

Partners and Places: Updates and Discussions

Kenai Fjords National Park

Togiak National Wildlife Refuge

Chugach National Forest

Lake Clark National Park

NPS Alaska GIS Team

Southwest Alaska Network, NPS Inventory and Monitoring Program

Kenai National Wildlife Refuge

Kodiak National Wildlife Refuge

Becharof National Wildlife Refuge

Alaska Maritime National Wildlife Refuge

Katmai National Park

Ocean Alaska Science and Learning Center

Western Alaska LCC

UAA Environment & Natural Resources Institute

Kenai Fjords National Park

Fritz Klasner



Harding Ice Cap Camp

“The Top of the World”

In the spring of 1970, The Fish House News advertised round trip tickets from Seward to the Harding “Ice Cap” (FHN) for \$15.00 per person. Jackie and Joe Stanton, owners of Harbor Air, and Jim Arness of Nikiski, partnered to provide this unique sightseeing experience. Ten Ski-Doo's and three Ski-Boose awaited visitors on top of the ice field, where they could be rented for \$7.00 an hour.

“The emergency hut is well stocked and furnished at this time and will take care of as many as 20 people ‘cosily.’ There is a cooking stove as well as a heating stove.” (FHN)

The camp consisted of a 10' x 18' emergency hut constructed of corrugated plastic, mounted on skids, and an outhouse. The camp operator and mechanic, Arland Zimmerman, and his son, Gary, remained on site during much of the summer and welcomed visitors with winter boots as they stepped off the plane. Visitors typically spent two hours on site, where activities included snow machining, skiing, and snowshoeing.



Snowmachine Camp on Harding Ice Cap, 1970. Photograph Courtesy of Seward Community Library Association.



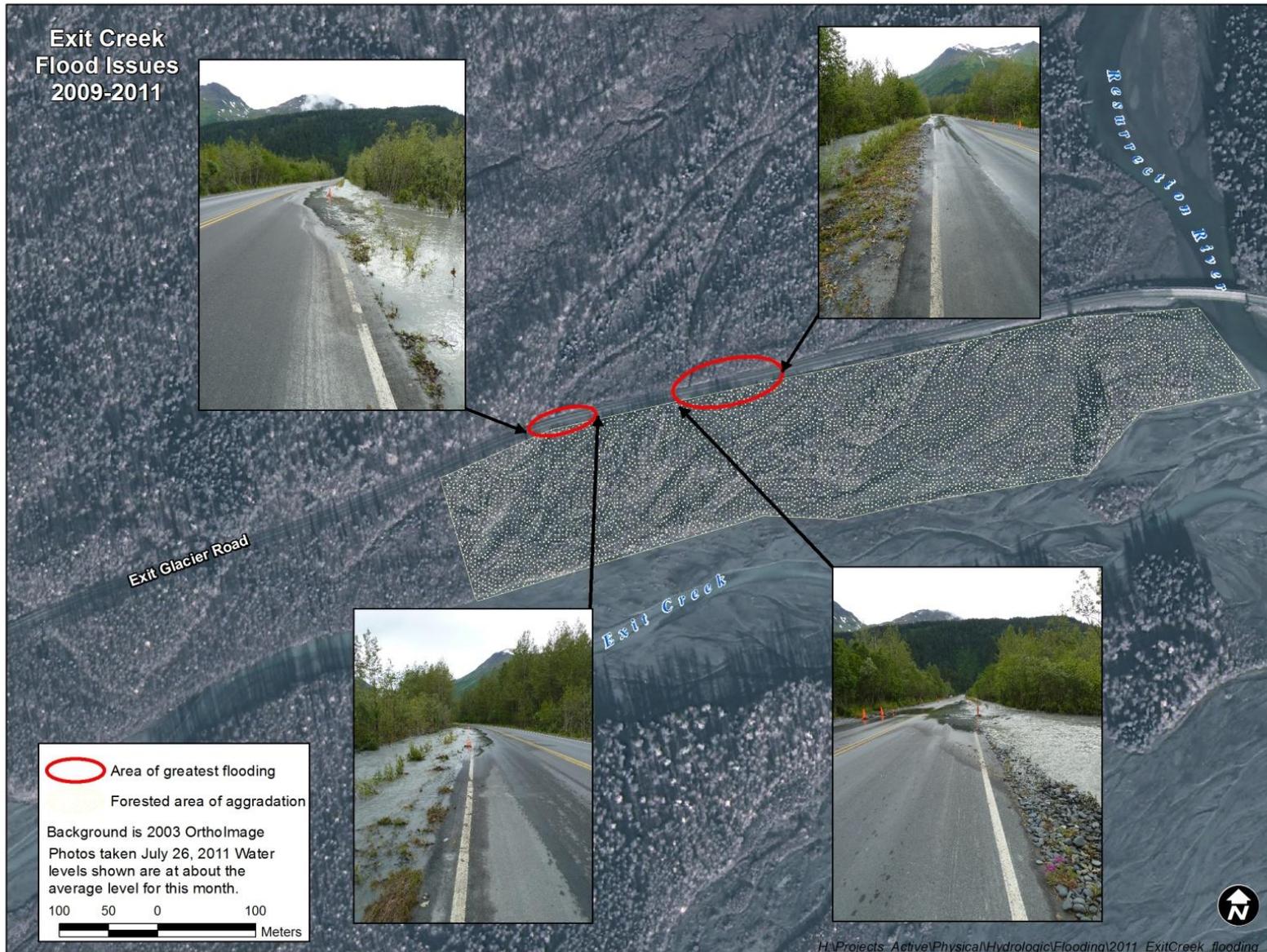
Harding Ice Cap warming hut and Ski-Doo line-up, 1970. Photograph Courtesy of Seward Community Library Association.

Operational Setback...

