



OCEAN
CANADA

*Taking Stock:
Arctic Working Group*

OceanCanada 2016 Conference May 24.



Remembering Our Goals for OCP:

- ◆ We offer Canadian society a shared grasp of emerging threats, challenges and opportunities.
- ◆ We need to understand the past, present and potential future states of Canada's coastal-ocean social-ecological systems.
- ◆ To that end, OceanCanada will undertake three key activities: take stock of what we know, build scenarios for the possible futures that await us and thus develop a shared vision of Canada's oceans.
- ◆ We will do this at the local level (using case studies in each of the three ocean-adjacent regions of the country to give us grass-roots understanding) and also through an overarching national perspective.”

The OCP Arctic WG aims to advance the trans-regional integration of the work of the OCP by contributing to:

- (1) inclusion of Arctic perspectives for enhanced understanding of the changes occurring in Canada's coastal and ocean systems;
- (2) establishment of an inclusive and respectful framework and foundation for community based research that supports the development of public policies and regulations that can help Canada improve its overall performance in ocean management and sustainability, as well as honouring its national and international commitments to Indigenous Peoples; and
- (3) integration of a wide range of expertise, including economics, law, geography, ethics, fisheries science, and oceanography, and local and Indigenous knowledge; to produce comprehensive research results for policymakers.

OCP Arctic Working Group Presentation

Part 1 May 24, 2016

Working Group	
Co-Chairs:	
Nancy Doubleday, McMaster University	Fraser Taylor, Carleton University
Members:	
Amos Hayes	Carleton University
Carleton Student RAs:	
Robert Oikle, Laura Salisbury, Leah Ronayne	Geography, Carleton University

OCP Arctic Working Group Presentation

Part 1 May 24, 2016

Working Group

McMaster Student RAs:

Sarah Newell, Health Policy PHD Program, McMaster University/UNU Water Without Borders Diploma

Kathryn Pringle, UG, Health & Peace Studies

Rodrigo Narro Perez, Geography & Earth Science PHD Program, McMaster University/UNU Water Without Borders Diploma

Jacob Brodka, UG, Life Science

Collaborators & Partnerships:	Projects:	Platform (if known):
Gita Ljubcic, Carleton	Sea Ice Use & Occupancy; Research Ethics	Atlas
Joanna Wilson, McMaster	Trans-regional comparisons	In discussion
Dustin Garrick, McMaster/Oxford	Transboundary water management, polycentric governance	In discussion, 2016 ISA Panel
Nidhi Nagabhatla, United Nations University Institute for Water, Environment and Health	SDGs, Ocean Conservation; small scale fishing communities and livelihoods, international policy development	2016 World Conservation Congress
Other (Worldwide Quest, One Ocean)	Citizen science	Ocean cruises

Collaborators & Partnerships:	Projects	Platform (if known)
Nunavut Coastal Resource Inventory	Community data	Atlas
Nunavut Place Names Atlas (KHS lead org)	Community data on places and uses (over 10,000 so far via IHT)	Atlas
Stephan Schott/Genome Canada	Towards a Sustainable Fishery for Nunavumiut	Atlas
Jackie Dawson, Ottawa U/Gita Ljubicic, Carleton	Arctic Marine and Use Transportation	Proposed Atlas/In discussion
Canadian Consortium for Arctic Data Interoperability (CCADI)	Numerous projects related to data standards, interoperability and Indigenous/Inuit focus	Proposed tools, standards, and policies

The OCP Arctic WG aims to advance trans-regional & transdisciplinary integration by contributing to:

(1) inclusion of Arctic perspectives on coastal and ocean systems change;	2) establishment of a inclusive and respectful framework for community based research	3) Knowledge integration: science, policy, local and Indigenous knowledge
Creation of the Arctic Ocean Atlas with collaborative participatory community based mapping and integration of partner sources.	Honouring its national and international commitments to Indigenous Peoples, and the TriCouncil Policy TCPS 2 regarding vulnerable communities	Working with Law & Policy WG; conducting case-based meta analysis of policy; evaluating policy with communities; community case –based collaboration with Atlantic and Pacific WGs.
Lead: Carleton	Lead: McMaster & Carleton	Lead & Port Mouton: McMaster

In order to raise the awareness of ALL Canadians...

