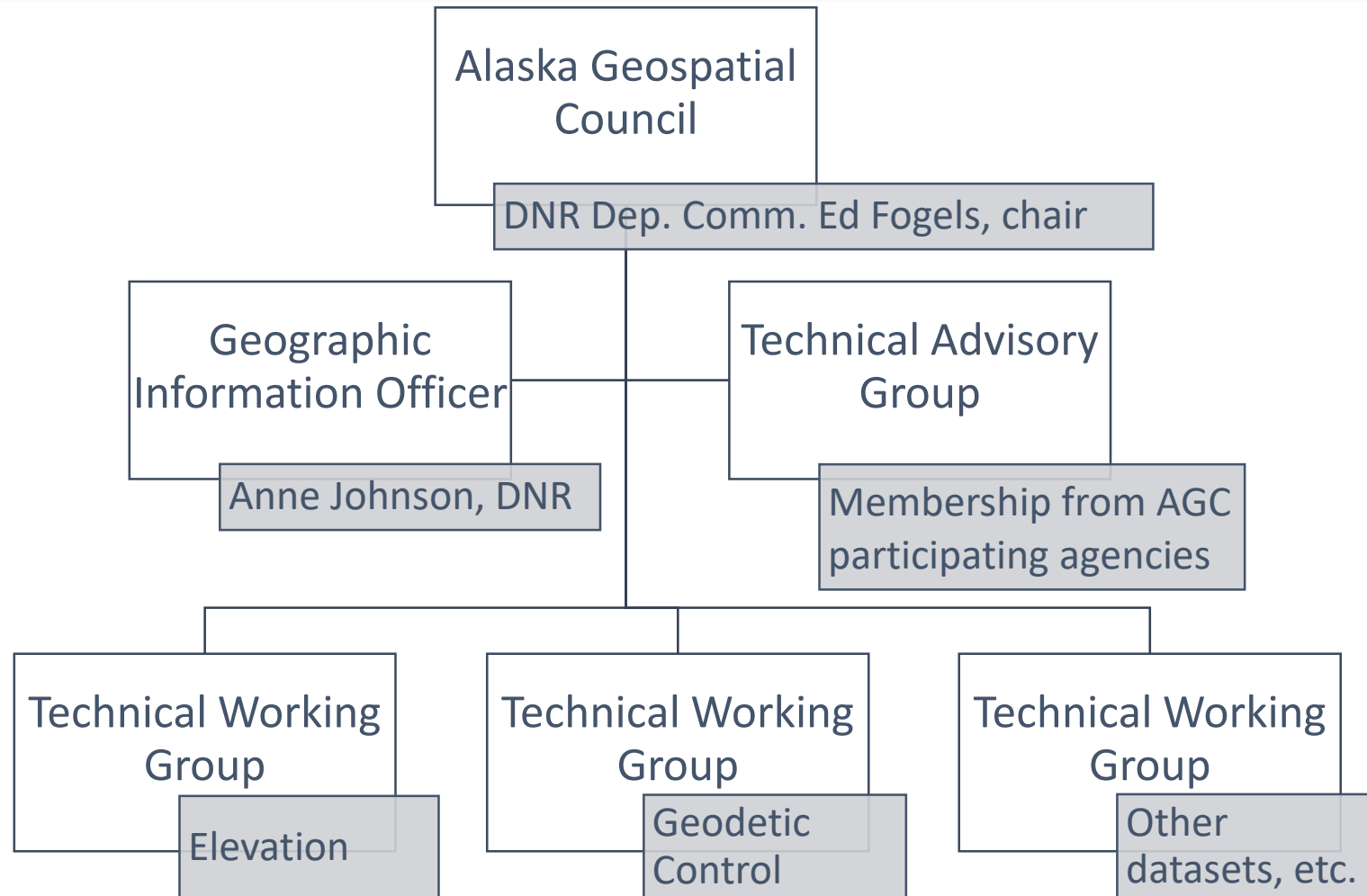
Alaska
DEC
Alaska Department of
Environmental Conservation