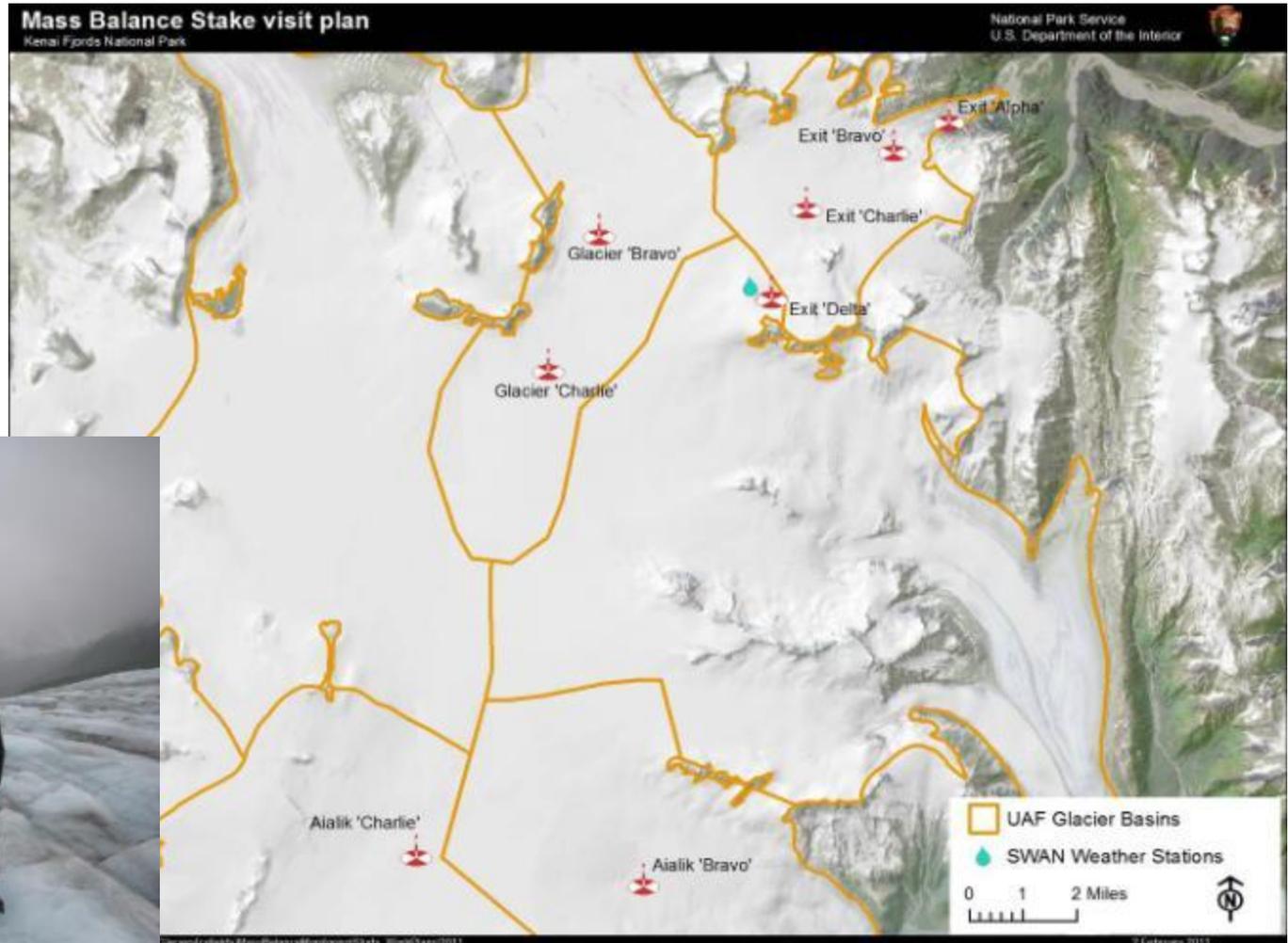
In 1966 the Harding Icefield was included the “land freeze” imposed by Secretary of the Interior Stewart Udall. This action halted conveyances of public lands to the State of Alaska until the Native Land Claims were resolved. An operational setback occurred when it was realized the camp was set up on BLM land, and a Special Use Permit was required. The BLM filed a trespass injunction against the operation as a consequence. Arness was ordered to vacate by November 1970. The partners were unable to remove the warming hut and other camp equipment, possibly due to inclement weather. The two year old business operation closed during the fall of 1970.

“I realize that the ‘land freeze’ contains certain stipulation that requires you issue the trespassing injunction...” (RB to VS)

Road Flooding



Glacier Mass Balance



Bald Eagle Monitoring

National Park Service
U.S. Department of the Interior



Natural Resource Program Center

Evaluation of a Survey Method for Estimating Number and Monitoring Occupancy of Bald Eagle Nests in Kenai Fjords National Park

Natural Resource Technical Report NPS/SWAN/NRTR—2009/271



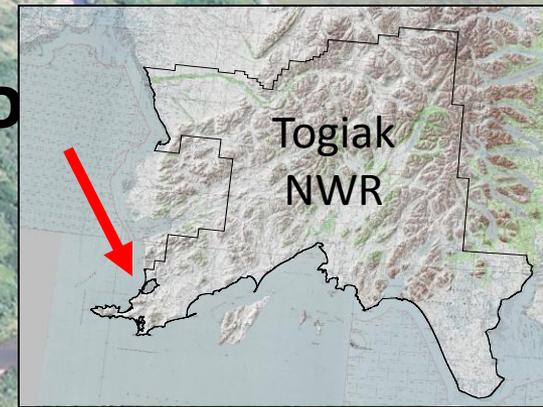
Check out the talk on Friday

Exxon Valdez Oil Spill
Trustee Council funding

Togiak National Wildlife Refuge

Patrick Walsh

Monitoring water quality in the Salmo River



Monitor pH, dissolved oxygen, **turbidity**, discharge, and temperature

Analyze water and sediments for trace metals

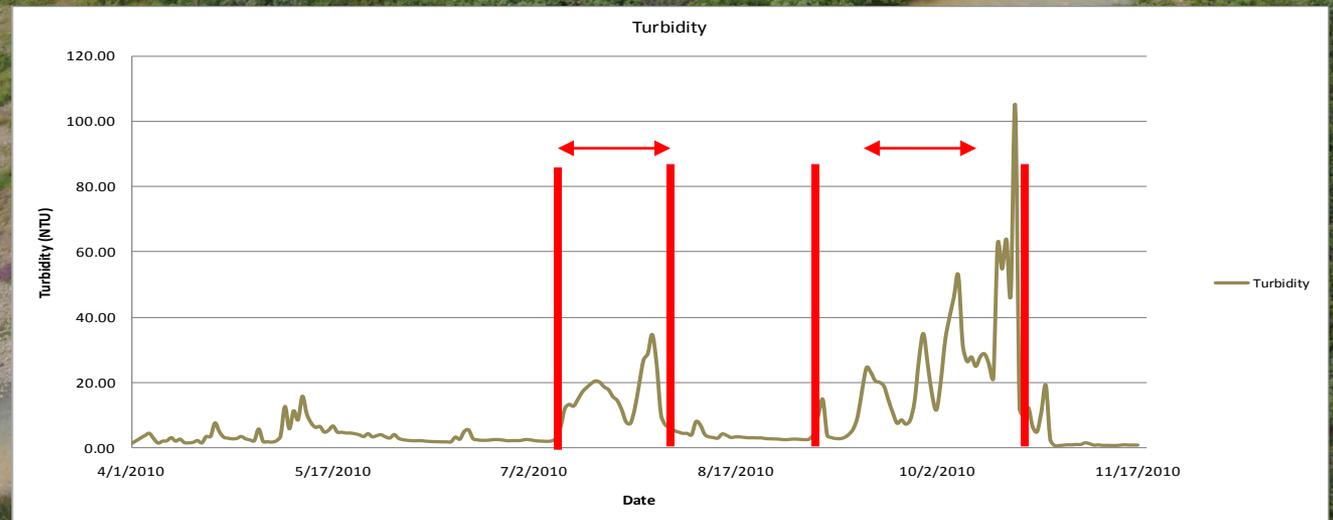


An aerial photograph of a wide, winding river system in a lush green landscape. The river flows from the top center towards the bottom left, with several meanders and oxbow-like curves. The surrounding terrain is a mix of vibrant green grass and some brownish patches, possibly indicating a dry season or specific soil types. The overall scene is a natural, scenic view of a river valley.

History

- Initial discovery and exploration 1920s
- Active operations for ~50 years
- Largely inactive since 1976
- Recently sold to XS Platinum
- Full scale operations are commencing

- Turbidity baseline: 4.04 +/- 2.8 NTU
- Turbidity above baseline during mining ops in 2010 and 2011 (exceeding 100 NTU)
- NOVs from ADEC, BLM, COE in 2011
- Mine halted discharge and is re-engineering processing ops



Future projections

- XS Platinum holds undeveloped claims on Togiak Refuge
- Full development planned in ~8 years.
- Seismic work planned fall 2011.
- Request for summer exploratory drilling anticipated.
- Most likely scenario— 25+ more years of active mining.