- ◆ So that we will re-examine our roles in land-water-ocean transfers, their interconnectivity, and the relationship of ocean health to the future of Canadians and to the broader objectives of the SDGs;
- ◆ So that we will walk the talk, and honour the Truth and Reconciliation Commission Final Report calls to researchers; and
- ◆ So that we are moved to honour our duty to future generations.

GCRC Workplan

◆ Year 1

- ◆ Light year for budget. Participation in project planning, ethics, collaboration activities.

◆ Years 2 & 3

- ◆ Develop Arctic Ocean Atlas. Start with focus on sikuatlas.ca content and methods. Port existing efforts to improved platform to allow continuation of sea ice use and occupancy work with new communities. Develop new core tools for improving research processes.

GCRC Workplan

◆ Years 4 - 6

- ◆ Recruit new partners to the atlas. Allow for dynamic content from multiple sources to be linked into stories that span many partners. Focus on taking stock themes and tracking project outcomes as they concern the Arctic.

GCRC Progress

- ◆ Recruitment of partners ahead of schedule (see "Atlas" partners)
 - ◆ Funding their own atlas development, travel, etc.
 - ◆ Enthusiasm for participation in bigger picture Arctic Ocean Atlas through OC but need to get their own data and stories organized first.
- ◆ SIKU Atlas on schedule
 - ◆ New version supporting community curation of maps, text, photos running internally. Working on community curation of talking sea ice terminology maps (non-geographical process maps)

GCRC Progress

- ◆ Ocean Canada Community Stories Atlas
 - ◆ We think it would be helpful to see project overview of community priorities.
 - ◆ Not a budgeted activity in our plan but willing to run off side of desk if it will help. No time to chase people though.
 - ◆ Workshop Thursday to discuss and offer access.



the top right hand corner. If you want to bring it back, click on the plus sign in the same spot.

> Overlays

Below the Base Layer options on the right, are the options for sea ice feature Overlays. All of these different ice features were drawn by elders and hunters from each community to share their knowledge, and to show their uses of the sea ice. They used hard copy topographic maps for their drawings, and we have transferred these features or trails or camps into digital format, to be able to share them online.

When you click on a feature, it will appear on the map, along with a general description of that feature on the right hand side (which is the same as what you learned in the introductory "Sea ice" diagram page). You can turn features on and off at any time, to see just one type of ice feature, or many features all at once. All the lines or circles that show up, represent all the features that each person from each community drew on maps over the course of their interviews. It is important to note that the ice ridge and reef layers will really only show up in the Igloolik map page. This is not because they don't exist in the other communities, but just because the elders and hunters did not include them in the drawings they did on their maps in Pangnirtung and Cape Dorset.

By seeing all the different features and uses represented from one communities, it provides a good overview of the importance and knowledge of sea ice in each community.

> Navigation

> Sea ice features

You can learn more through these maps than just the features that appear when you turn layers on and off. Let's take camps for example. If you click on camps, it will show you all the elders or hunters in each community drew during their interviews. You can then click on any point, to learn more about that camp. Once you click on it, look at the window to the right of the map, to see the details about the feature.

