



Wetland Monitoring in Alaska

Terri Lomax, Program Manager
Alaska Monitoring and Assessment Program,
Alaska Department of Environmental Conservation

Status of Alaska's M&A Program

- Program development in progress
- Alaskan Senate Bill 27: evaluate the potential benefits, costs, and consequences of assuming 404 permitting
- SB 27 future direction
- As part of SB 27, DEC has started development of a wetland program plan

Wetland Monitoring History in AK

- Hydrogeomorphic assessments, focused on assessing impacts and functions for planning, permitting, and mitigation.
 - Interior
 - Cook Inlet
 - Southeast/Southcentral
- NWCA - Arctic Coastal Plain
 - DEC's 1st wetland condition assessment

2011 Arctic Coastal Plain Wetland Assessment



What?

Freshwater emergent wetland assessment

When?

July-Aug 2011

Where?

Arctic Coastal Plain within the National Petroleum Reserve-Alaska

Why?

- Requirement of CWA
 - Characterize States waters
- Participation in EPA's National Wetland Condition Assessment (NWCA)
- Enhancement of NWCA
- Included in AKMAP's 5 year focus on the Arctic

How?

NWCA methods with Alaskan Modifications

Collaborations

- EPA
- North Slope Borough
- Bureau of Land Management
- Olgoonik Fairweather Corp.
- UAA Alaska Natural Heritage Program
 - Shell Oil
- USDA Natural Resource Conservation Service

