Data Management of LTK in a Project Combining it with Western Information

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Sustainable Living

Healthy Ocean Ecosystems

PUBLIC

LAW

SCIENCE

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The subsistence way of life is an essential part of ecosystem health.
Identifying Important Ecological Areas – Partners

• North Slope Borough
• Northwest Arctic Borough
• Inuit Circumpolar Council – Alaska
• Kawerak*
• Audubon Alaska

* Informal Agreement
Important Ecological Areas

- Areas that contribute disproportionately to ecosystem health
- Some places are better for fishing, hunting and gathering
- Recognized nationally and internationally
An Atlas of Important Ecological Areas

Wiser Stewardship
Informed Decisions
Reduce Conflict
Education
Identifying IEAs: Best Available Information

LTK is necessary to identify IEAs
• Essential information
• “Western” science is patchy

LTK is valuable
• Consent to document and limited use
• Review and approval before publication
• Community receives the atlas
Using Maps to Combine Information

Arctic Marine Synthesis:
Atlas of the Chukchi and Beaufort Seas

Bowhead Whale
(Balaena mysticetus)

Distribution
- Concentration Area
- High Concentration Area
- Winter (November - March)
- Spring (March - June)
- Summer (June - August)
- Fall (September - November)
- Overlap Areas
- Generalized Migration Pattern

Subsistence Hunting Areas
- Alaska Eskimo Whaling Community Hunting and Search Areas (Canadian and Russian Hunting Areas Not Shown)
- Quiet Area

Sources:

This map is based on the best available data, which varies in quality across the project areas. For more information on data quality and scale, see the introduction to the atlas by Robert Kopf and the description of this map.
Incorporation of LTK

- Review of IEA identification processes
- Previously documented LTK
- Sharing information on important areas
- Ground truthing “western” science
Methods: Peer Review Model

- 2-3 locally designated experts per community
- Given appropriate maps for review (e.g., walrus) with focus on concentration areas
- Series of questions to identify:
  - mistakes
  - corrections
  - concurrence
  - further detail
- Encouraged to consult and or skip
LTK and “Western” Information

Corrections, additional details, and concurrence establish new maps with combined information.

Many maps are made up of points, lines, and polygons.
Information Management
ArcMap Attribute Table (GIS) – polygon
Summary
Authorized oil and gas leases layer was to provide a graphic display of the historic oil and gas leases from the 1999, 2002, 2004, 2006 lease sales as well as the 2008 segregations of the 1999 lease sale. Provides a graphic display of the historic lease sale areas for planning, mapping, calculating acreage, as well as for visual inspection of the authorized leases.

Description
Authorized Oil and Gas Leases within the National Petroleum Reserve - Alaska.

Credits
There are no credits for this item.

Access and use limitations
Any hardcopies or published datasets using this data shall clearly indicate their source. Any users wishing to modify this data are obligated to report the extent of their modifications. User specifically agrees not to misrepresent modifications to this data, as approved or endorsed by the BLM.
ArcMap Attribute Table (GIS) – polygon
ArcCatalog Metadata (GIS) – groups of polygons
Electronic copies
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Endnote bibliography
What data management is needed to ensure LTK combined with other information is used respectfully and appropriately long after it is documented?