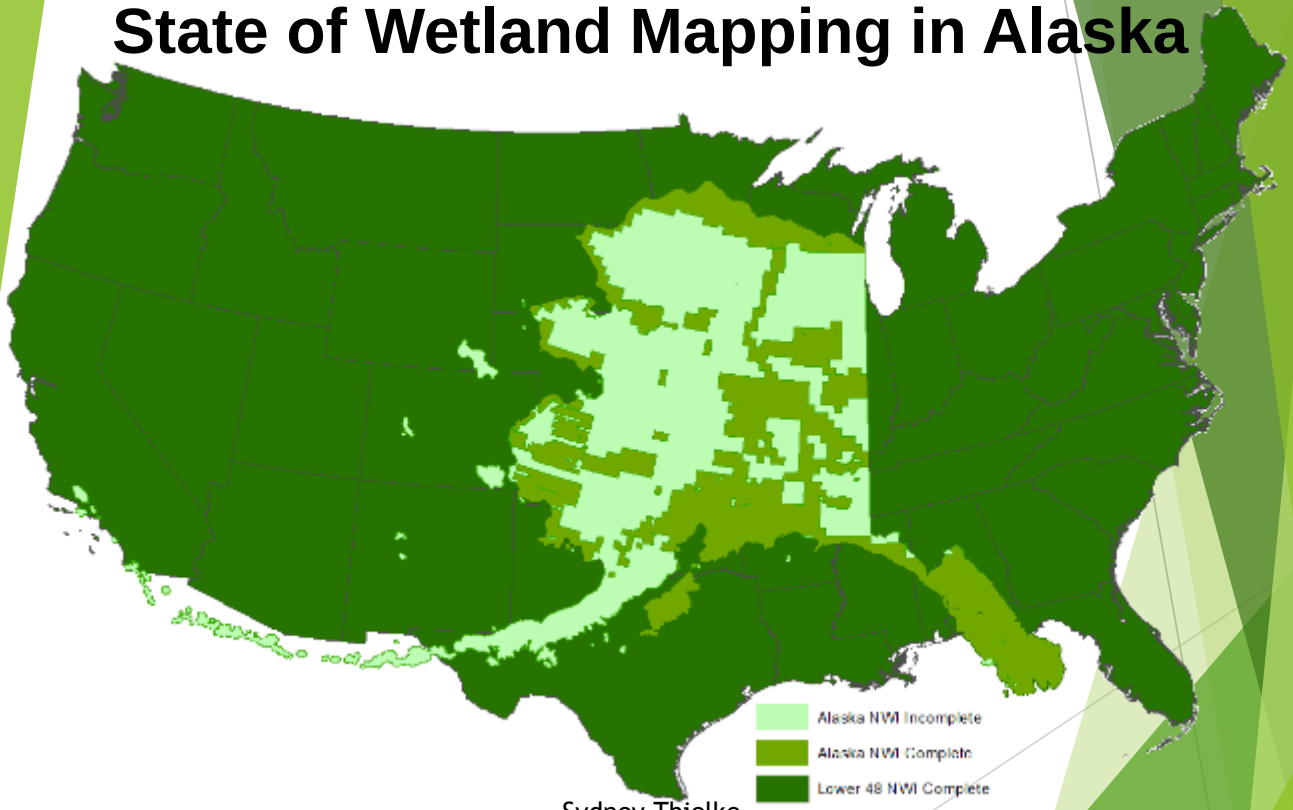
The NWI's Unfinished Business: The Current State of Wetland Mapping in Alaska



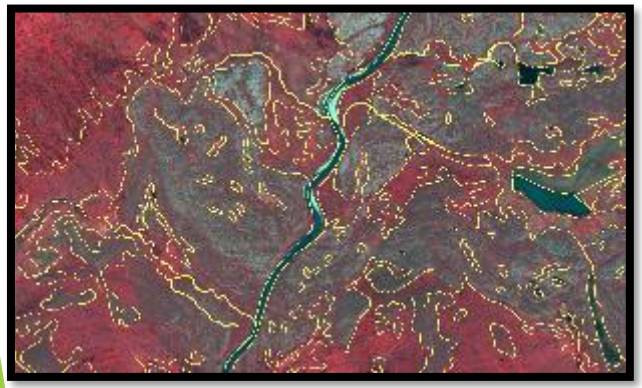
Sydney Thielke
Regional Wetland Coordinator
U.S. Fish and Wildlife Service, Alaska Region
February 12, 2020

Sydney Thielke

- FWS, Regional Wetlands Coordinator
- NRCS, Resource Conservationist, GIS
- BLM, GIS, Recreation, Planning
- Expertise
  - GIS and Remote Sensing
  - Natural Resource Management
  - Land Use Planning