Alaska Department of
Transportation & Public Facilities



Alaska Geospatial Council



People · Systems · Data

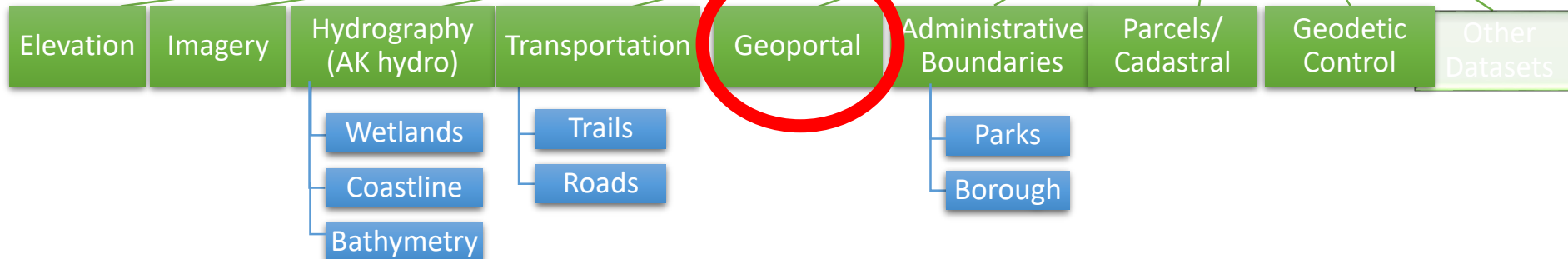
Collaborative development of geospatial infrastructure

Alaska Geospatial Council

Technical ideas and solutions pertaining to geospatial technologies
Strategic planning, budgetary and policy development

Technical Advisory Group
Policy Advisory Group
Framework Implementation Team

Coordination of acquisition and distribution of framework datasets (standards)