Chugach National Forest

Rob DeVelice

Some Chugach National Forest Tidbits



Anne Ver Hoef photo

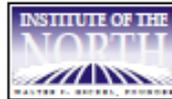
Prepared by Aaron Poe, Greg Hayward, Rob DeVelice, and Connie Hubbard

Classrooms for Climate

May 4 -7, 2011

A Symposium on the changing Chugach, northern ecosystems and the implications for science & society

Google "*classrooms for climate*"



Highlights

- Keynote: Majora Carter –Adaptation & Innovation
- David Cleaves, USFS –Changing Forests, Enduring values
- Shad O’Neel, USGS -Disappearing Ice, Rising Sea
- Charles Wohlforth –Nature & Human Nature
- Senators Mark Begich & Lisa Murkowski

22 Concurrent Climate Change Sessions

- From: Ecology, Economics, Education, Outdoor Recreation, Human Health, Adaptive Responses... etc.

10th International Youth EcoForum

- 50 Youth from Alaska, Russia, China, & Canada
- Declaration submitted to UN and 14 Arctic Governors



Chugach & UAA Next Steps..

Climate Change Vulnerability Assessment

- Foundation for setting adaptation priorities.
- Downscaled climate scenarios with (UAF) SNAP.
- Ecological & Socio-Economic Vulnerability Assessment (UAA) ISER

Landscape Roles & Contributions

- Community engagement over ecosystem and socioeconomic services in the region
- Landscape management communication platform

**Hot off
the
Press**

United States
Department of
Agriculture

Forest
Service

R10-MB-733

September 2011



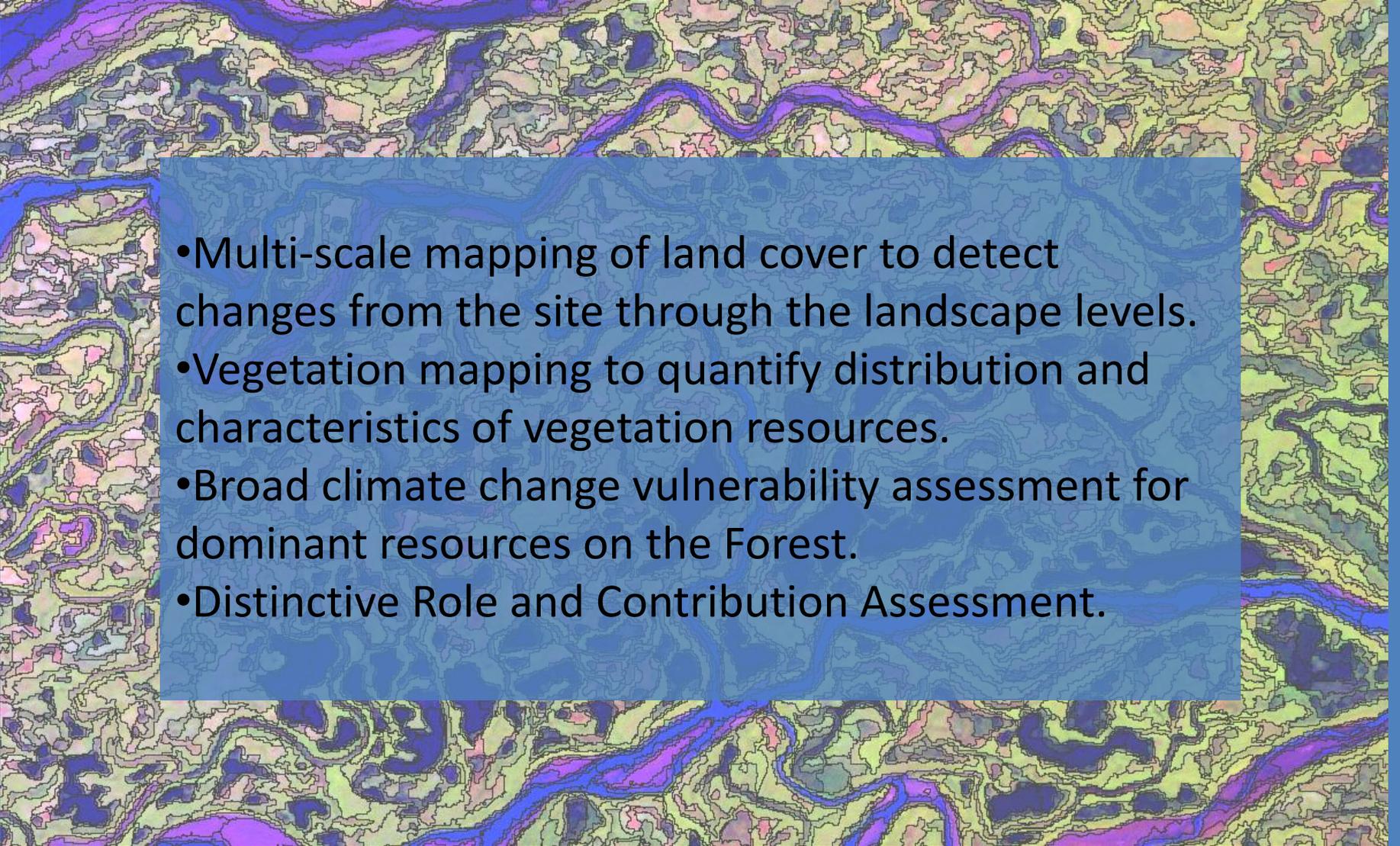
Monitoring Guide

For the Chugach National Forest Revised Land and Resource Management Plan



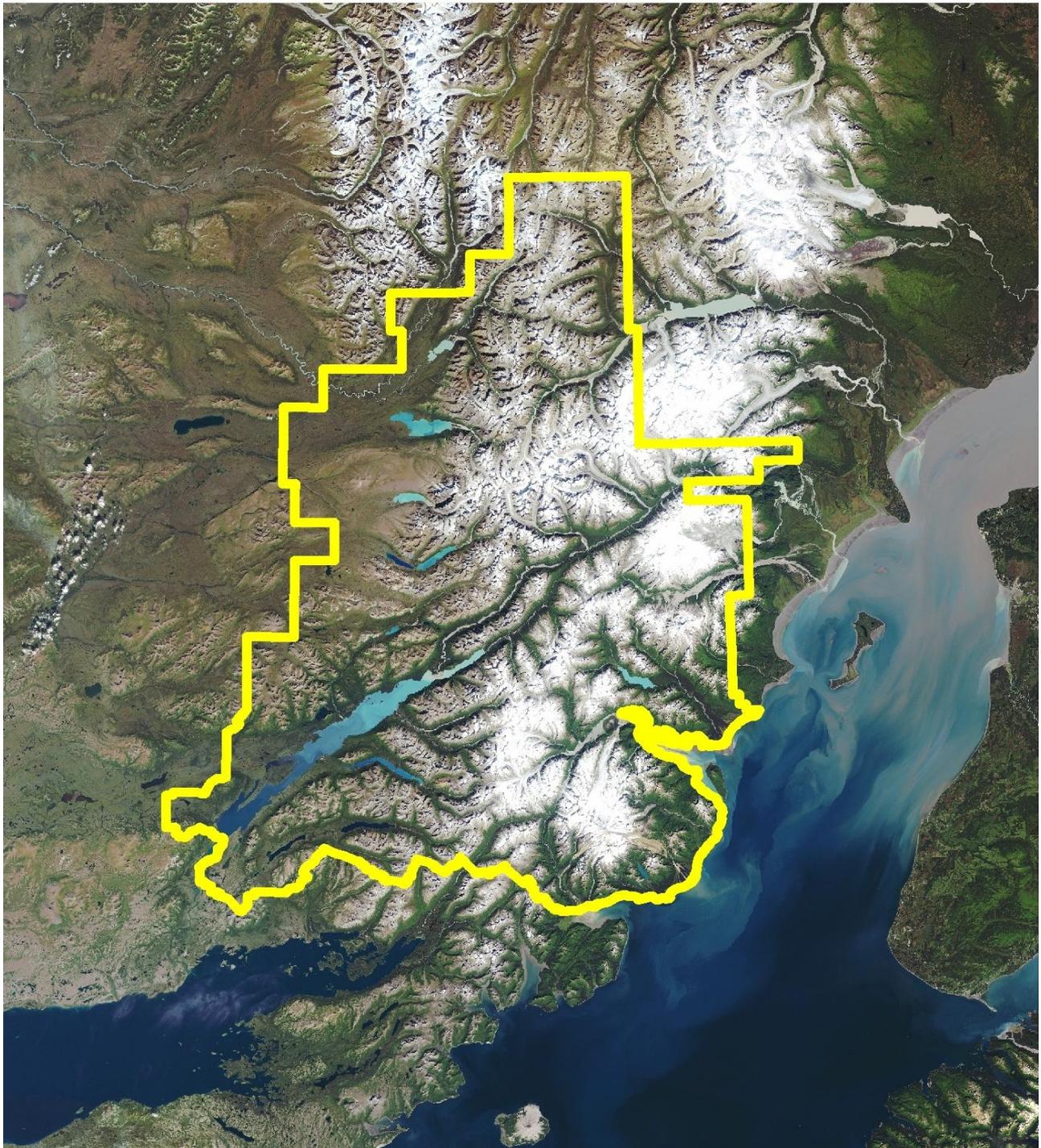
Google “2011 chugach monitoring guide”

