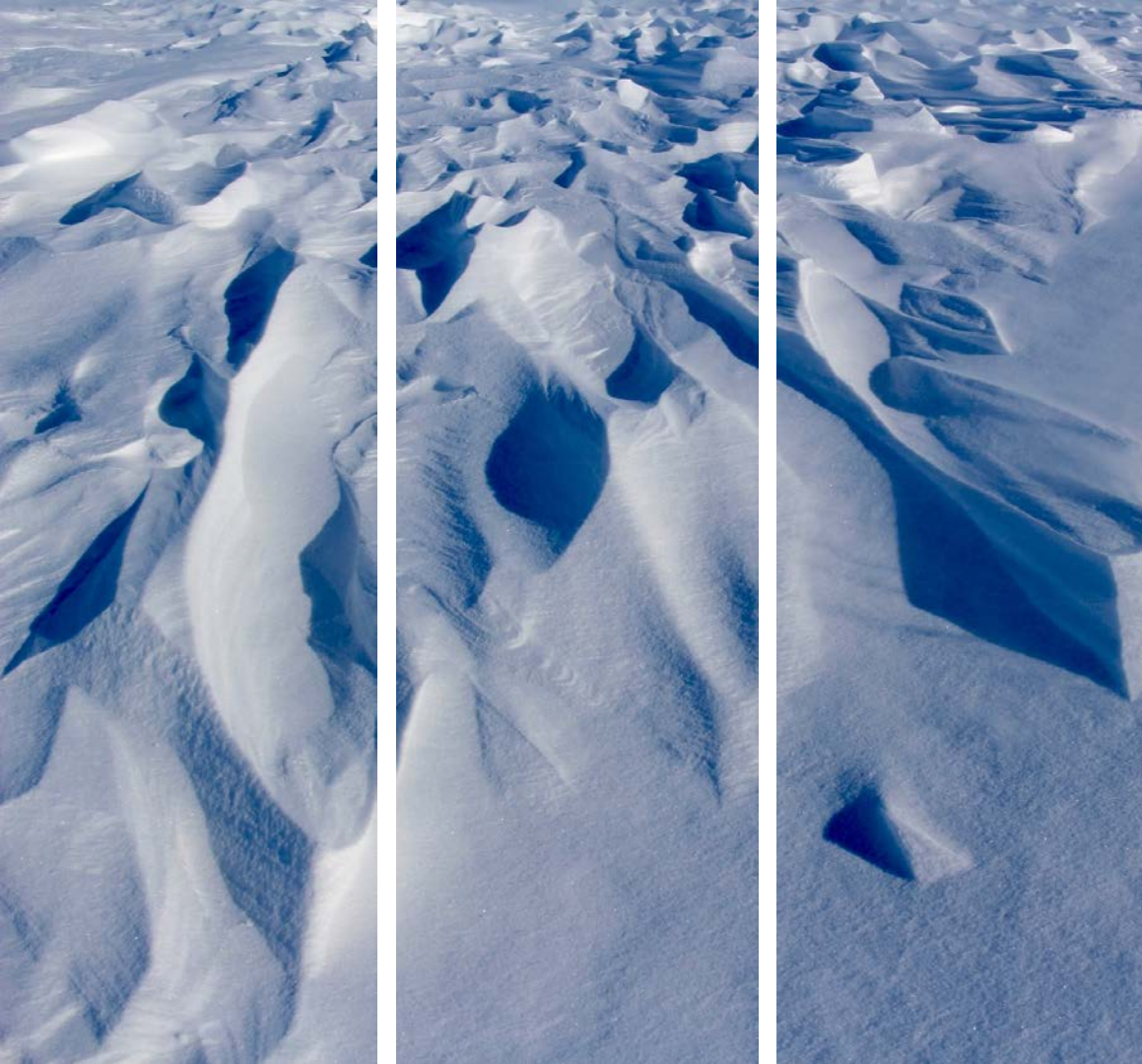




Participatory development of environment and health surveillance in the Canadian Arctic

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On behalf of: Dr. Ashlee Cunsolo², Anna Bunce³, Dr. Daniel Gillis¹, Oliver Cook¹, Inez Shiwak⁴, Jack Shiwak⁴, Michele Wood⁵, Dr. James Ford³, Dr. Chris Furgal⁶, Dr. Victoria Edge¹, and Dr. Sherilee Harper¹.