> Events

Nunavut Coastal Resource Inventory

Communities

admin

Logout

Mock Interview 2

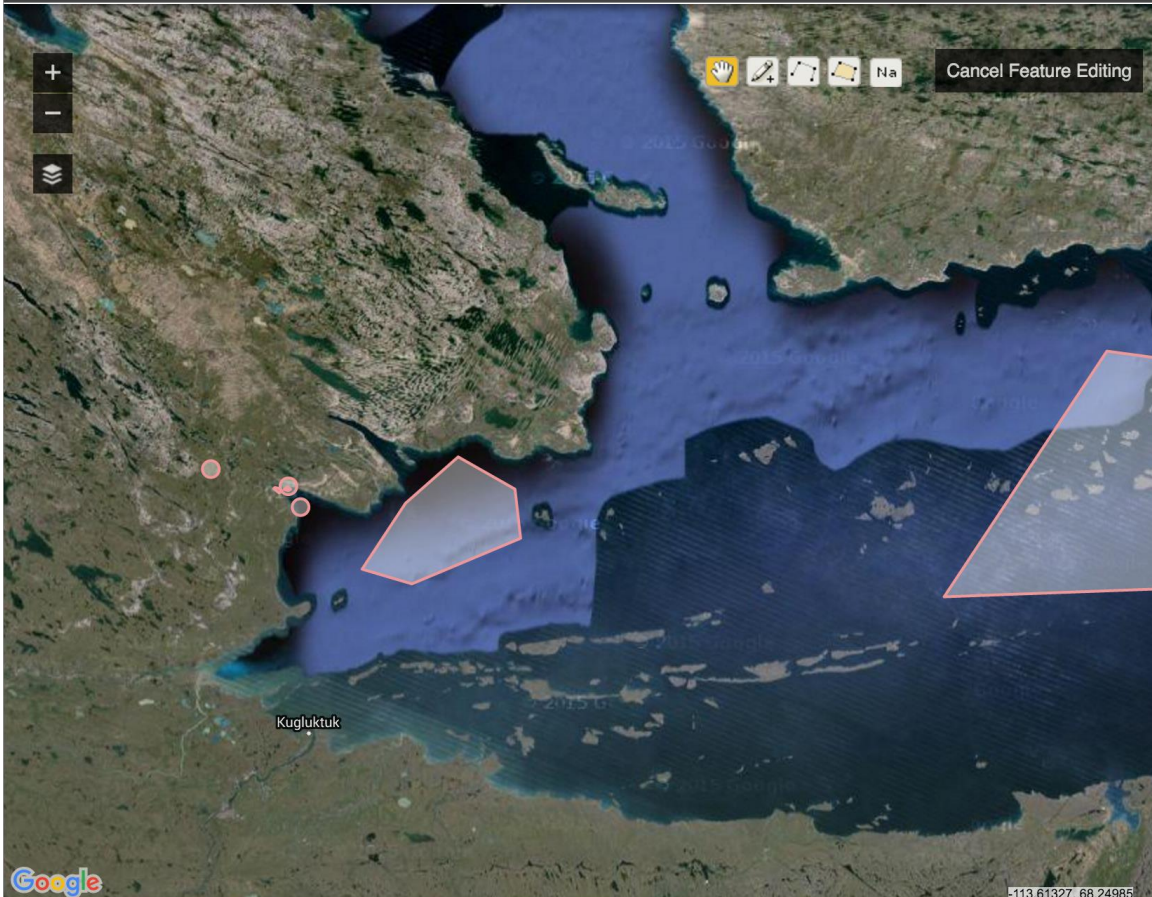
Interview with Monica on 2016-02-10

Create Place

Create Observation

Create Document

search the atlas



Observation

Interview

Interview(Monica 2016-02-10) X

Label Number

Species

Flags

- ☐ Abundant
- ☐ Everywhere
- ☐ Feeding
- ☐ Historic
- ☐ Migration
- ☐ Nursery
- ☐ Present
- ☐ Spawning
- ☐ Unknown
- ☐ Change