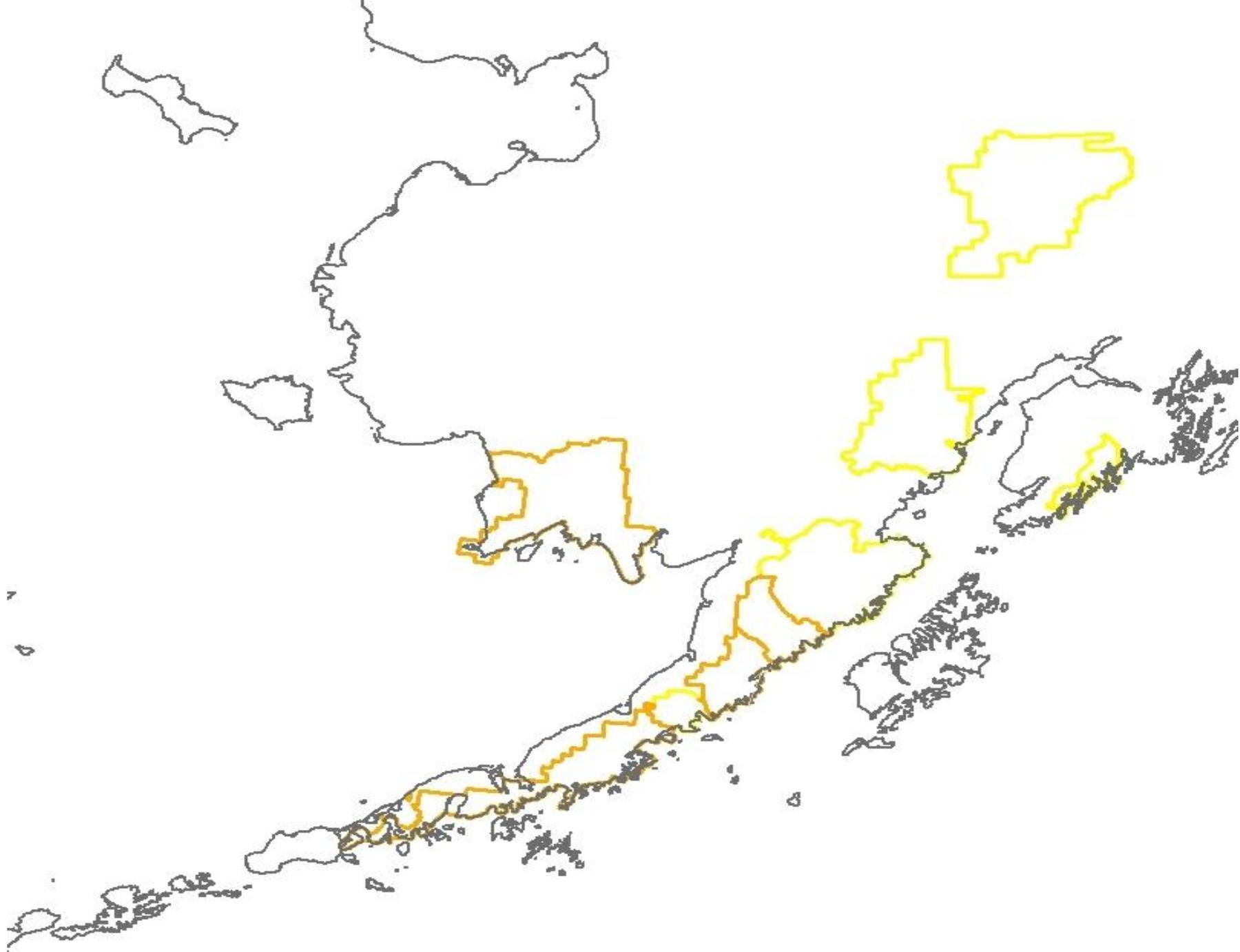
Information Needs Assessment

- 
- Multi-scale mapping of land cover to detect changes from the site through the landscape levels.
 - Vegetation mapping to quantify distribution and characteristics of vegetation resources.
 - Broad climate change vulnerability assessment for dominant resources on the Forest.
 - Distinctive Role and Contribution Assessment.