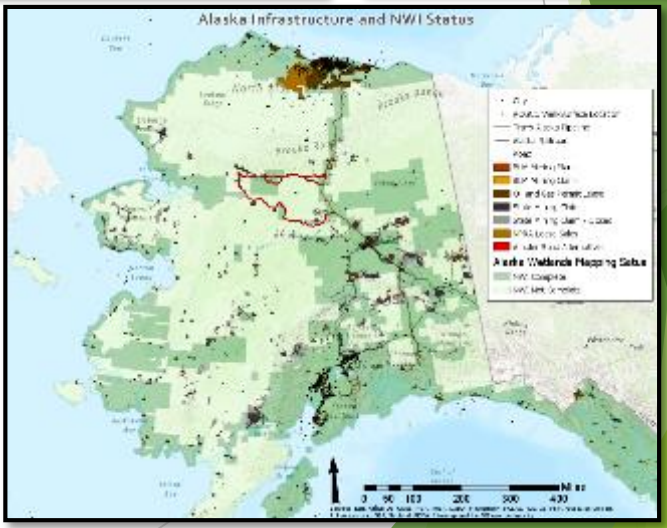
The National Wetlands Inventory

- 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

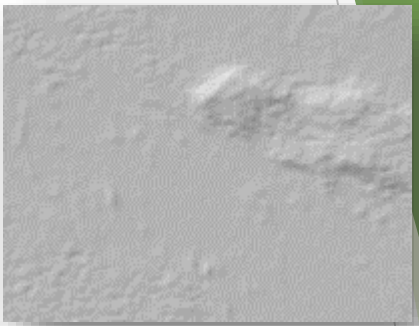


The National Wetlands Inventory in Alaska-Then

- 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

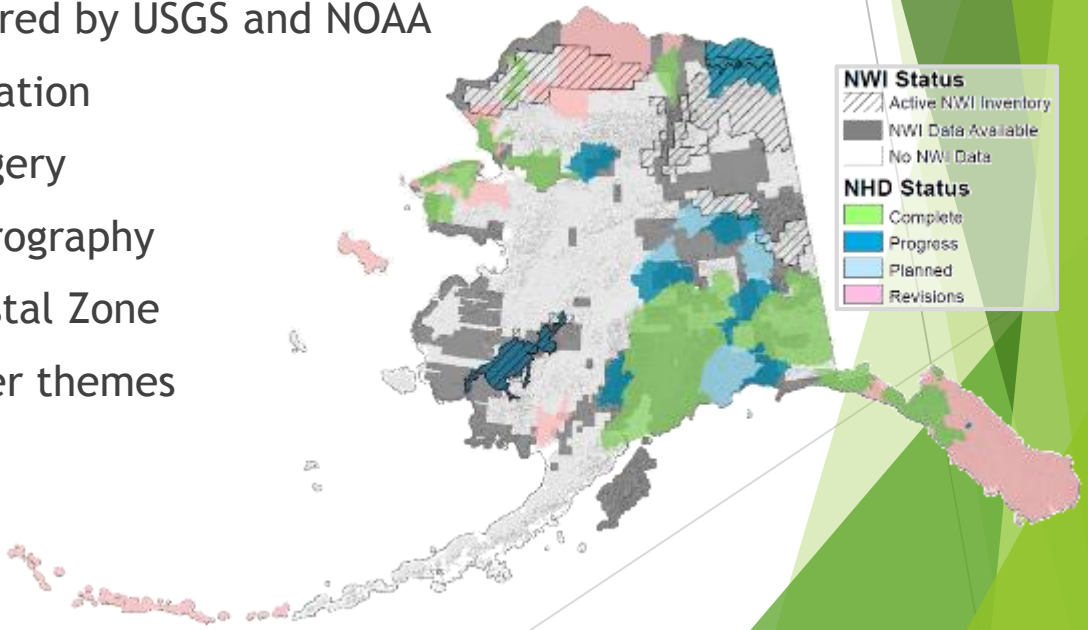
The National Wetlands Inventory in Alaska-Now