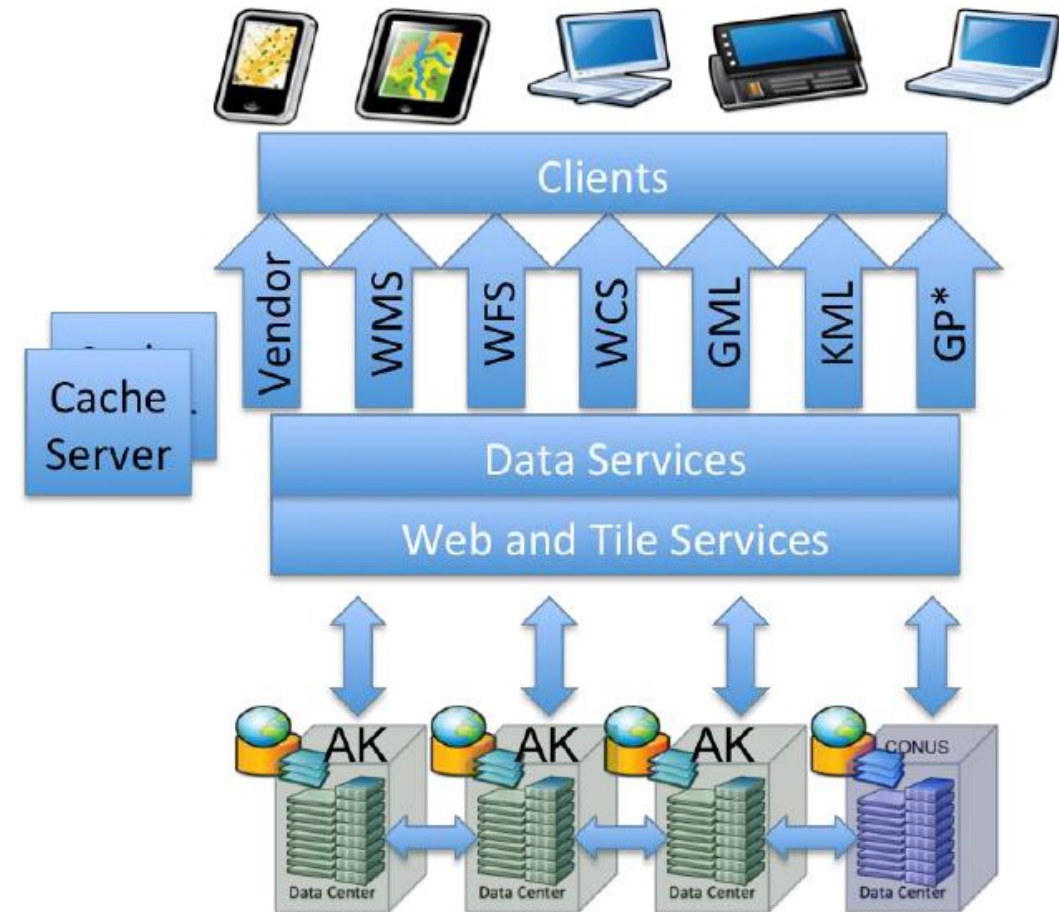


Working Groups: make recommendations for data acquisition, maintenance and distribution to Alaska Geospatial Council; develop data standards and define data models. Additional groups or subgroups deployed as needed.

State Geoportal:

Requirements

- Low bandwidth access*
- Map tile download*
- Clip, zip, ship*
- Non-ftp and non-http access*
- Committed funding*
- Metadata publication*
- Reference non-hosted data*
- Authentication for restricted data*
- Data access logs*
- Data collaboration tool*
- COOP capability*
- Data archiving and redundancy*



Alaska Geospatial Council

Geoportal Technical Working Group