Lake Clark National Park & Preserve

Jeff Shearer





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Angie Southwold

GIS TEAM FOCUS: DATA STANDARDS

Angie Southwold, Alaska Region GIS



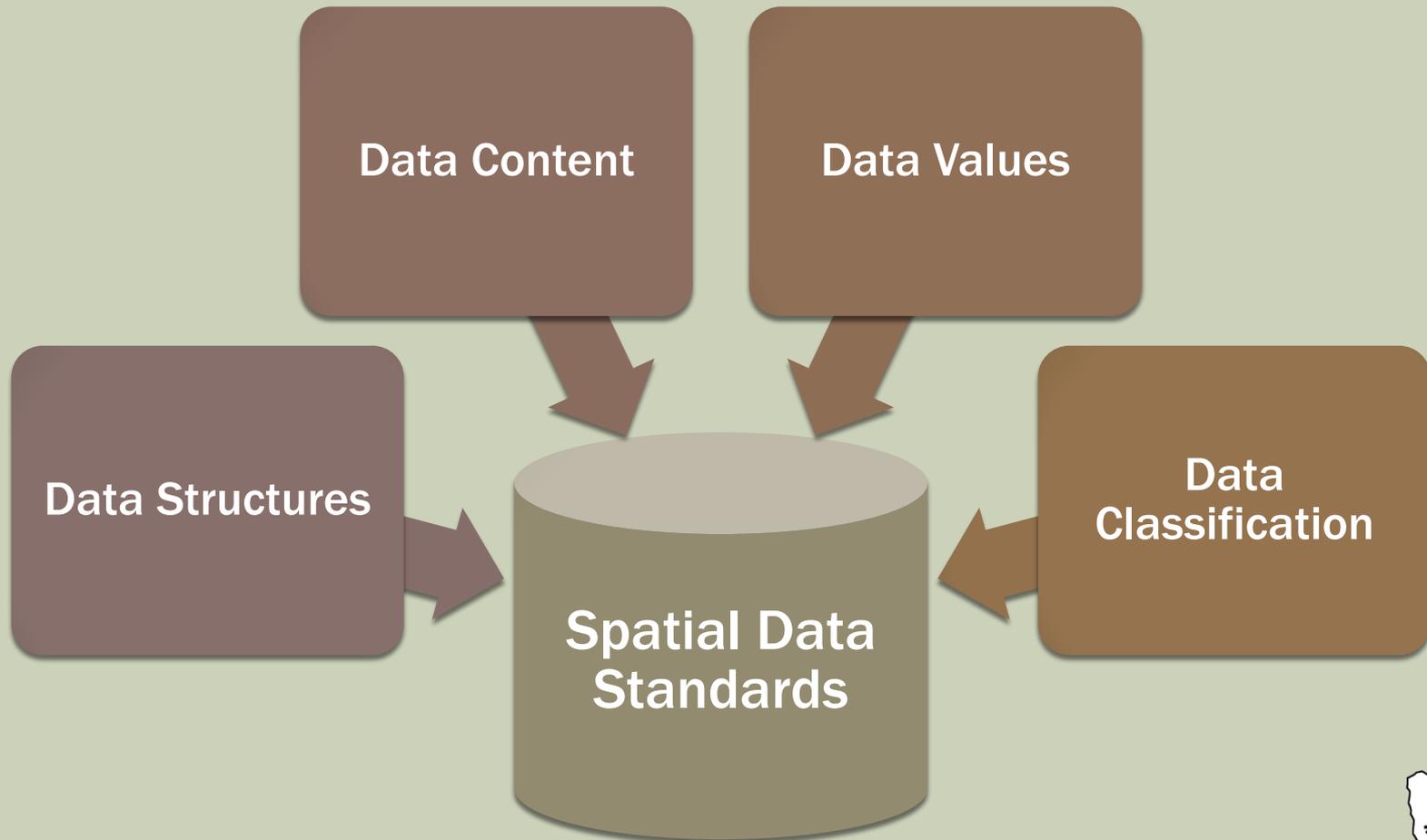
DATA STANDARDS OVERVIEW



- A data standard is an agreed upon “container” for common data
- Why?
 - Increase data compatibility
 - Improve the consistency and efficiency of data collection
 - Reduce data redundancy



DATA STANDARDS MODEL



DATA STANDARDS BENEFITS

When spatial data is standardized across the region, the AK Region GIS Team can:

Provide data models, documentation, and other tools for more efficient data input and management of spatial data.

Provide assistance with the regional compilation and maintenance of these datasets, while giving parks the ability to edit data locally.

Provide data processing and spatial analysis models for generation of uniform, comprehensive products.