Notes

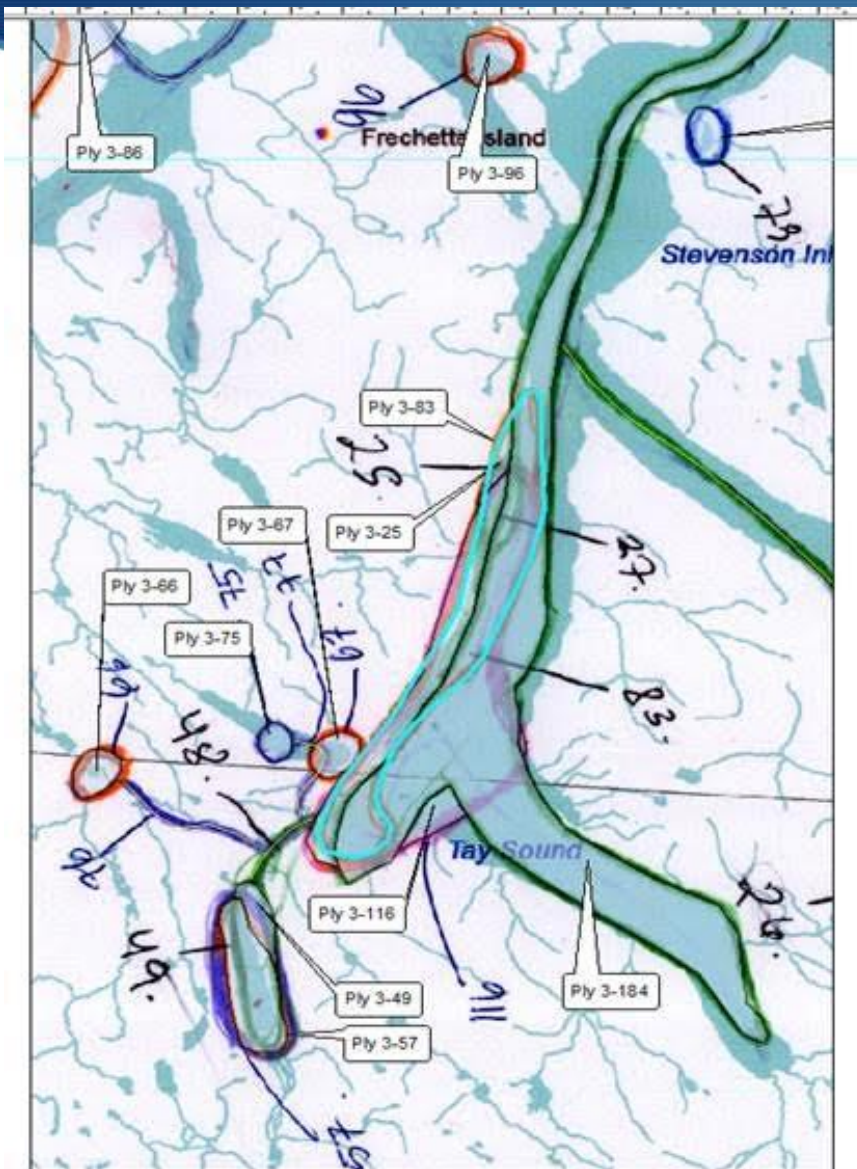
Time of Year

- Jan ☐ () ()
- Feb ☐ () ()
- Mar ☐ () ()
- Apr ☐ () ()
- May ☐ () ()
- Jun ☐ () ()

