



Annual Toolik GIS Report

Overview

- **Metrics and Highlights From 2015**
- **BLM Collaboration on Data Sharing**
- **Common Use Boardwalk**
- **Aerial Photographs**
- **Control Watershed**
- **2012 Science Vision Workshop
Recommendations for GIS Dept.**



Requests Completed

2012: 219 Requests from 31 Institutions

2013: 215 Requests from 28 Institutions

2014: 253 Requests from 33 Institutions

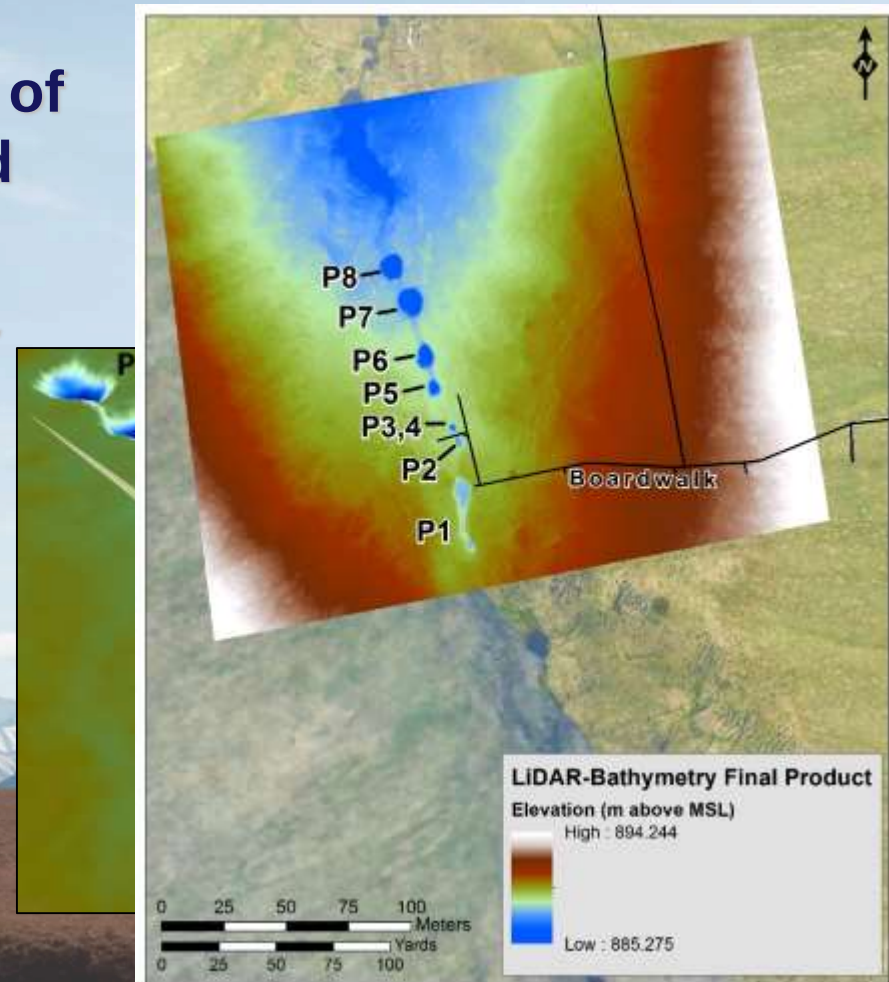
2015: 213 Requests from 36 Institutions



Requests

Merging of LiDAR & Bathymetric Dataset

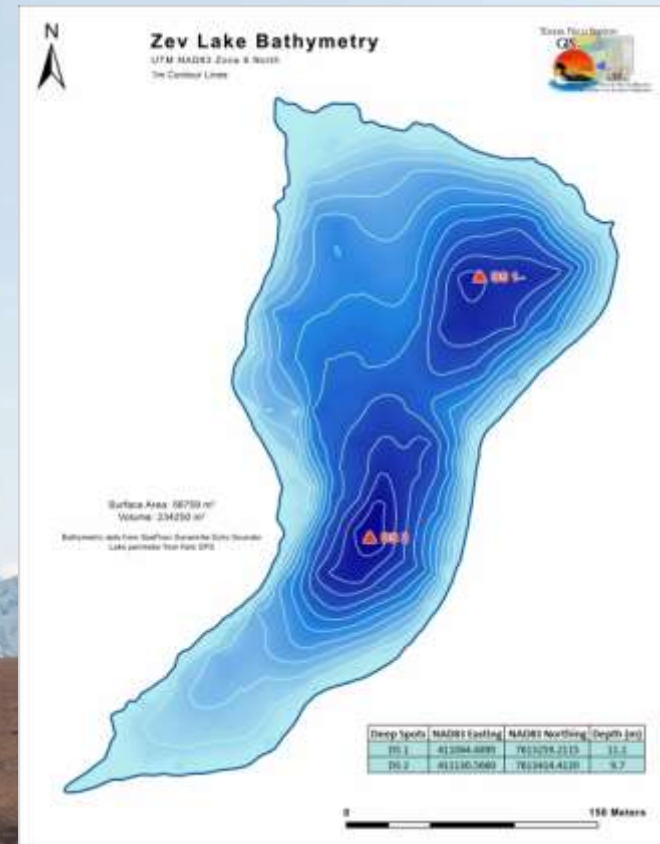
- Seamless Detailed 3D Model of Terrestrial Topography and Pool Bathymetry
- Integrated with Groundwater Flow Data
- Randy will be Credited as Contributing Author on any Publication