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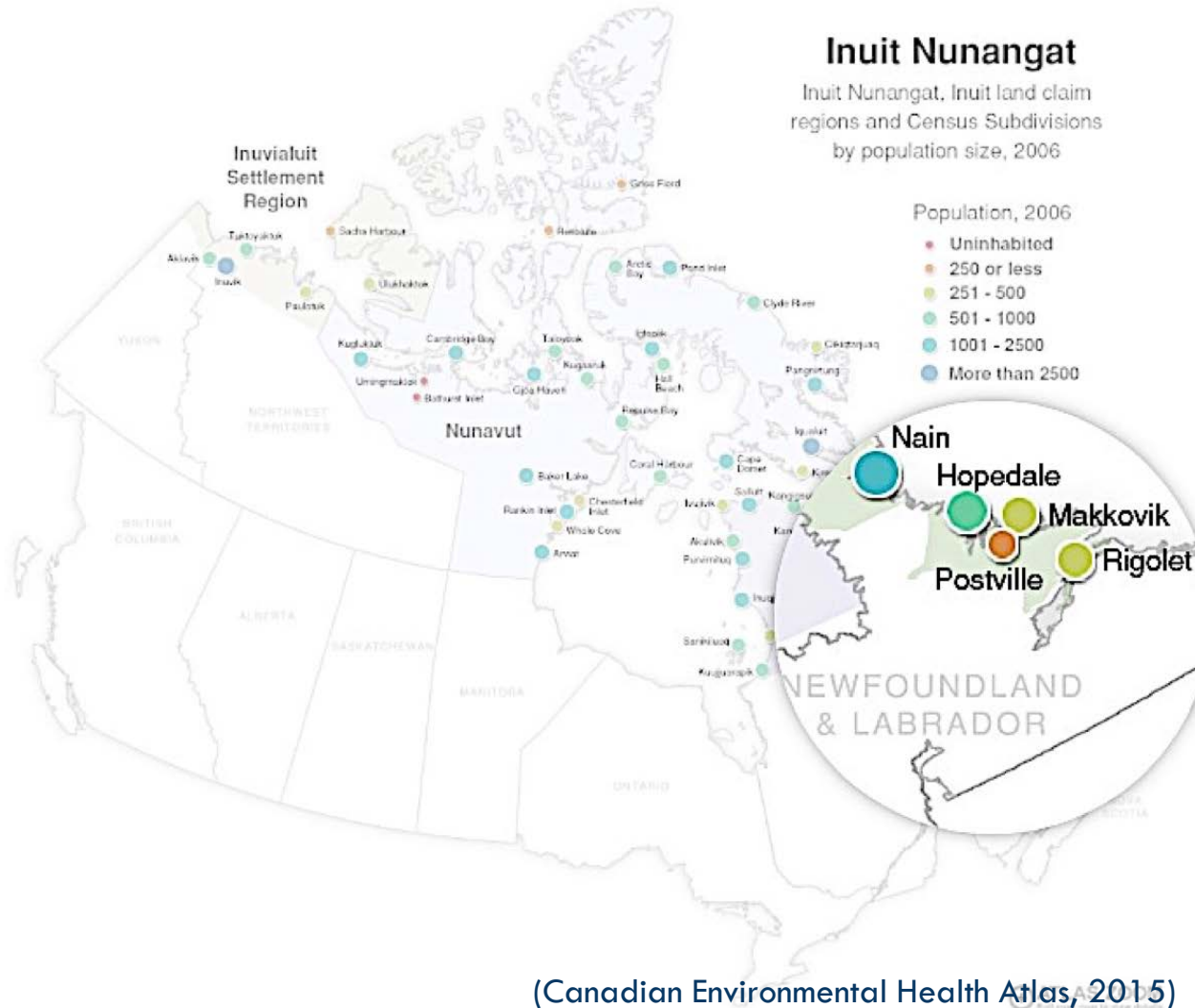
“Our beautiful land”

