Developing Environmental Community-Based Monitoring Through Collaborative Research and Two-Way Capacity Sharing

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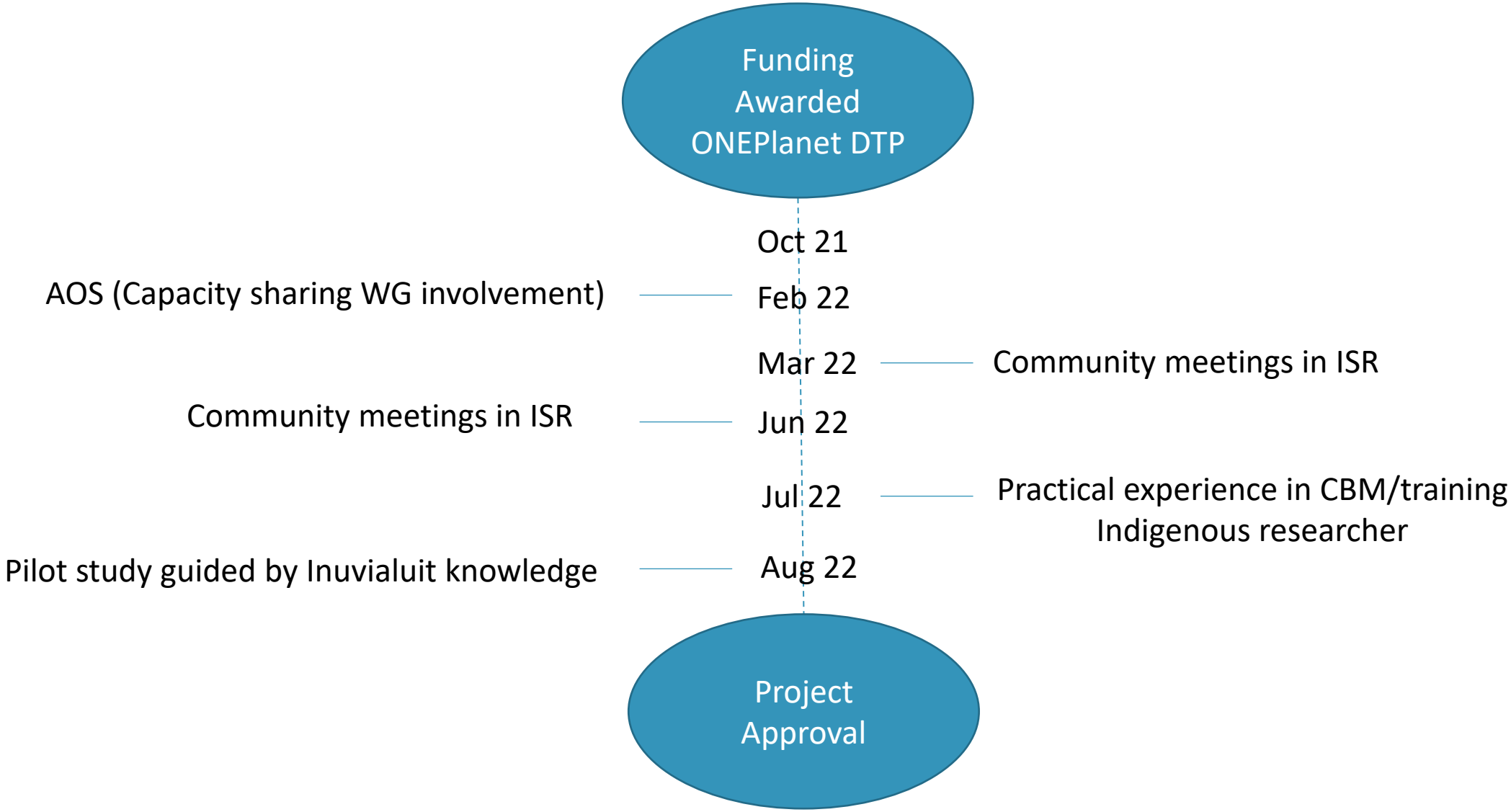
Takeaways from AOS

"Capacity means to create the space, opportunities, and means which enable everybody to work together and learn from each other"

- Indigenous communities determine their own research priorities
- Support Early Career Researchers (ECRs) and bridging functions….that are often difficult to support with revolving and time-limited research funds.
- Build understanding about the true value of capacity sharing

AOS statement (2022)