- 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



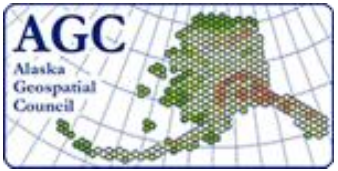
Alaska Mapping Executive Committee

- 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

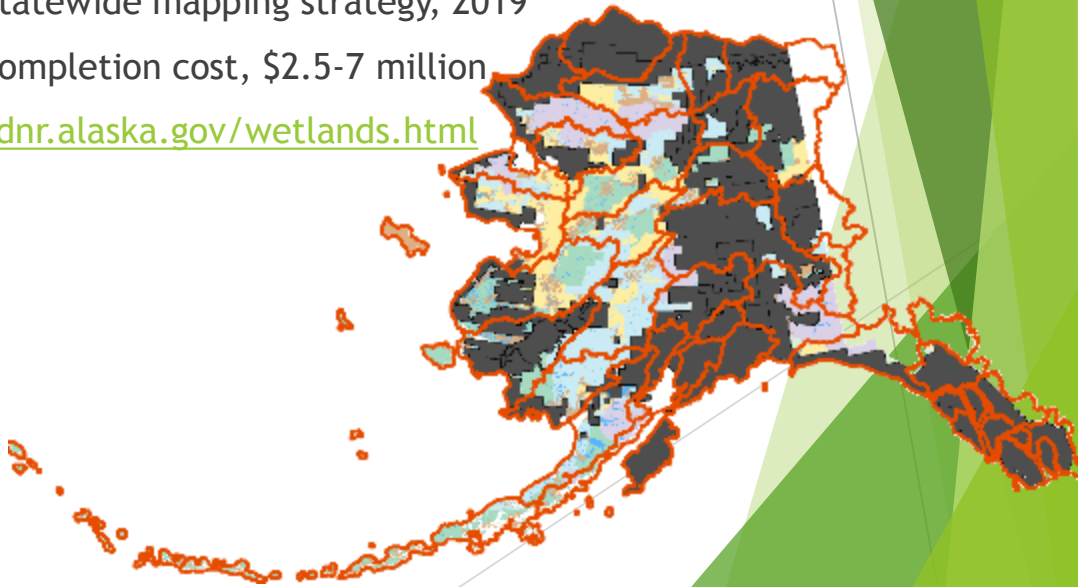


Mission

- *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.*

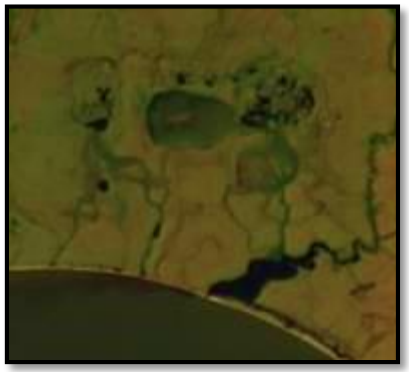
Wetlands Technical Working Group

- 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



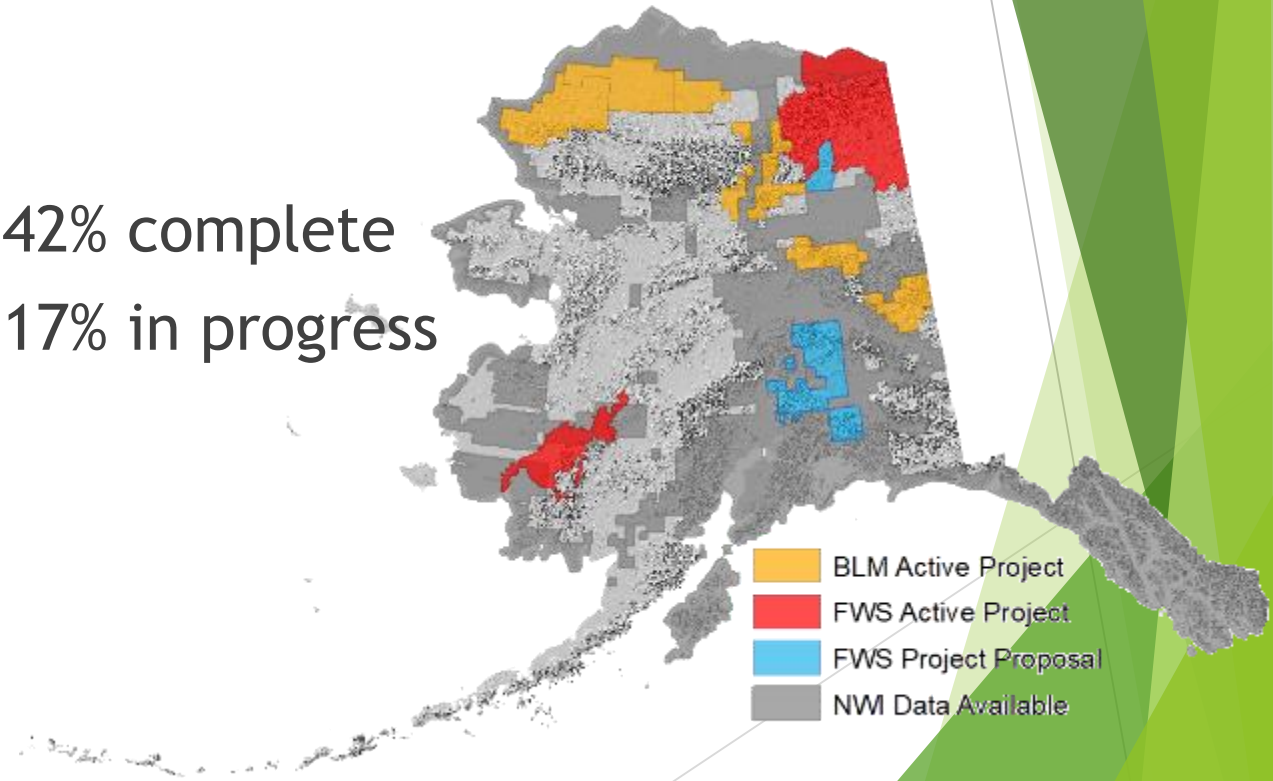
WTWG Strategy

- Build on the State of Alaska Wetlands Program Plan (2015)
  - 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!

https://safety4sea.com/the-round-table-making-ship-board-meetings-matter/

NWI Moving Forward

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