The North is a critical last frontier

- Arctic research is important to circumpolar communities

- Insights can be applied elsewhere:

    - to address complex challenges related to sustainable development, within ever-changing contexts

    - to harness conservation opportunities

How do we get there?

Diversified, balanced and prioritized scientific programming

Intervention capacity and effectiveness (reactivity)

Maintaining expertise in key scientific areas

Integrated planning and resources aligned with targets and desired outcomes

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The Role of Science in Government

- Scientific research applied to Government priorities
- Support for public policies
  - Artificial Intelligence, Arctic, Clean Growth & Climate Change, Safety & Security, etc.
  - Regulations and policy decisions
- International cooperation / Science Diplomacy

△ *TRANSFORMATIONS*

△ *Align science programming towards socio-economic benefits*

△ *Understanding of how science supports public policy (and mechanisms)*

△ *Contribute to building a stronger science culture*

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Science Diplomacy as a Determining Role

- Benefit from increased access to international innovation through S&T agreements/networks (growing impact of science on prosperity)
  - Find solutions to global challenges;
  - Promote values, including scientific principles;
  - Contribute to formulation of international policy; etc.

- Enhancing science diplomacy:
  - Include in whole-of-government/country, regional and thematic strategies (e.g. Arctic)
  - Develop international S&T strategies
  - Improve coordination within government (e.g. appointment of high-level science advisors)
  - Improve science literacy of non-science-based departments/organizations

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Open Science as an Enabler

- Make findings and data **available** and **discoverable**
  - *E.g. Move to "Open Science" by enhancing current platforms to facilitate discovery publicly-funded science information*

- Make findings and data **understandable** and **re-usable**
  - *E.g. Encourage/promote "Citizen Science"*

- Work with scientists to maximize the effectiveness of interactions with the public and the media

1. Diversify your audience

2. Share science broadly

3. Encourage dialogue

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Science Advice for Environment & Regulatory Issues

- Opportunity for science to be part of an ongoing dialogue
  - Early and sustained engagement and collaboration;
  - Improved communication and accessibility of data and science;
  - Cumulative of all impacts (environment, health, socio-economic)

- Includes natural/physical sciences as well as economic analysis, statistics collection and other social sciences

- Traditional Knowledge (and community knowledge) contribute to evidence-based decision-making

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Generating first class scientific evidence that is driven by innovation, engagement and strong networks for collaboration and information-sharing
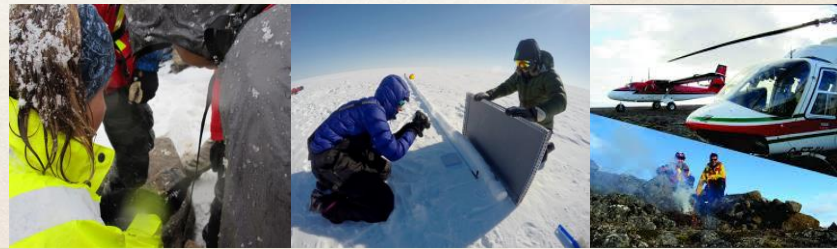
Public more involved in/ informed of evidence-based decision-making

Science Advice for Environmental & Regulatory Issues

Open Science and Science Communications

Science Diplomacy

Science programming that addresses complex challenges

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Key Questions to Guide our Discussion

- *How can we ensure a stronger voice for evidence in government policy making (science and policy integration)?*

- *How can we further promote the value of informed decision-making to our citizens?*

- *How can we increase uptake of open science data and information... in environmental assessments... in the innovation chain...?*

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