Made with Nunaliit

GCRC Progress

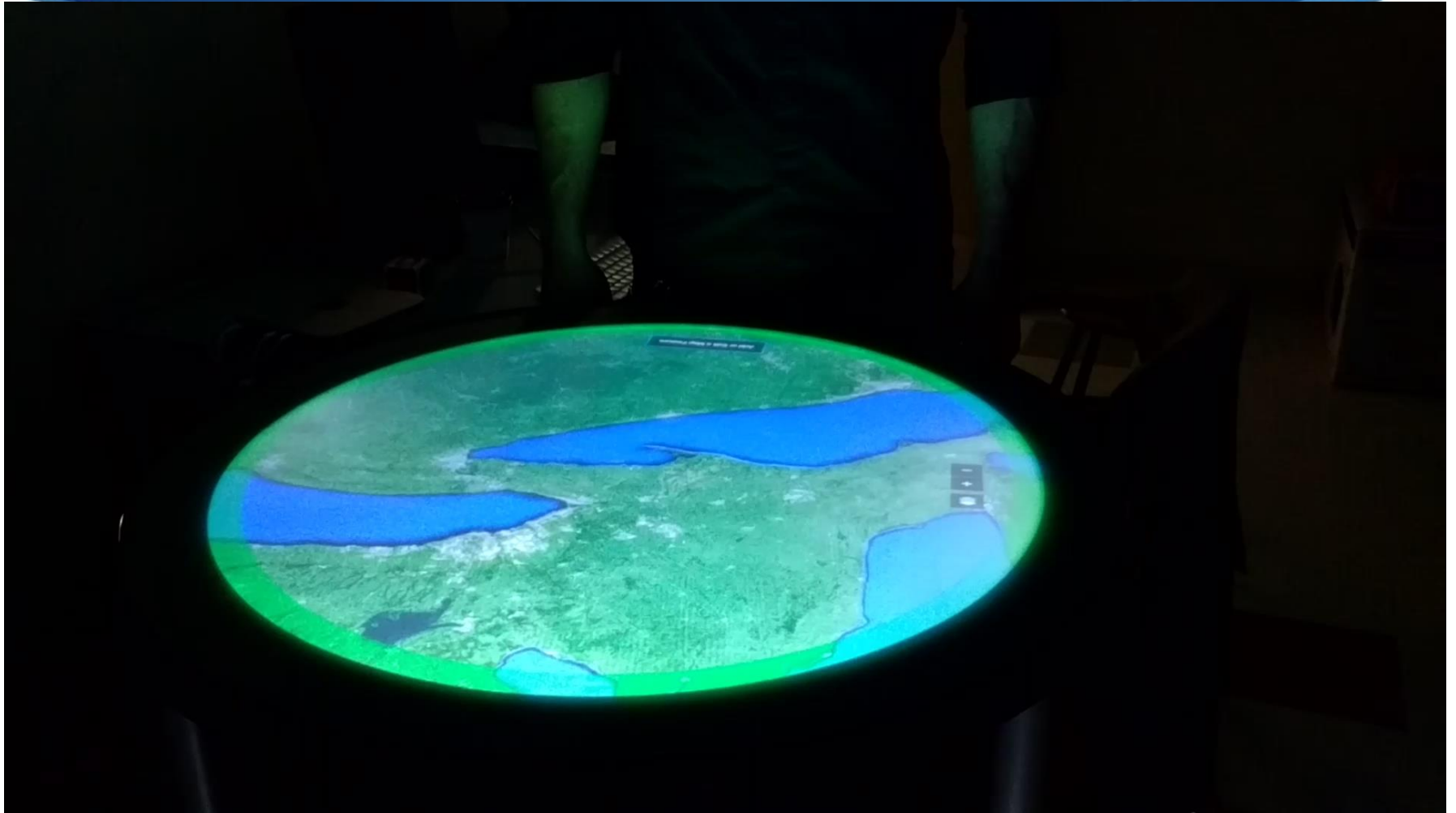
- ◆ Additional work to meet community research needs
 - ◆ Improve process for digital capture of knowledge
 - ◆ Enable community-owned interactive repositories of knowledge
 - ◆ Provide rapid digital return of research data for community use
 - ◆ Promote shared tools and standards to lend strength and provide clarity for integration with academic and government datasets.
- ◆ Nunaliit Framework + Nunaliit Table + innovative process and data design with partners