- Kick off Meeting Nov. 3
- Met Dec. 7 and Jan. 11

- Alaska Biological Research
- Alaska Dept. of Environmental Conservation
- Alaska Dept. of Fish & Game
- Alaska Dept. of Natural Resources
- Alaska Dept. of Transportation
- Alaska Ocean Observing System
- Dewberry
- GeoNorth
- Joint Base Elmendorf-Richardson
- Matanuska-Susitna Borough
- Municipality of Anchorage
- Pipeline Open Data Standard
- Resource Data, Inc.
- U.S. Geological Survey
- U.S. Forest Service
- University of Alaska

Data Sources

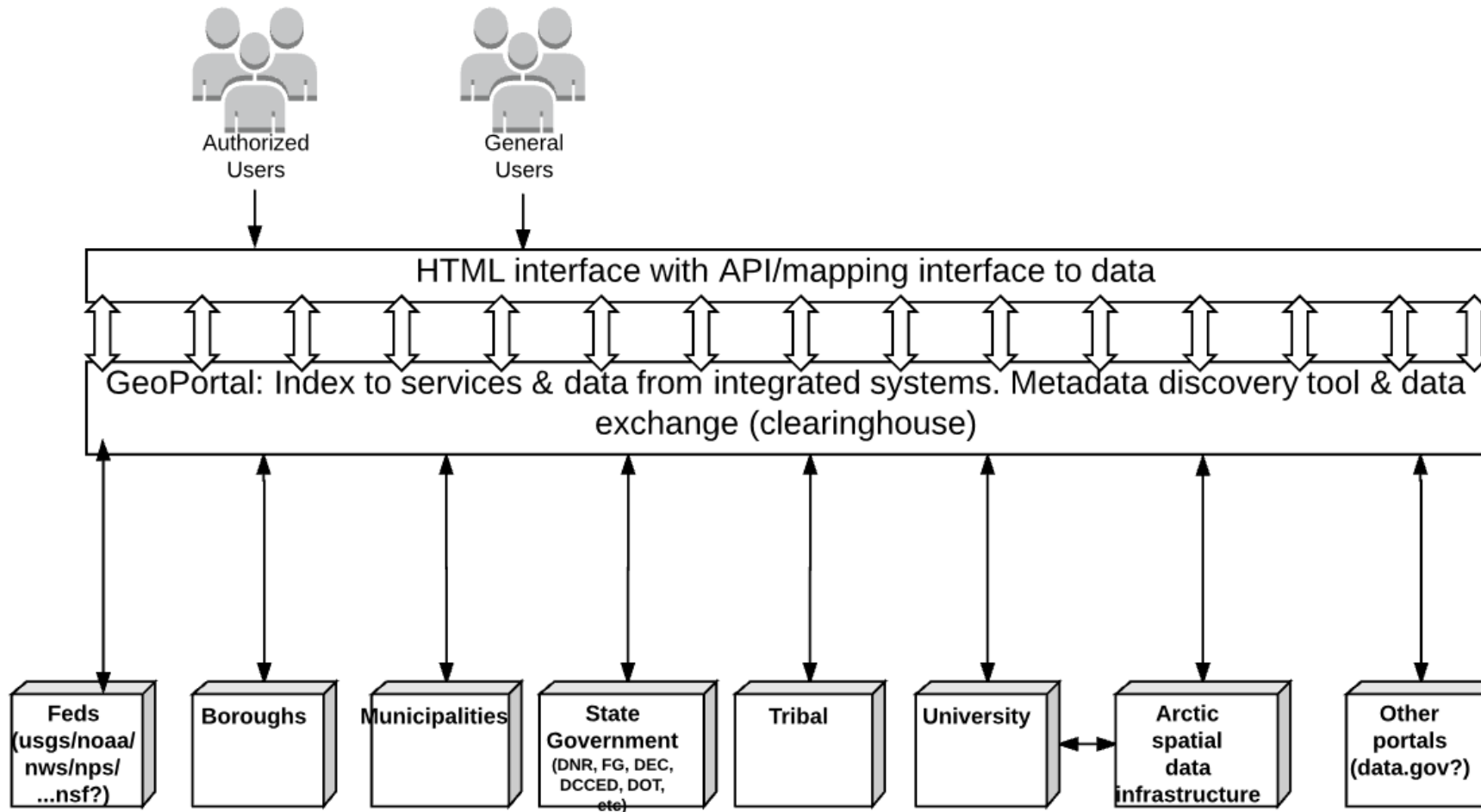
- Google spreadsheet
- 236 data sources added so far
- ~80% with available metadata online
- Problems with metadata consistency