GENERIC DATA STANDARD

Feature Description

Unique Identifier

Feature Type

Park Unit and Region

Feature Creation

Create and Last Edit Dates

Method Used to Create Feature

Data Source

Horizontal and Vertical Accuracy

Feature Usability

Use Restrictions due to Data Sensitivity

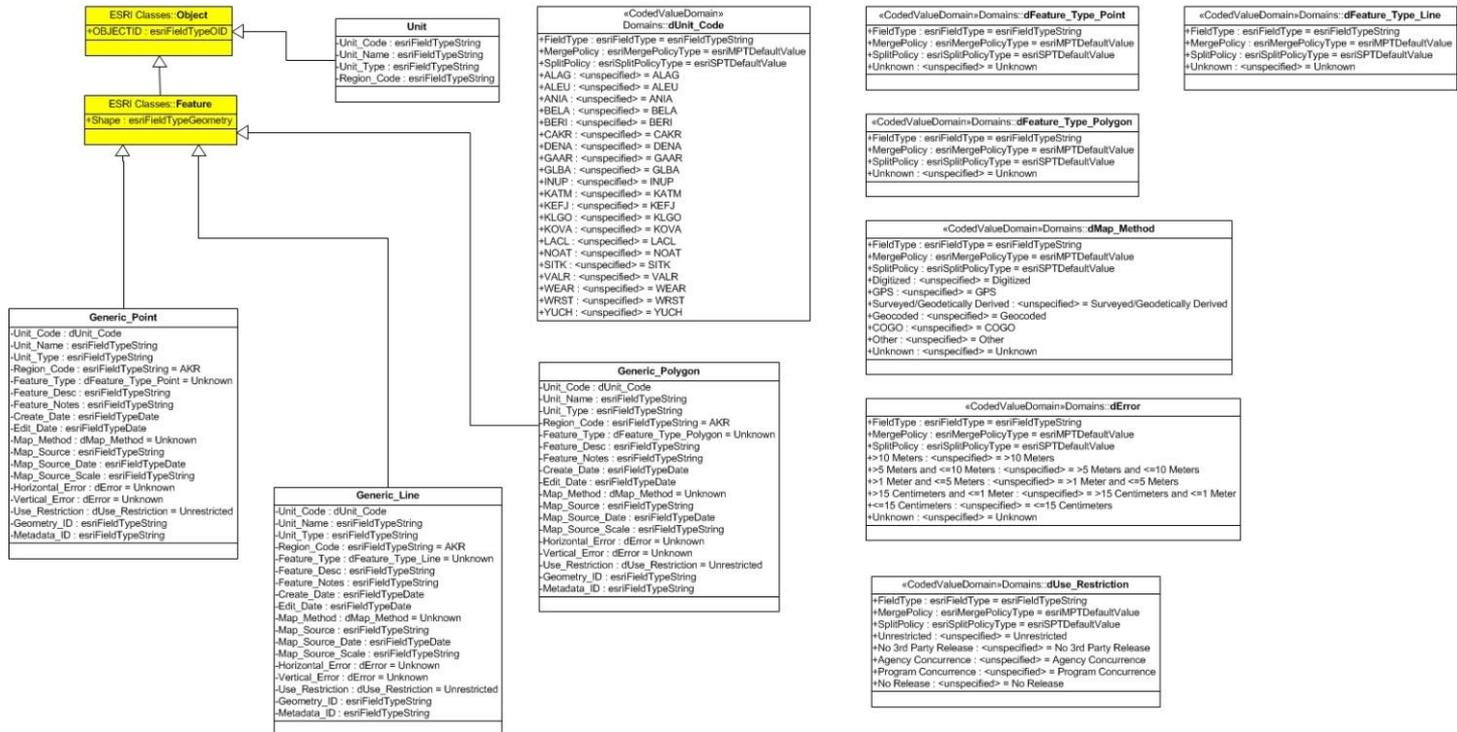
Link to Online Metadata Record

Additional Comments

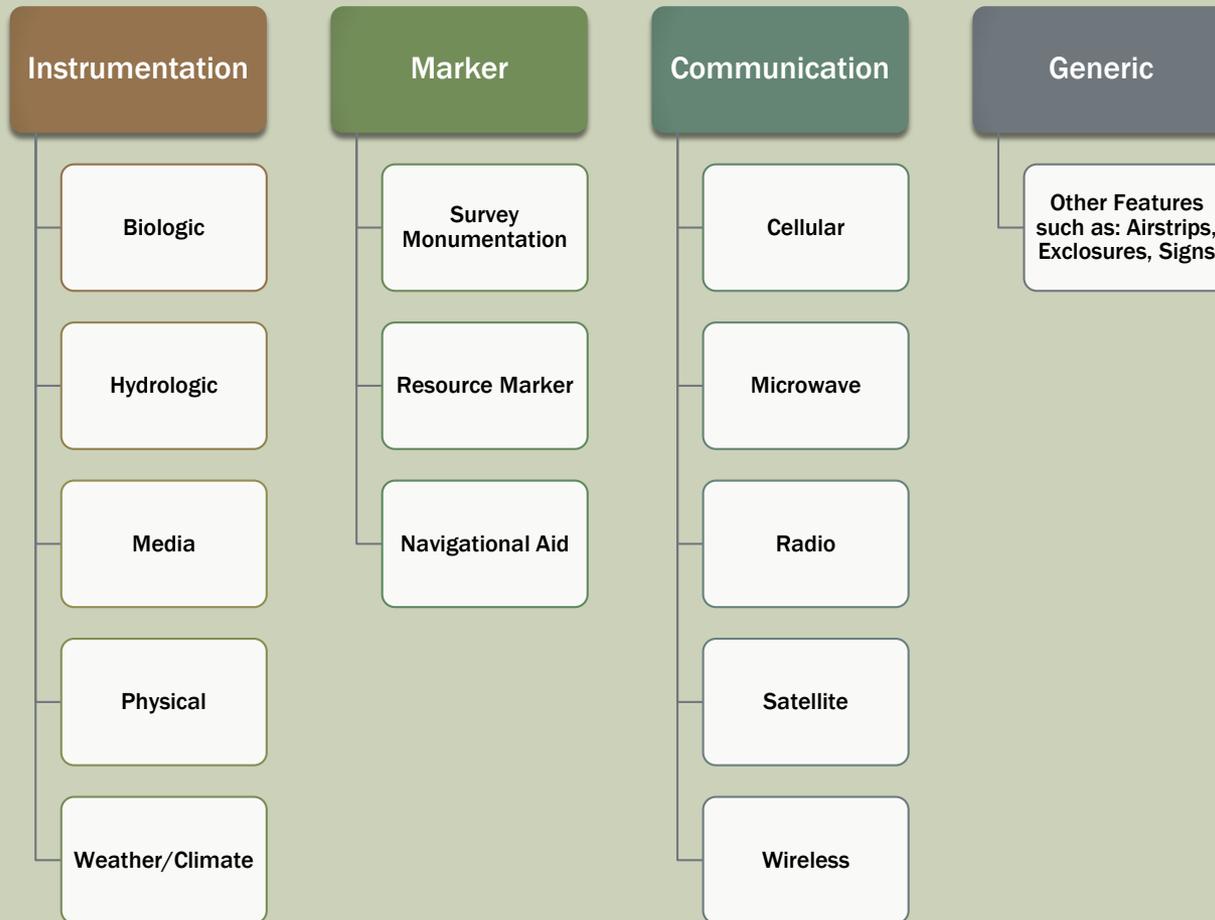


GENERIC DATA STANDARD

Alaska Generic GIS Data Standard Database Diagram FEATURE CLASSES and DOMAINS



AK REGION INSTALLATIONS



AK REGION INSTALLATIONS

Identification Attributes

- Uniquely identify and categorize a feature
- Link a feature to external systems

Status Attributes

- Report current status of an installation feature
- Distinguish current data from historic data
- Support temporal statistics

Analysis Attributes

- Provide metrics on size and visibility or obstrusiveness of a feature

Metadata Attributes

- Track geometry creation parameters and feature level record edits



GPS TELEMETRY DATA

User enters and maintains collar information with species and animal identifier

Telemetry data is downloaded from vendor website and imported into the Animal Movement database

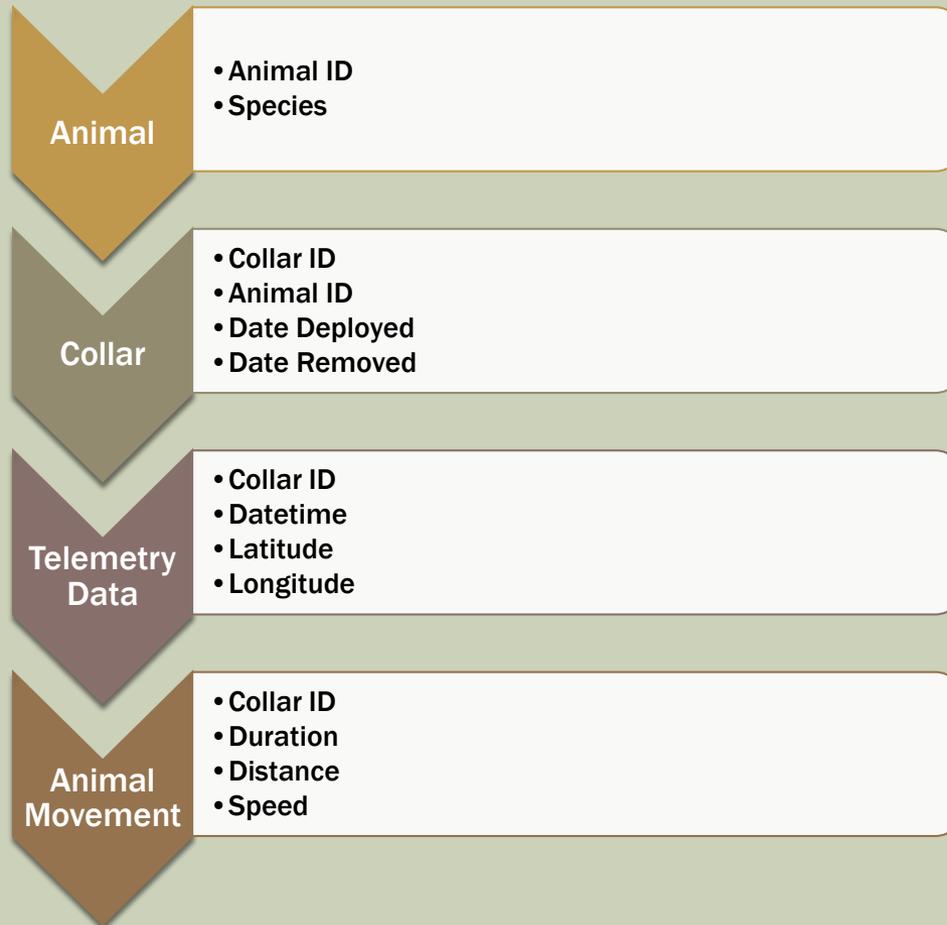
Telemetry data is spatially enabled and available for display as point geometries in ArcMap

Telemetry data is used to generate movement vectors

User runs Animal Movement tools to further analyze data and report results



GPS TELEMETRY DATA



QUESTIONS?