Theory to practice: my PhD to date

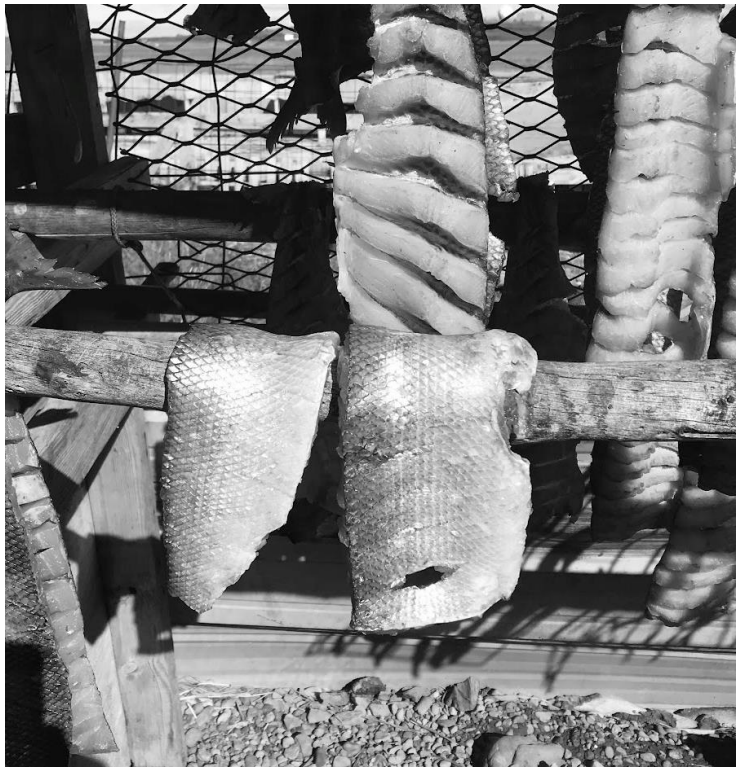


Community meetings

Tuktoyaktuk

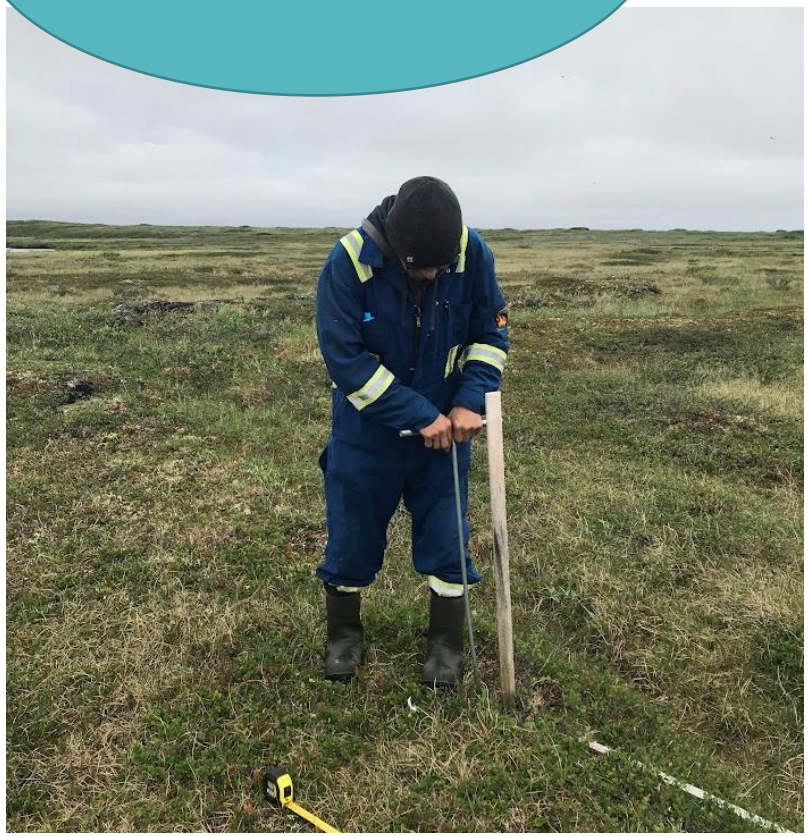
Tuktuyaaqtuuq

Summer in Tuk



Practical experience in CBM

When funding isn’t a limiting factor what is?