Requests

Summer Field Support

- Provided Field Support for 10 Projects
 - Collected Bathymetric Data
 - Processed Data and Delivered Maps Within Days of Request
- Added to ToolikGIS' Bathymetric Catalog of Research Lakes (>70)



Requests

Site Selection

- **Provided Assistance to 9 Individuals/Groups**
 - **Daniel Ackerman**
 - **ACUASI**
 - **Ashley Asmus**
 - **Linda Deegan**
 - **Ned Fetcher**
 - **Rebecca Finger**
 - **INTERACT Group**
 - **Josh Schimel**
 - **Ken Tape**



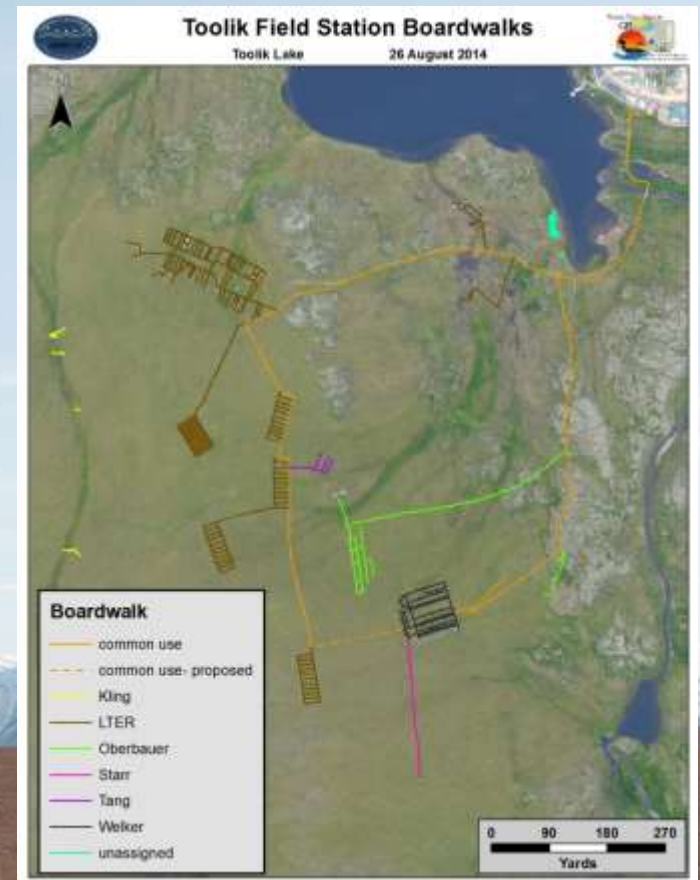
Update: BLM Collaboration on Data Sharing

- **Periodic Meetings Between BLM, Toolik Management and Toolik GIS**
- **Improve Permitting Process & Streamline Annual Site Inspection Visit**
- **Created Shared Online Document**
 - **New Projects Permitted in 2015**
 - **PI Name, BLM Permit Number, Boardwalk (Y/N)**
 - **Shared Database of GPS Locations for Projects Permitted in 2015.**



Upgrades to Common Use Boardwalk

- Continued Collaboration With CPS Staff and Toolik Researchers
- South of Toolik in Good Condition
- Boardwalk Loop Completed
- Shift Focus to Imnavait for 2016