- For more information, please contact

Joni Piercy, GIS Team Lead

joni_piercy@nps.gov

907-644-3554

Angie Southwold, Database Developer

angie_southwold@nps.gov

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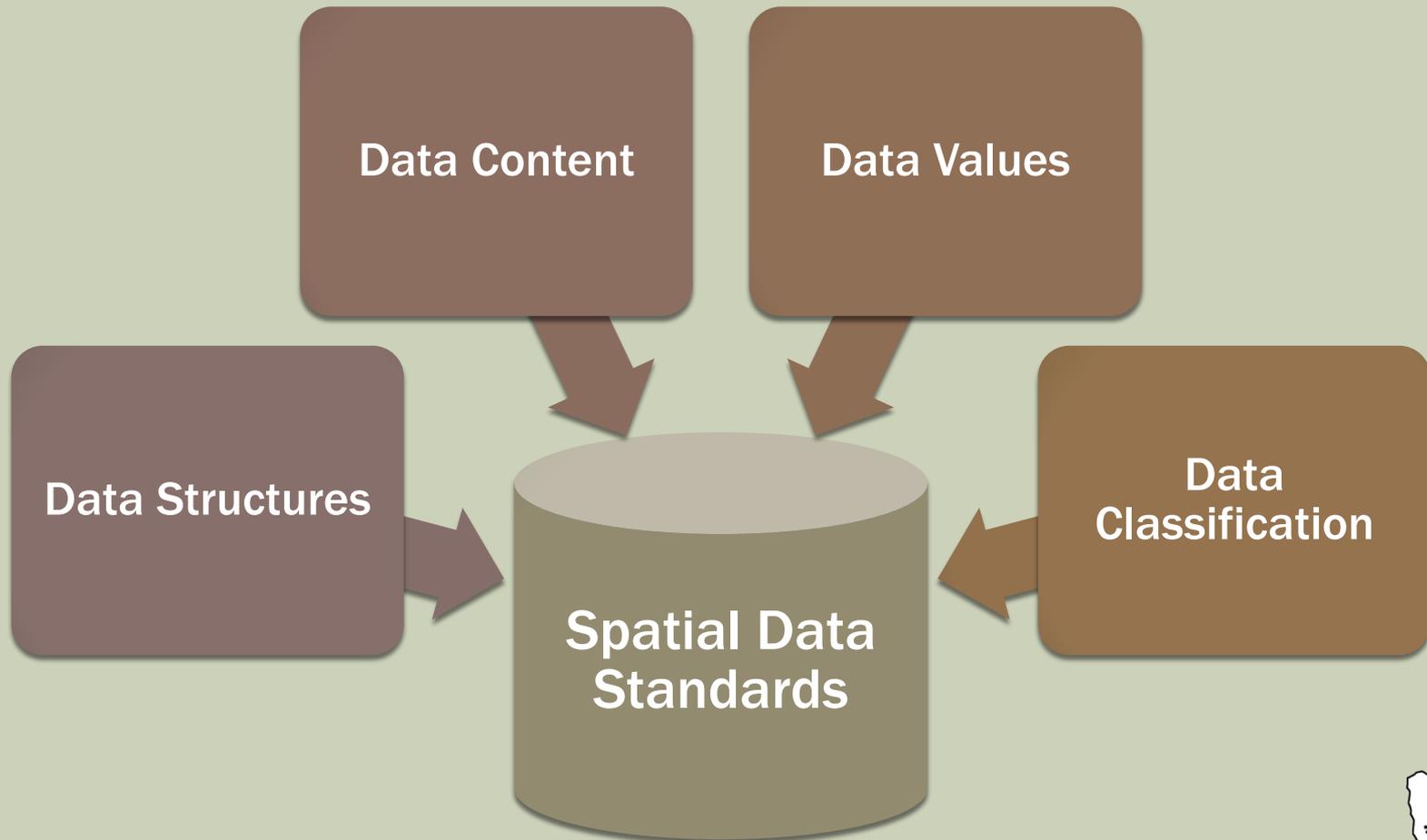
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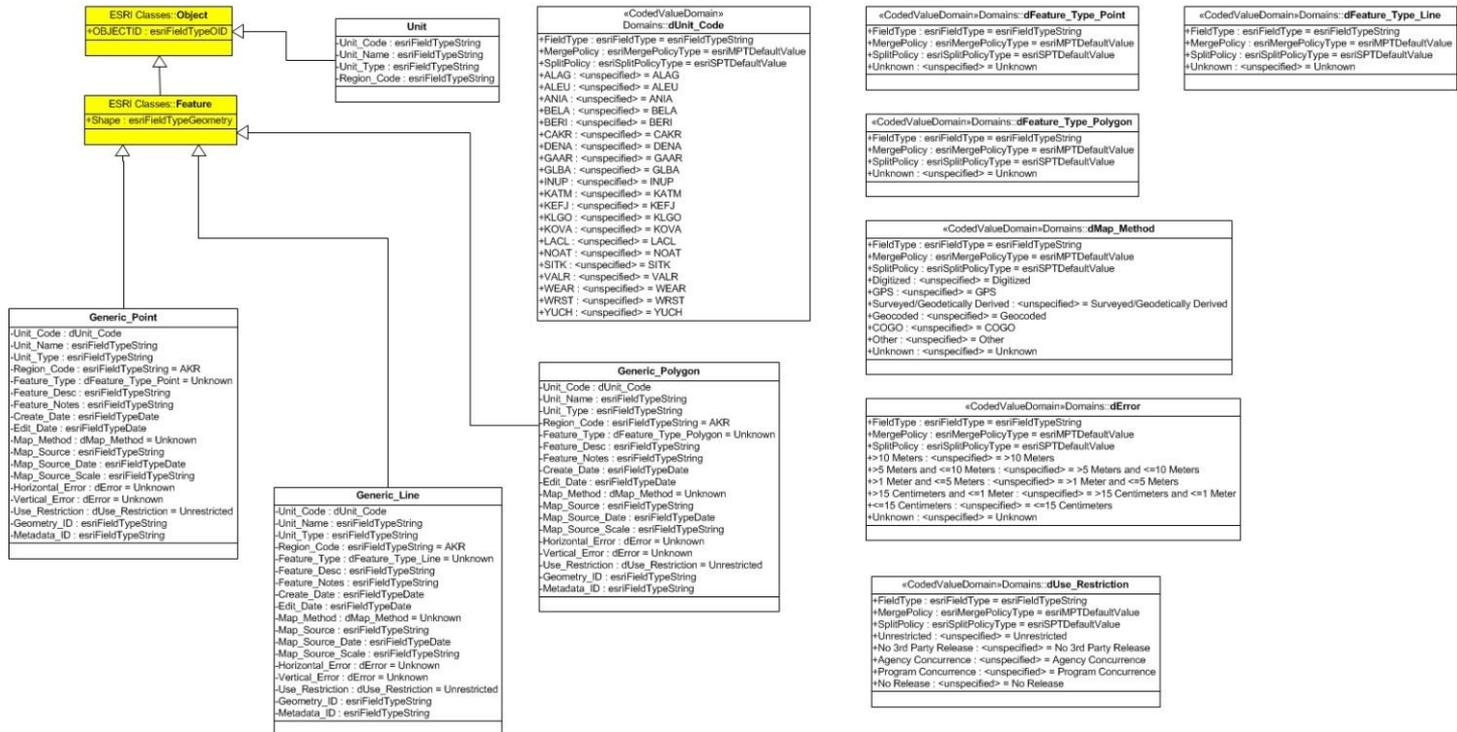
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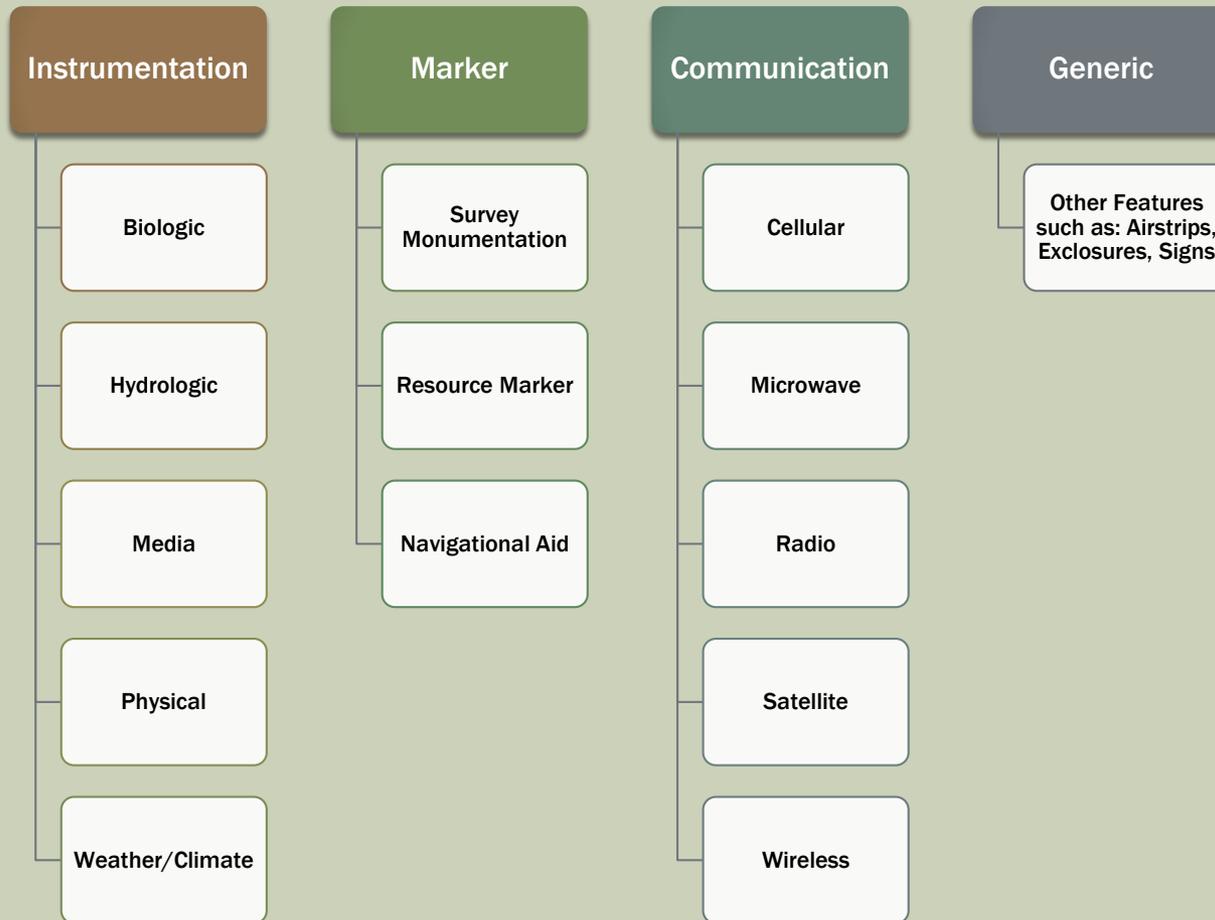