Shifting from capacity building to capacity sharing in Arctic research

Capacity sharing is a two-way multi-directional exchange that is developed from a foundation of reciprocity, communication and collaboration

The focus on capacity building (a one-way exchange process) must shift towards capacity sharing (a two-way exchange process)

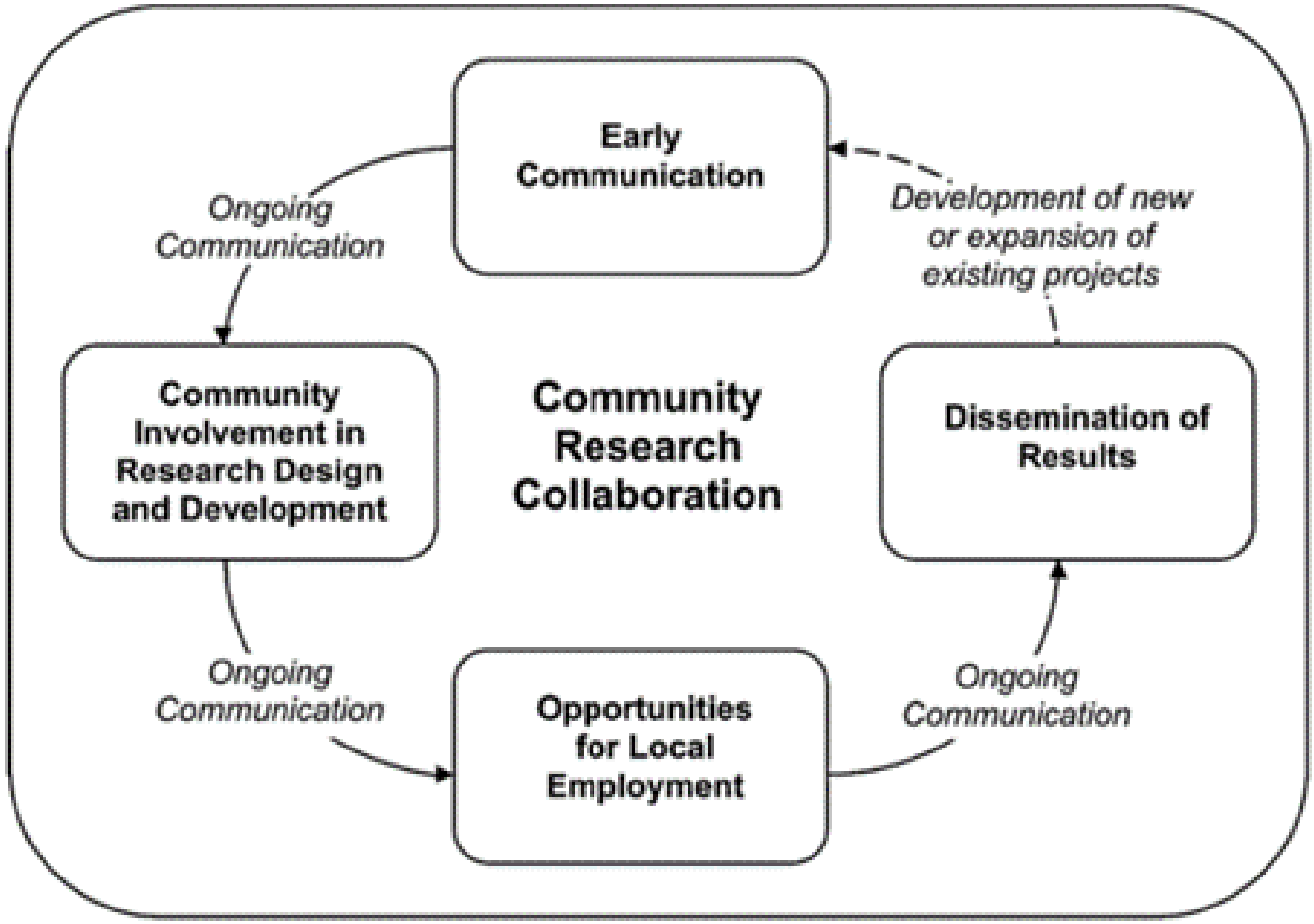
Co-development of contaminant monitoring to improve strategic decision making

Evolving CBM program that addressing contamination threats posed by the legacy of infrastructure including industry, transportation routes and waste

Pilot study guided by Inuvialuit Knowledge

Addressing community research priority

Embedding upskilling into program



Building a flexible and adaptable program

(Pearce et al., 2009)