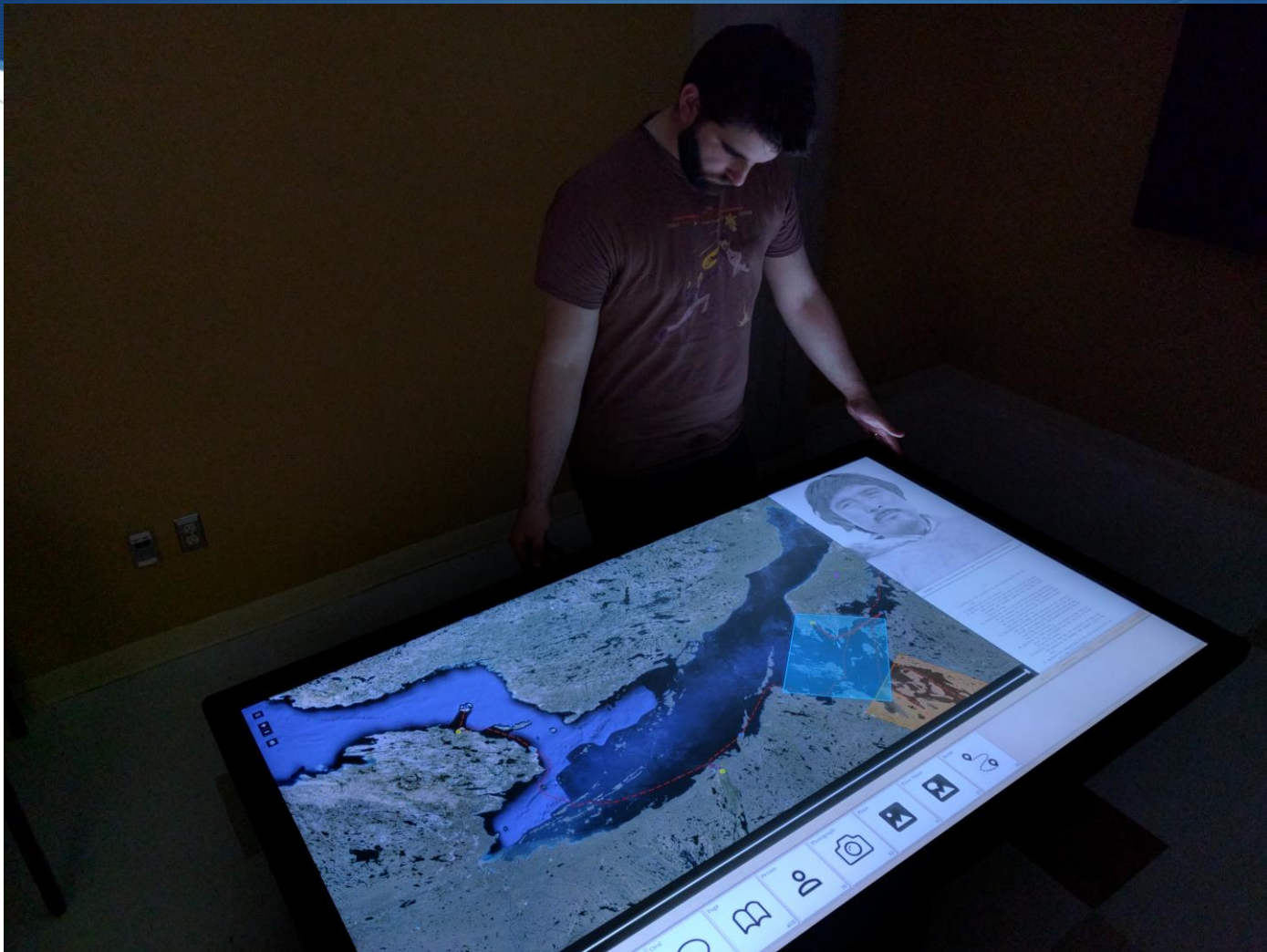
Sample map data for
verification during digitization
– NCRI Atlas



Focus Group in Pangnirtung (map and terminology verification) (Angmarlik Visitor's Centre, Pangnirtung, May, 2005; A. Papatsie).



Nunaliit Table Prototype – Geomatics and Cartographic Research Centre, Carleton University



Another Nunaliit Table Prototype showing <http://thuleatlas.org>
Geomatics and Cartographic Research Centre, Carleton University

Other Possible Partnerships on Horizon

◆ Clyde River Atlas

- ◆ Model for community-led development of local multi-stakeholder atlas
- ◆ Currently discussing options for content to be shared beyond community
- ◆ NCRI data for Clyde River a community priority

◆ ArcticCBM

- ◆ Developed in partnership with many organizations with an interest in community-based monitoring
- ◆ Would be excellent to feed & draw from