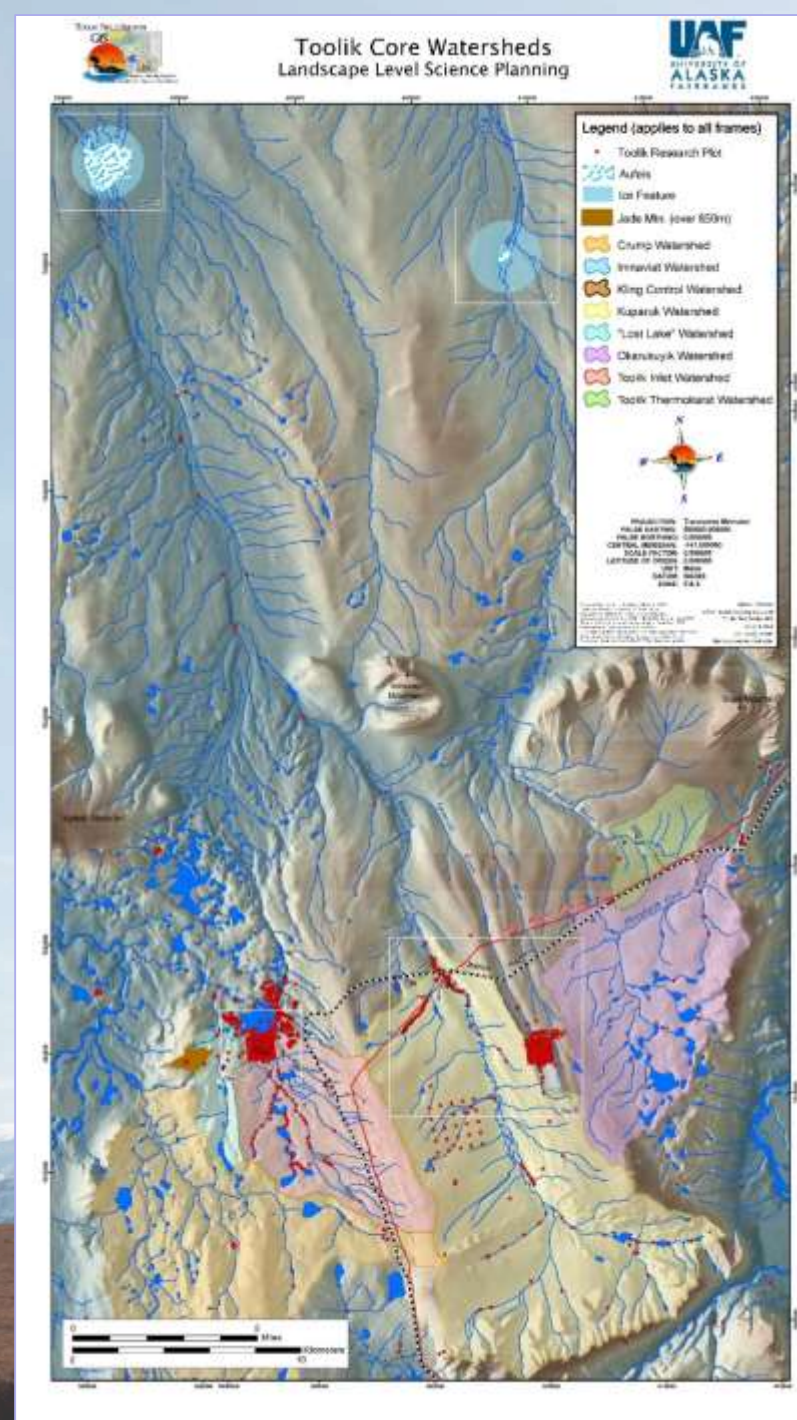
Aerial Photographs

- Orthorectified & Georeferenced
- 2002, 2007 & 2013
- Metadata Written to INSPIRE Metadata Standards
- Available on Toolik GIS Website
- Historic 1949 & 1956 Photos Also Available



Control Watershed

- **Recurring Topic**
 - Toolik Annual Meeting, 2015
 - Science Vision Workshops, 2012, 2004
- **Core Ideas:**
 - No Manipulative Research
 - No Destructive Research
- **Propose Creation of a Working Group**



