

#12 Managing Development? Knowledge, Sustainability and the Environmental Legacies of Resource Development in Northern Canada

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There is a lot of research about how industry affects the Arctic. This includes the politics of environmental reviews to how mining activity changes the environment. Yet, there are key research gaps in our understanding of the lasting effects (legacies) that the activities of industry has on the land and water and what this does to local communities.



Areas that need further study:

- ⇒ *Lack of case studies to compare*
Most research has a very narrow focus, studying one species or the harvesting practices of one community. A wider research approach could show effects at different levels (local, regional, territorial, across the north) or across different resources (such as lumber or minerals). Research on environmental changes needs to look at the impacts of all forms of resource development and how areas are linked.

⇒ *Long-term environmental results of past and present developments*

Usually, research on environmental impacts of a mining project focuses on planning, building, and operating a mine or other development. Less research is done about the ongoing changes from developments and the lasting effects after the mine is closed. Resource development can leave long-lasting changes to the land and water as well as social changes. More research is needed on fixing damaged lands and water, and government policies to deal with the long-term effects for communities of resource developments.

⇒ *Community understanding of science based management processes*

Issues of trust, Traditional Knowledge, and other factors are important to how well scientists and politicians are able to communicate with community members about northern development. In particular, research is needed on how Aboriginal communities might play a more central role as co-managers of non-renewable resources. Without a clear understanding of these issues, communities may continue to feel left out of processes happening on their doorsteps.

⇒ *Comparisons with other regions*

These issues concern people worldwide and it would help northern communities to look at other regions, including mining and rural development in Australia.



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