The screenshot shows a Google spreadsheet titled "Data Sources" with the following columns: Theme (i.e., transportation, hydrography, imagery, etc.), Dataset (Name), Source (agency), Point of Contact, Contact email, Contact phone, Considered authoritative?, and Metadata Available?. The spreadsheet lists 50 data sources, including categories like cultural, boundaries, biology, and environmental. Many entries include a URL for metadata availability.

1	Theme (i.e., transportation, hydrography, imagery, etc)	A	B	C	D	E	F	G	
2	1	Theme (i.e., transportation, hydrography, imagery, etc)	Dataset (Name)	Source (agency)	Point of Contact	Contact email	Contact phone	Considered authoritative?	Metadata Available?
2	cultural		Cities	ADCED/ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
3	boundaries		ADEC Contingency Planning Regions	ADEC/DNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	No	http://dnralaska.gov/n
4	boundaries		ADFG Game Management Units	ADFG	Rebecca Strauch	rebecca.strauch@alaska.g	907-267-2408	No	
5	Boundary (management)		Commercial Fisheries Statistical Areas	ADFG/CF	Sabrina Larsen	sabrina.larsen@alaska.g	907-465-6103	Yes	
6	Boundary (management)		ADFG Game Management Units (and UCI	ADFG/DWC	Rebecca Strauch	rebecca.strauch@alaska.	907-267-2408	Yes	
7	Boundary (management)		Hunt areas (wildlife)	ADFG/DWC	Rebecca Strauch	rebecca.strauch@alaska.	907-267-2408	Yes	
8	Boundary (management)		Wildlife management "special areas"	ADFG/DWC	Rebecca Strauch	rebecca.strauch@alaska.	907-267-2408	Yes	
9	Biology		Anadromous Waters Cataog	ADFG/SF/RTS	J Johnson	dfig.dsf.gis@alaska.gov	907-267-2337	Yes	
10	Biology		Habitat Management Guides	ADFG/SF/RTS	Jason Graham	Jason.graham1@Alaska.	907-267-2326	Archive	
11	Boundary (management)		Sport Fish Regulations	ADFG/SF/RTS	Jason Graham	Jason.graham1@Alaska.	907-267-2326	Yes	
12	boundaries		Administrative Large Parcels	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
13	boundaries		Alaska Seaward Boundary	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
14	boundaries		ANCSA Corporations	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060		http://dnralaska.gov/n
15	boundaries		Conservation System Units	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	No	http://dnralaska.gov/n
16	boundaries		DNR Regions	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
17	boundaries		Election Districts 1994	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
18	boundaries		Election Districts 2002	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
19	boundaries		Election Districts 2006	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
20	boundaries		Recording Districts	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
21	boundaries		Rural Education Attendance Areas	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
22	boundaries		Soil & Water Conservation Districts	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
23	boundaries		State Park Units through ILMA	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
24	classification		Disposable Interest	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
25	classification		General Land	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
26	classification		Habitat Land	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
27	classification		Legislatively Designated Areas	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
28	classification		Miscellaneous	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
29	classification		Recreation Land	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
30	classification		Reserved Use	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
31	classification		Special Use Land	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
32	cultural		Recording District Offices	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
33	cultural		USGS Place Names	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
34	environmental		AKP 1989 Shoreline Oiling	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
35	environmental		CIK 1989 1990 Shoreline Oiling	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
36	environmental		CIK 1989 Shoreline Oiling	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
37	environmental		CIK 1991 Shoreline Oiling	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
38	environmental		ESI Aleutian Islands	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
39	environmental		ESI Bristol Bay	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
40	environmental		ESI Cook Inlet	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
41	environmental		ESI Kodiak	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
42	environmental		ESI North Slope	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
43	environmental		ESI Northwest Arctic	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
44	environmental		ESI Prince William Sound	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
45	environmental		ESI Southeast	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
46	environmental		ESI Western	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
47	environmental		KAP 1989 1990 Shoreline Oiling	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
48	environmental		KAP 1991 Shoreline Oiling	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
49	environmental		KOD 1989 Shoreline Oiling	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n
50	environmental		Large Parcel Habit at Acquisitions	ADNR	GIS Public Access Coordinat	dnr.gispub@alaska.gov	907-269-8060	Yes	http://dnralaska.gov/n

ALASKA GEOPORTAL CONCEPTUAL OVERVIEW

1. Safe
2. Sustainable
3. Reliable
4. Stable



Many agencies and organizations are already providing data. A state geoportal will search registered locations for datasets and return matching results to users. Data is not stored by the geoportal, which serves only as an indexed reference system which passes requests to hosting agencies.

Alaska Department of Natural Resources



- 7 Divisions
 - [Agriculture](#), [Forestry](#), [Geological & Geophysical Surveys](#), [Mining, Land & Water](#), [Oil & Gas](#), [Parks and Outdoor Recreation](#), and [Support Services](#)
- Esri Geoportal
- ArcGIS Online
- ArcGIS Open Data
- [Alaska State Geospatial Data Clearinghouse](#)

The screenshot shows the homepage of the Alaska Department of Natural Resources Open Data Beta Site. The background is a satellite-style aerial view of a forested landscape with a river. The main heading reads "Welcome to Alaska Department of Natural Resources Open Data Beta Site". Below this is a sub-heading: "Your gateway to accessing geo-spatial land and resource data, applications, maps, and publications produced and maintained by the Department of Natural Resources." A search bar is visible. The page is divided into sections: "This is the community's public platform for exploring and downloading open data, discovering and building apps, and engaging to solve important local issues. You can analyze and combine Open Datasets using maps, as well as develop new web and mobile applications. Let's make our great community even better, together!" followed by "Using This Site" which explains how to use the search bar. A note at the bottom says "Note: To view a list of all available datasets type an asterisk '*' into the search bar above." At the bottom of the page, it says "The Divisions and Offices of the Alaska Department of Natural Resources" and "ArcGIS Online" with four icons representing different divisions or offices: a map of Alaska, the state outline, the State of Alaska seal, and the Alaska Division of Parks, Land & Rivers seal.

Questions?

Anne Johnson

Geospatial Information Officer

Alaska Department of Natural Resources

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