Accessible and applicable monitoring

Embedding upskilling into program

Different sampling techniques

Data collection, collation, analysis and interpretation

Recording observations

Sample labelling and storage

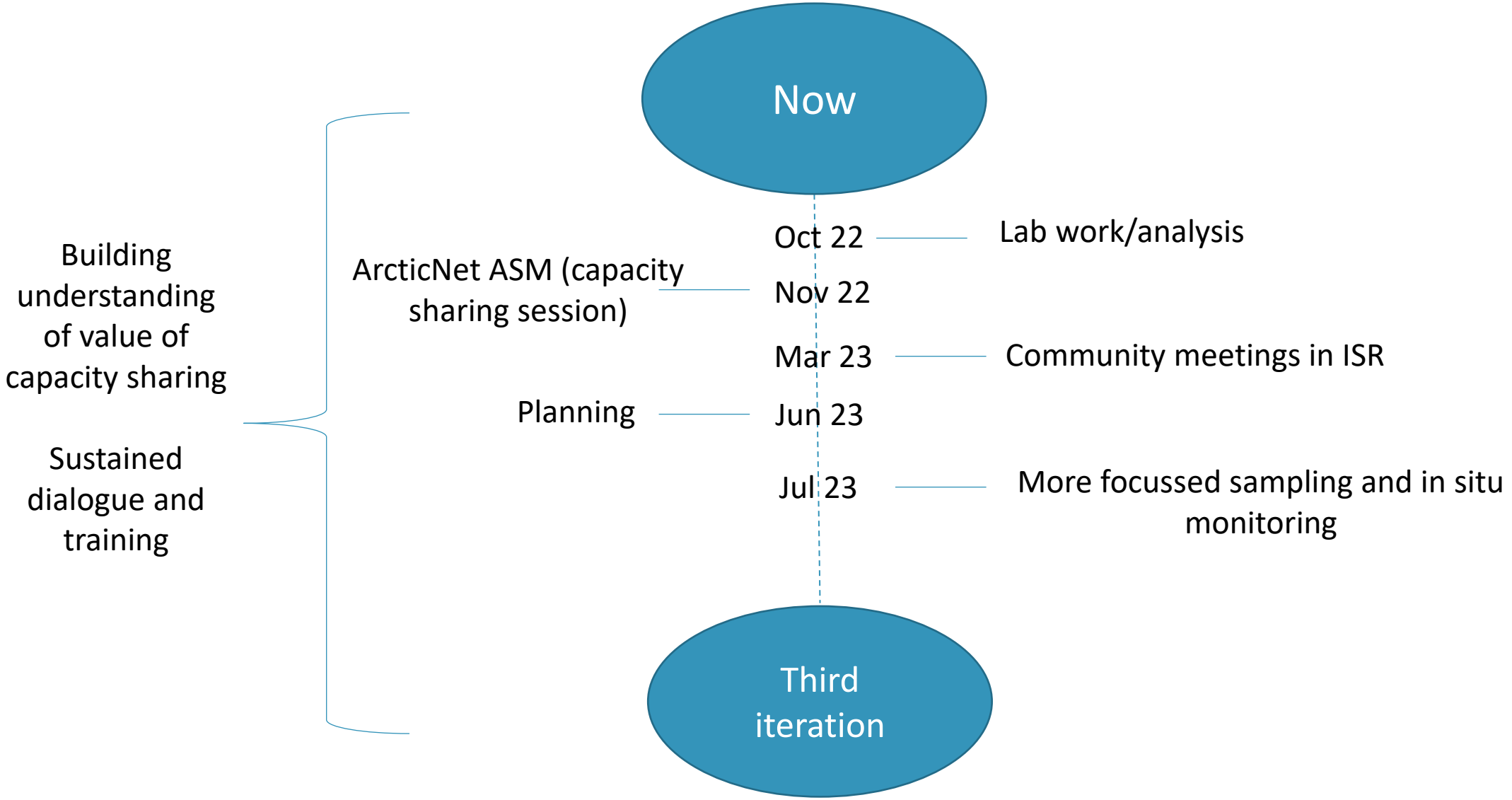
Lab work

Understanding data quality

Science communication

Data analysis

Next steps


Now
Oct 22
Lab work/analysis
ArcticNet ASM (capacity sharing session)
Nov 22
Mar 23
Community meetings in ISR
Planning
Jun 23
Jul 23
More focussed sampling and in situ monitoring
Building understanding of value of capacity sharing
Sustained dialogue and training
Third iteration

Discussion

- Valuable but challenging approach
- Requires time and sustained funding
- Large emphasis on adaptability of program by evolving through different iterations
- Funding supporting early dialogue and co-dissemination is required

https://arcticobservingsummit.org/wp-content/uploads/2022/08/AOS_2022_Conference_Statement.pdf
Pearce, T.D., Ford, J.D., Laidler, G.J., Smit, B., Duerden, F., Allarut, M., Andrachuk, M., Baryluk, S., Dialla, A., Elee, P. and Goose, A., 2009. Community collaboration and climate change research in the Canadian Arctic. *Polar Research*, *28*(1), pp.10-27