About these maps

Detailed Wetlands



This high-resolution map of wetlands in the Barrow region was created by the BAID Team from 0.5-meter WorldView-2 satellite imagery from August 2010, 2012 and 2013 using a supervised classification algorithm. The resulting map covers an area of approximately 1,500 km² and contains a total of 18 wetland classes, where 7 are unique vegetation communities that range from palustrine emergent persistent semipermanent flooded tundra to palustrine emergent persistent scrub-shrub evergreen tundra. Delineation of fine-scale land cover heterogeneity associated with regional microtopography and moisture gradients from polygonal tundra landforms are demonstrated.

NWI Wetlands



This map, provided by the U.S. Fish and Wildlife Service, shows wetlands classes as delineated by the National Wetlands Inventory (NWI)... The NWI provides topical wetland and riparian maps that are graphic representations of the type, size, and location of wetlands, deep water habitats, and/or riparian habitats in the United States. These maps were developed through analysis of high altitude imagery in conjunction with collateral data sources and field work. A margin of error is inherent in the use of imagery; thus, detailed ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis. The NWI follows the Cowardin et al. (1979) definition of wetland.

NSSI Landcover



This map, provided by the North Slope Science Initiative (NSSI), is a 2013 landcover map for the North Slope of Alaska. At a 30-meter resolution, the map identifies twenty four classes derived from Landsat Thematic Mapper imagery.

Ownership



Land ownership information, existing infrastructure and place name data were compiled by from various sources including the North Slope Borough Planning Department, the Iñupiat History Language and Culture Department, the Ukpeaġvik Iñupiat Corporation and the Bureau of Land Management. Zoning



Administrative boundaries, existing infrastructure and place name data were compiled by from various sources including the North Slope Borough Planning Department, the Iñupiat History Language and Culture Department, the Ukpeaġvik Iñupiat Corporation and the Bureau of Land Management.

Research



The Barrow Area Information Database (BAID) contains over 15,000 current and historic research sites dating back to the 1940s in the area surrounding the villages of Barrow and Atqasuk, plus the research station of Ivotuk, on the North Slope of Alaska. These sites are associated with current and extant research programs and experiments including projects funded by the Office of Naval Research, National Science Foundation National Oceanic and Atmospheric Administration, Fish and Wildlife Service, Cold Regions Research and Engineering Laboratory, the U.S. Geological Survey and others. This data set provides location information and key attributes including the site name and associated researchers, as well as, links to digital photos, contact information and project descriptions.

Imagery



This high-resolution satellite imagery shows the Barrow region as it appeared on July 25, August 10-11, and September 6, 2014, depending on location. It has a pixel resolution of 0.5 m (1.6 ft). Panchromatic and multispectral WorldView-2 imagery was acquired by DigitalGlobe, orthorectified and pan sharpened by E-Terra LLC, purchased by the Ukpeagvik Iñupiat Corporation (UIC), and further processed by UIC project partners (the University of Colorado and the University of Texas at El Paso).

Elevation



This map highlights the terrain in the Barrow region using light and shadows plus 1 meter elevation contours (viewable at finer zoom scales.) The shaded relief image was created from a 2002 IFSAR Digital Terrain Model (DTM), with a pixel resolution of 5.0 m (16.4 ft). The image can be useful as a basemap for display of shorelines or other map features. Also, depicted is the extent of the 1963 flood as mapped by storm debris.

Anadromous Fish



This map depicts the known anadromous fish bearing lakes and streams (from the mouth to the known upper extent of species usage). The extent of species utilization of a given stream may change from year to year. These data are from the 2014 revision of the Alaska Department of Fish and Game's (ADF&G) "Atlas to the Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes" and the "Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes" effective June 1, 2014. This particular data layer is for the Arctic Region of Alaska.

Spectacled Eider



The Spectacled Eider breeding concentration area was developed by Audubon Alaska and Oceana for the Arctic Marine Synthesis. These data were provided in August, 2015 as part of the data update for the Chukchi Sea region.

Steller's Eider



Stellers Eider occurrence and breeding area data were compiled for the Arctic Marine Synthesis by Audubon and Oceana. These data were provided in August, 2015 as part of the data update for the Chukchi Sea region.

Snowy Owl



Buffered range and occurrence data were provided by the Alaska Natural Heritage Program at the University of Alaska Anchorage. The information was compiled from NatureServe, the Nature Conservancy Migratory Bird Program, Conservation International and World Wildlife Fund. Bowhead



This information was derived from the "Bowhead Whale Subsistence Sensitivity" Mapping project. Quiet Areas include seasonally sensitive hunting and search areas contiguous to villages and extends 40 miles offshore. Spring and Fall distribution and movement areas are based on Moore, S.E. and Reeves, R.R., 1993, Distribution and Movement.

Polar Bear



These data depict polar bear distribution and denning areas. Denning areas were digitized from NOAA's 1988 Atlas of the Bering, Beaufort, and Chukchi Seas, and the USFWS 1995 Polar Bear Conservation Plan. Complete, detailed metadata is located at http://ak.audubon.org/arctic-marine-data. Links to species/topics describe the specifics of the data, which elaborates on the information presented in the attribute table. Data were compiled for the Arctic Marine Synthesis by Audubon Alaska and Oceana.

Ring Seal



This dataset focuses on the known extent of range and concentration areas for ringed seals. Shorefast ice is considered high quality denning habitat for ringed seals. Complete, detailed metadata is located at http://ak.audubon.org/arctic-marine-data. Links to species/topics describe the specifics of the data, which elaborates on the information presented in the attribute table. Data were compiled for the Arctic Marine Synthesis by Audubon Alaska and Oceana, with assistance from Pew Charitable Trusts and World Wildlife Fund.