Methods and Modifications

Soil

- Ice auger
- Permafrost depth
- Added C:N ratio

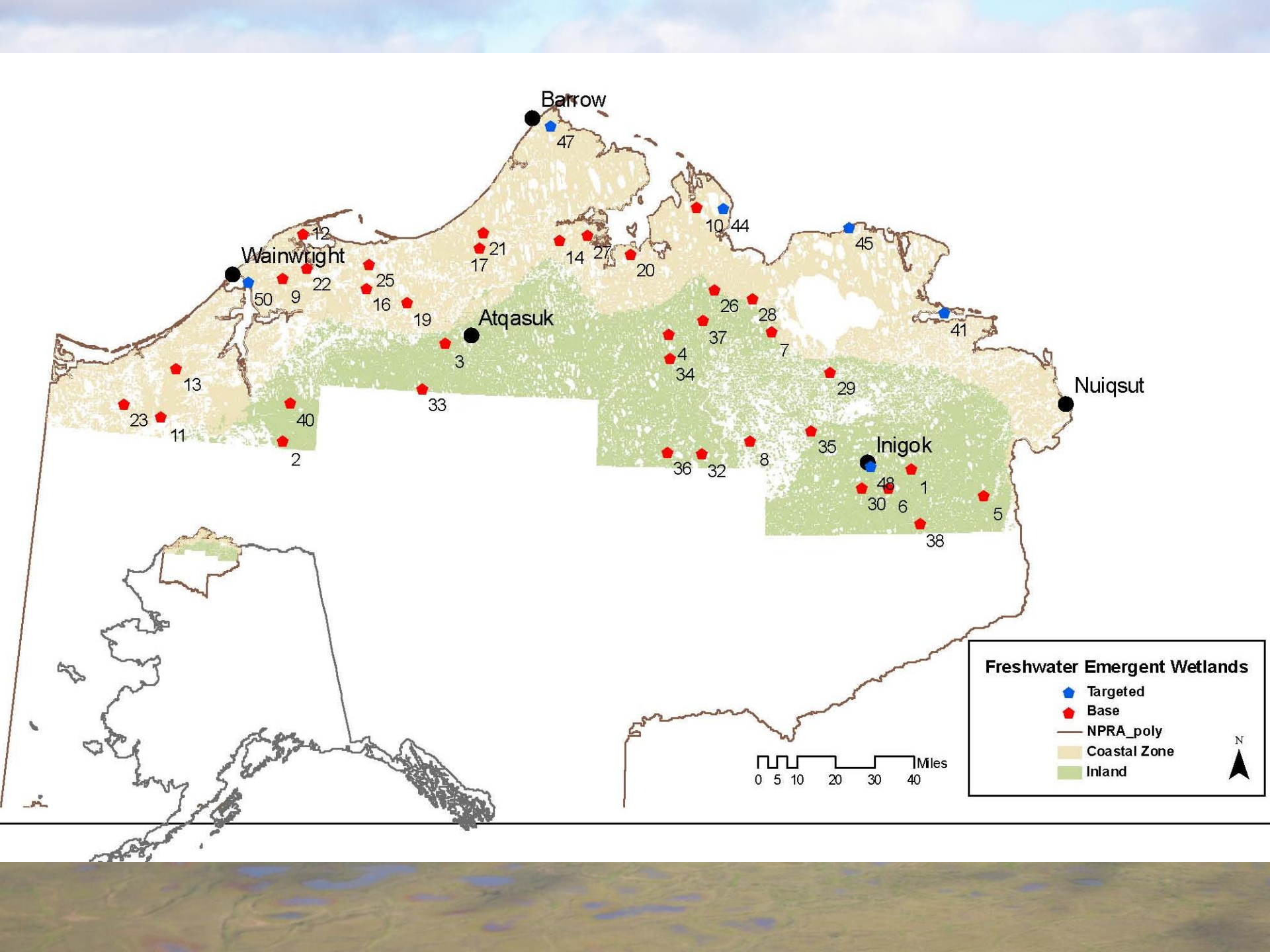
Vegetation

- Added in bryophyte identification, lichen and moss are an important food source in the Arctic

WQ analysis

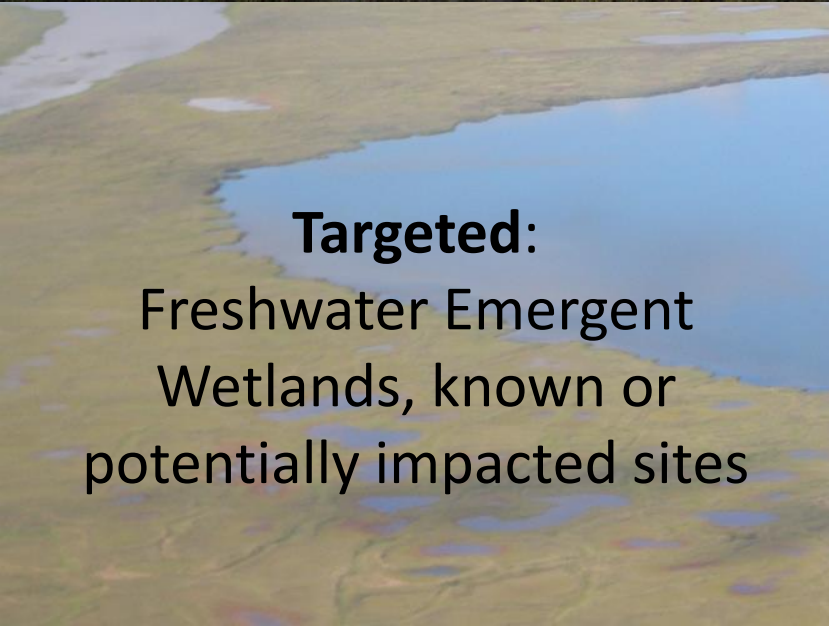
- Dropped: Nitrite , ortho-phosphate
- Added: Stable isotope







Random:
Selected from NWI,
Freshwater Emergent
Wetlands, GRTS design

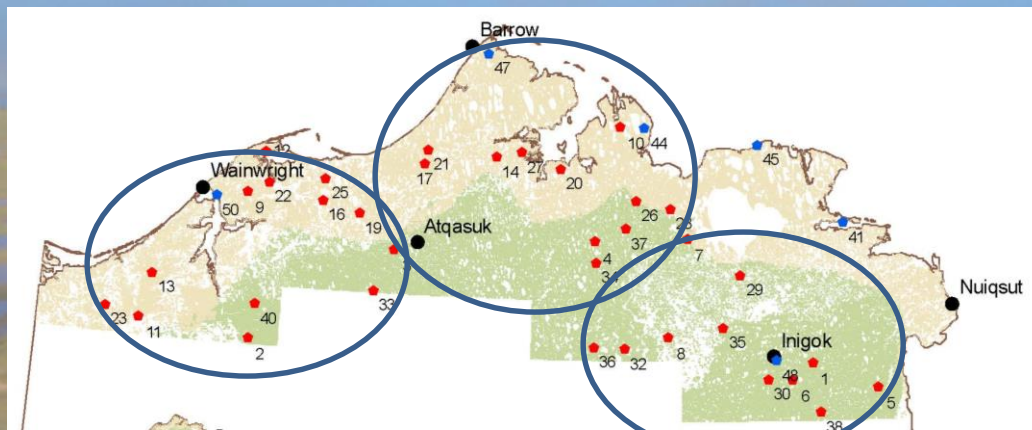


Targeted:
Freshwater Emergent
Wetlands, known or
potentially impacted sites



Next Steps

- Data analysis completed by December 2013
 - Soils data
 - Biological data
 - Habitat data
- Interpretation of data by March 2013
- Final report June 2014



Challenges

- Impacts to subsistence lifestyles
- Remote nature of work
- Weather
- Logistics
- Mosquitoes



Thank You

Terri Lomax
Alaska Dept of Environmental Conservation
907-269-7635
Terri.lomax@Alaska.gov

<http://dec.alaska.gov/water/wwdp/wetlands/index.htm>
<http://dec.alaska.gov/water/wqsar/monitoring/AKMAP.htm>