The NWI’s Unfinished Business: The Current State of Wetland Mapping in Alaska

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- FWS, Regional Wetlands Coordinator
- NRCS, Resource Conservationist, GIS
- BLM, GIS, Recreation, Planning

Expertise
- GIS and Remote Sensing
- Natural Resource Management
- Land Use Planning
The National Wetlands Inventory

- The Emergency Wetlands Resource Act of 1986
- Federal Geographic Data Committee Standard
- National Spatial Data Infrastructure, Geospatial Data Asset
- **NOT** a regulatory dataset
NWI importance in Alaska

- Conservation
  - Habitat modeling
  - Species use predictions
  - Land acquisitions

- Informed Development
  - Mining
  - Oil and Gas
  - Local, regional and statewide infrastructure

- Land Use Planning
The National Wetlands Inventory in Alaska - Then

- Original Inventory Priorities
  - Road System
  - Coastal Zone
- Base Imagery
  - Hard copy photographs
  - High-Altitude Imagery (70s-80s)
- Ancillary Data
  - 1:63K topo maps
  - Inaccurate NHD
  - Limited vegetation information
The National Wetlands Inventory in Alaska - Now

- Inventory Priorities
  - Complete coverage
- Base Imagery
  - Statewide 2.5 meter SPOT
  - Best Available, often satellite
- Ancillary Data
  - 1:25K topo maps
  - Progressive NHD updates
  - Digital elevation-5 meter IfSAR
  - Numerous vegetation inventories
- Increasing use of automation
Alaska Mapping Executive Committee

- Alaska Mapping Executive Committee (AMEC)
- Chaired by USGS and NOAA
- Elevation
- Imagery
- Hydrography
- Coastal Zone
- Other themes
Alaska Geospatial Council

- Alaska Geospatial Council (AGC)
  - Chaired by the State of Alaska
- Technical Working Groups
  - Wetlands
  - Cadastral
  - Hydrography
  - Imagery
  - Elevation
  - Others

Mission

- Create a spatial infrastructure that will be supported by a participatory environment to facilitate collaboration and communication between all public and private stakeholders based on a philosophy of shared responsibilities, shared costs, shared benefits, and shared control.
Wetlands Technical Working Group

- Established the WTWG charter, 2017
- Membership includes federal, state, and local governments, universities and consultants
- Adopted a statewide mapping strategy, 2019
- Estimated completion cost, $2.5-7 million
- [http://agc.dnr.alaska.gov/wetlands.html](http://agc.dnr.alaska.gov/wetlands.html)
WTTWG Strategy

  - Identified lack of comprehensive geospatial data
- Adopts NWI as the statewide geospatial database
- Provides an outline to complete statewide NWI over 10 years
- Control costs by completing mapping at varying resolutions
  - 1 acre Target Mapping Unit (Selected locations)
  - 5 acre Target Mapping Unit (Alaska Standard)
NWI Status

- 42% complete
- 17% in progress
NWI Collaboration

- Department of the Interior
- State of Alaska
- Natural Resources Conservation Service
- Bureau of Land Management
- U.S. Army Corps of Engineers
- Local Governments
- Tribal Governments
- Universities
- Consulting groups
- And More!

NWI Moving Forward

- Pursuing investment
- Use the data
- Share the data
- Encourage others to do the same