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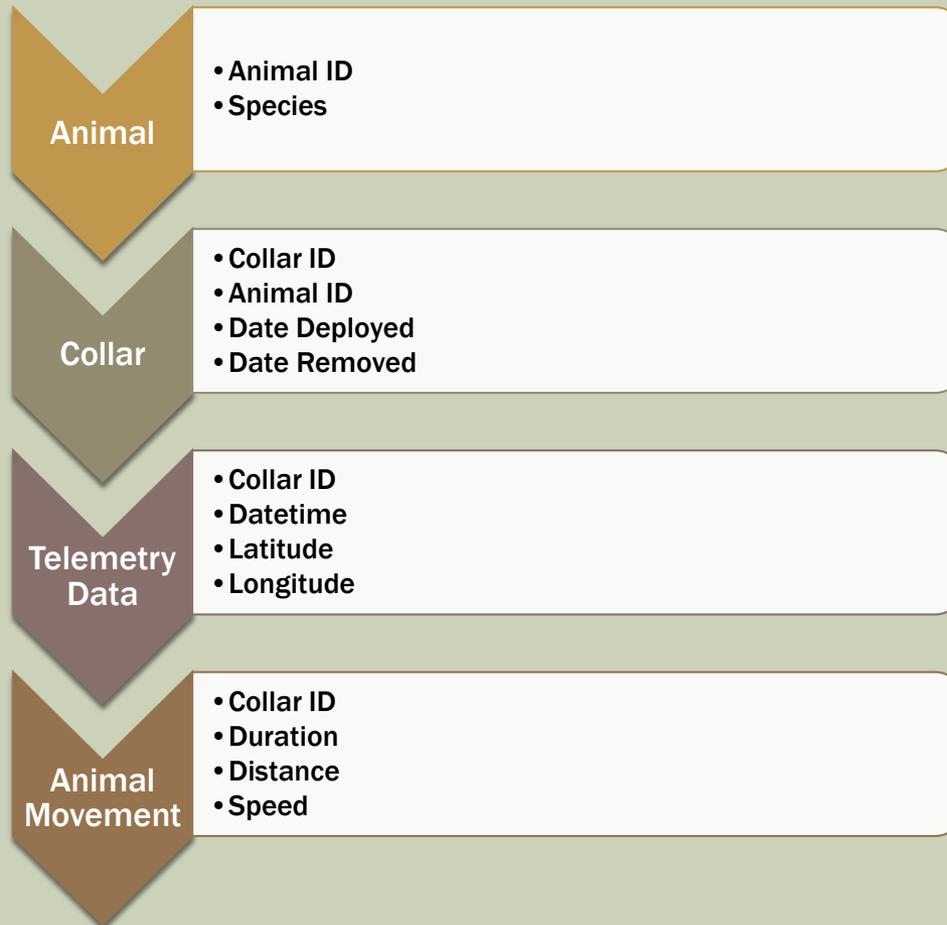
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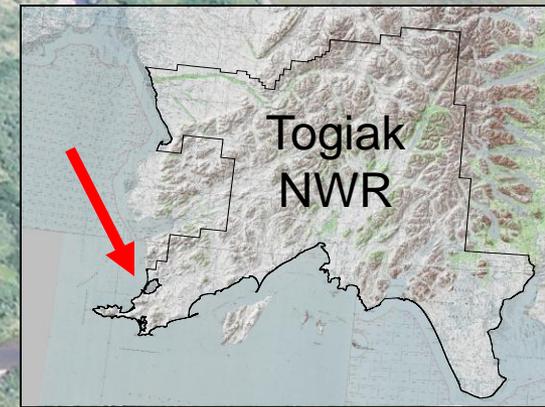
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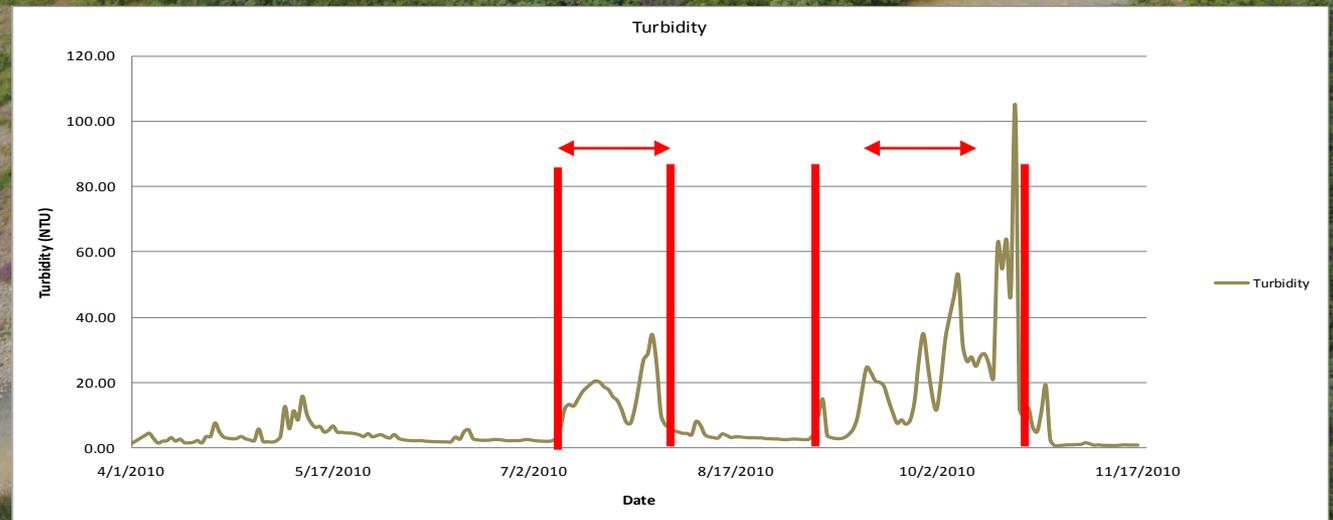


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