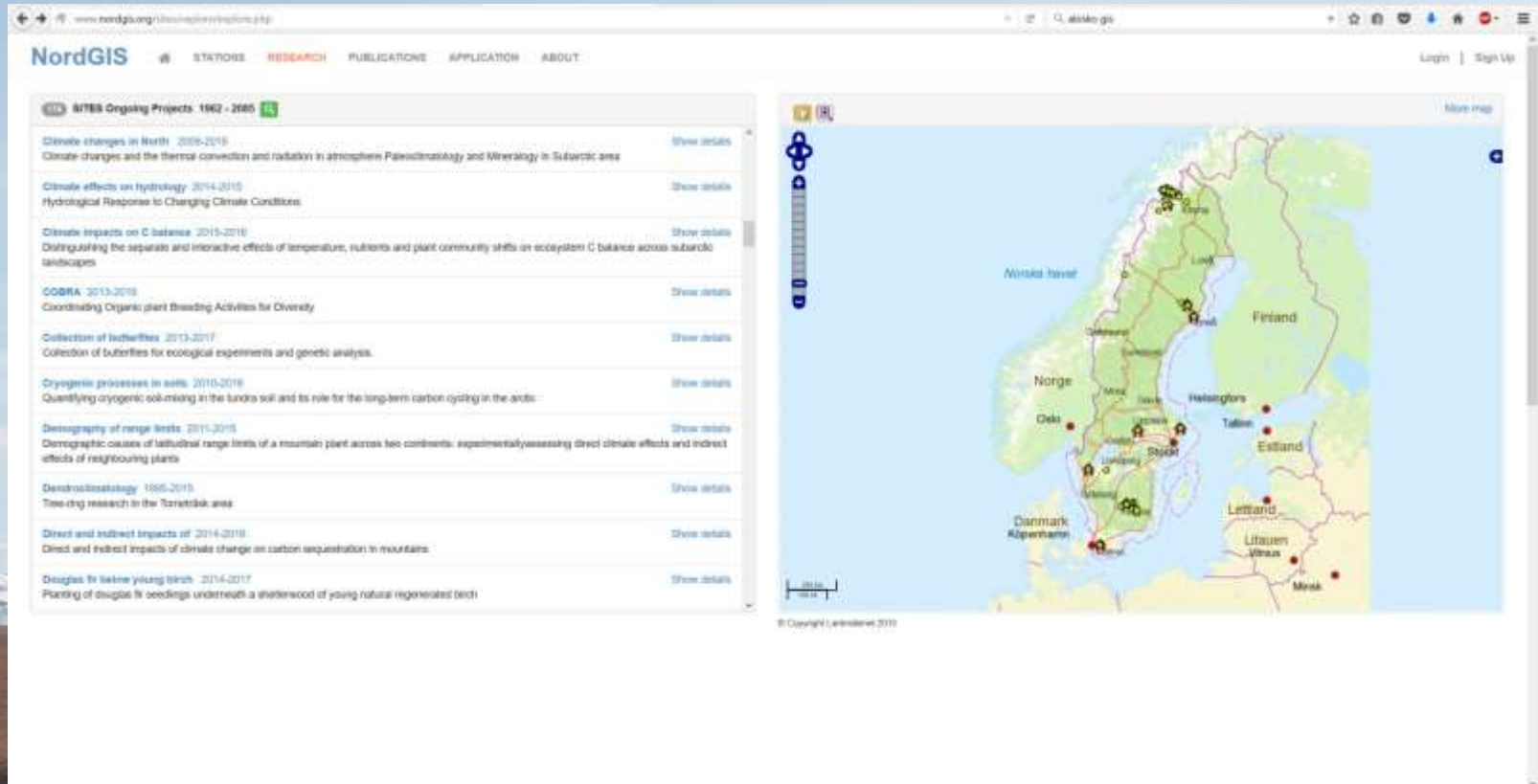
Update on 2012 Science Vision Workshop Recommendations

- **Toolik Information System**
- **High-Resolution Digital Elevation Models**
- **Last Mile Connectivity (Wi-Fi on the Hill)**



Update on 2012 Science Vision Workshop Recommendations

- Toolik Information System



Update on 2012 Science Vision Workshop Recommendations

- **High-Resolution Digital Elevation Models (DEMs)**
 - **30-50cm Developed from 2013 Aerial Photos (2015)**
 - **1m DGGS Covering Dalton/Pipeline Area (2011-2012)**
 - **2m PGC of Toolik Region (2015)**
 - **2m PGC of Kuparuk Watershed (2015)**
 - **3m AK DOT Road to Umiat (2012)**



Update on 2012 Science Vision Workshop Recommendations

- **Last Mile Connectivity (Wi-Fi on Hill)**
- **Traci Ruthkoski, Amazon Web Services**
 - **Built and Successfully Tested Prototype**
- **Toolik Management**
 - **More Robust System**
 - **UAF OIT Compatible**
 - **BLM Permitting Options**



Website Usage - Metrics

10 Most Popular Pages

1. Homepage
2. General Maps
3. Data Download
4. Maps Homepage
5. Photos/Imagery
6. Thematic Maps
7. Plots/Permits
8. GPS Reservations
9. TAGA Maps
10. Online Mapping

Downloads - Nov. 13, 2014 to Dec. 17 2015

	Unique Users	Maps/Files	Downloads
Maps	336	189	2056
GIS Data	482	64	4899

Toolik GIS