Inuit are experiencing
dramatic and rapid
changes in ways of life

Hold deep, intrinsic
relationships with the land

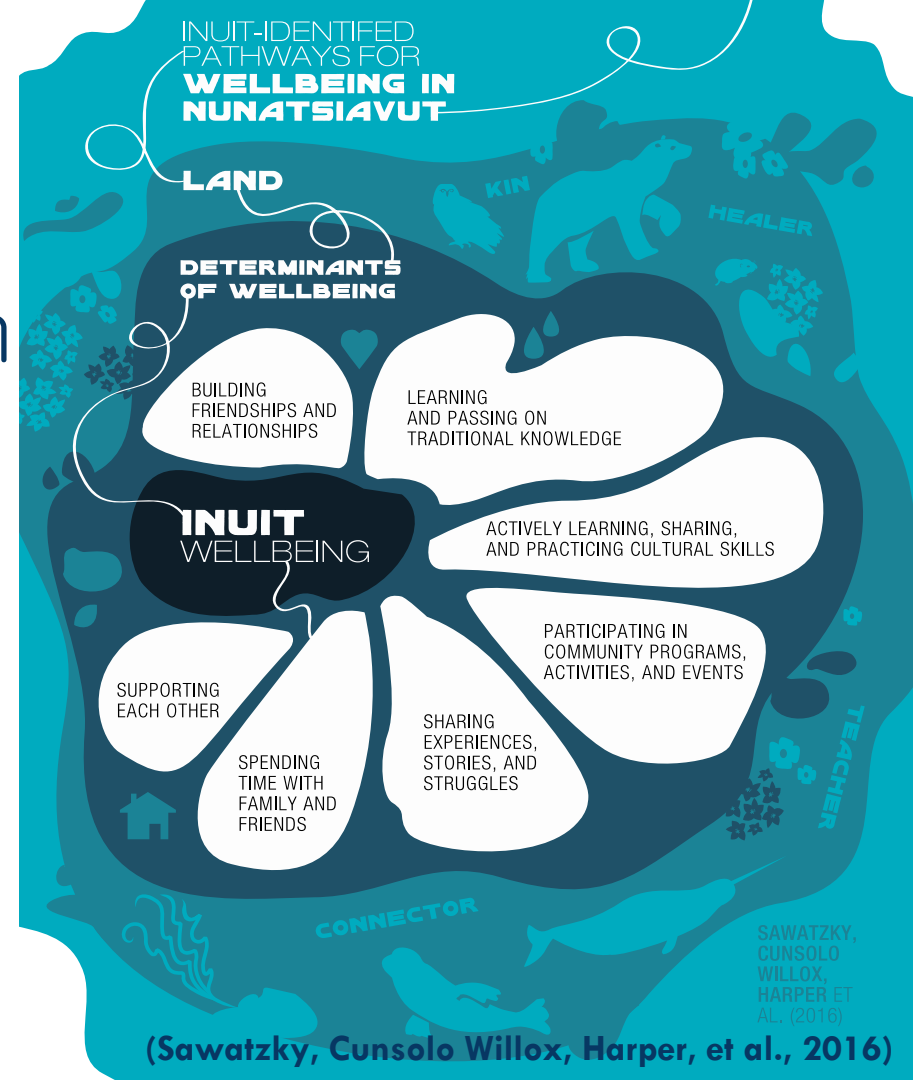
Inuit Nunangat

Inuit Nunangat, Inuit land claim
regions and Census Subdivisions
by population size, 2006



Connecting the environment and health

- For Inuit, the environment and human health are inextricably linked
- Environmental changes have direct and indirect impacts on health
- Understand connections in order to develop and support more holistic, context-specific climate change health adaptation



Past Research in Nunatsiavut

Climate change impacts on:

- Physical and mental wellbeing
- Food security
- Water quality
- Gastrointestinal illness
- Cultural practices and intergenerational knowledge transmission
- Resilience and adaptive capacity

From documentation to response:

- Streamline existing research efforts
- Comprehensive, community-driven environment and health surveillance

Call for community-driven environment and health surveillance

- Multiple sources and variability of environmental changes
- Range and cumulative nature of environment-sensitive health impacts
- Need to prioritize Indigenous and Northern cultures, ways of knowing, and values
- Move towards integrated, community-designed, and community-led strategies

Research goals

Develop and implement a community-based monitoring system to track, analyze, and respond to cumulative health impacts of climate change, resource development, and resulting socio-cultural and socio-economic shifts in Rigolet, Nunatsiavut

Premised on:

Community
engagement

Building
relationships

Commitment to
reconciliation

Iterative research development

Phase One: Participatory design

Define problem and establish common goals

Phase Two: Knowledge development

Identify what to monitor, why, and how

Phase Three: Intervention

strategy

Co-development of surveillance system (Charron, 2012)

Phase 2: What to monitor, why, and how?

- In-depth interviews (n=14) and focus group discussions (n=6)
- Community open houses
- Meetings with local and regional government stakeholders
- **What** observations/changes are most important to monitor?
- **Why** are they important?
- **How** can they be monitored?

Main themes



Phase 3: Co-develop surveillance

system
Use indicators and priorities identified in previous phases

Participatory App and website development

- iPods as data collection tools
- Cohort of community members will track changes over 2 years
- Upload information to secure online database

Community-driven, active monitoring



Significance

- Developed, owned, and operated by local and regional leaders
- Produce near real-time data for community members, health professionals, and policy-makers
- Living archive of land-based knowledge and Inuit wisdom about region
- Facilitate timely, locally-relevant public health concerns and messaging



Nakummek / Thank you

Advisory Committee: Drs. Sherilee Harper, Ashlee Cunsolo, and Andria Jones-Bitton

Rigolet Community Partners: Inez Shiwak, Charlie Flowers, Jack Shiwak (AngajukKak), and the Rigolet Inuit Community Government

Project Team: Dr. Dan Gillis, Oliver Cook, Anna Bunce, Dr. James Ford, and Dr. Chris Furgal

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Canada

Savoir polaire
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“People don’t want to be a part of another program. This program needs to be designed so that it becomes a **part of our lives.**”

