

A FILM FOR ENGAGEMENT + IMPACT

Signal Fire is a resource to help create awareness and understanding. It is also a gateway to facilitate our larger goal: to activate meaningful change by transforming our scientific methodologies, land and resource management policies, research funding approaches, journal publishing standards and educational cultures and curriculums.

This change requires acknowledgement and atonement for Canada's treatment of First Nation, Métis, and Inuit people and rebalancing our relationships to meet the needs of Indigenous peoples and their communities.

We have a lot of work ahead, and we all have a part to play...

ABOUT THIS GUIDE

After watching the film, we invite audiences to reflect, share and discuss how we – as individuals and representatives of institutions – can put the ideas and intentions of the 10 Calls to Action to Natural Scientists Working in Canada into practice.

All screening hosts will have their own goals and moderating styles that are relevant to their groups. This guide is a resource to spark conversations and prompt critical thinking.

Beyond questions, the guide references quotes from interviews in the film and some visuals you can screenshare to facilitate dialogue. Choose what works for you.



DISCUSSION STARTERS

- What is a key message you take away from this film?
- Is there a moment or quote that stood out for you while watching the film?
- Reflecting on the film, can you share an example from your education or research experience where any of the ten calls to action could have changed your understanding, process and/or outcomes?
- Considering your current studies and projects, what steps could you take to collaborate with Indigenous communities and incorporate Indigenous knowledge in your work?
- How might you be able to create more awareness and understanding about reconciliation in natural science within your own networks?
- How do you think western science research may have contributed to power imbalances with respect to Indigenous sovereignty over lands and waters?
- What intimidates you about starting to enact Reconciliation in your learning and/or research?

10 CALLS TO ACTION TO NATURAL SCIENTISTS WORKING IN CANADA

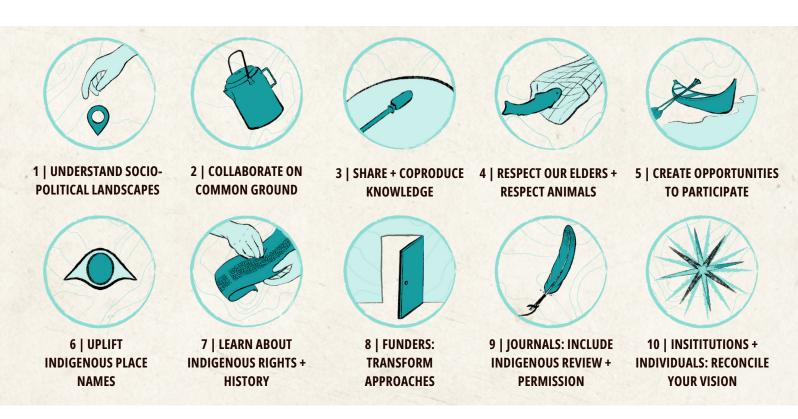
Reconciliation is about establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in the country.

In order for that to happen, there has to be awareness of the past, acknowledgement of the harm that has been inflicted, atonement for the causes, and action to change behaviour.

TRUTH AND RECONCILIATION COMMISSION OF CANADA (TRC)

The TRC's definition of reconciliation includes four elements required to make meaningful change -- awareness, acknowledgement, atonement and action.

Ask your group to select one of the 10 calls to action and discuss how individual scientists and/or institutions could translate the TRC's intentions into concrete actions in natural science research approaches and implementation.



Step-up | Socio-political understanding

Reconciliation is not a box-ticking exercise. It is about asking questions, identifying opportunities to listen and working to collaborate throughout a research endeavour. Discuss some questions and actions relevant to approaching Call 1.

- Determine which Indigenous government(s) / community has jurisdiction over the research site.
- Does the research take place on a settled claim or a claim in negotiation? This affects the governance structure, and who you contact for permits/permission to present, etc.
- Do they have their own ethical guidelines for research formal rules or oral customs? How would they impact your methodology?
- Do they have their own process for research permitting to consider?
- Identify community representatives and elders with whom you can share your proposal and collaborate on how research can meet the interests and priorities of the community.

KNOWLEDGE SHARING AND CO-PRODUCTION

Someone might tell me a story about a swamp monster – something unusual in a lake. My first inclination as a scientist might be to dismiss it. Then I'll see something and say "Oh, there's a huge methane pocket at the bottom of that lake and a huge thing of moss comes up and bubbles to the surface and smells like sulphur." We're talking about the same thing. We're just describing it in different ways.

HEIDI SWANSON

ASSOCIATE PROFESSOR OF BIOLOGY, WILFRID LAURIER UNIVERSITY ADJUNCT PROFESSOR, UNIVERSITY OF WATERLOO Language is important. In the film, terms such as western science and Indigenous knowledge are used to describe different world views, perspectives, and cultural approaches. **Are these terms adequate**, **sufficient**, **accurate?**

What types of considerations should we be aware of regarding language and understanding in the context of research?

Many researchers are interested in "co-developing" research with Indigenous partners, but may not know where to start.

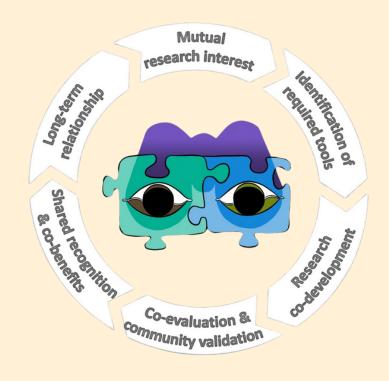
What are some ways we can include Indigenous ways and cultivate space for Indigenous methodologies in research?

ETUAPTMUMK (MI'KMAW FOR 'TWO-EYED SEEING')

This concept is often used as an example to illustrate working with different knowledge systems. Two-Eyed Seeing embraces "learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of mainstream knowledges and to use both these eyes together, for the benefit of all," as envisaged by Elder Dr. Albert Marshall.

Ask your group to share examples of their work and discuss how using a framework like "Two-Eyed Seeing" could improve outcomes for all.

What can we do within the western science research community to foster more holistic science and more open-mindedness with respect to other ways of knowing?



ARTICLE

GRAPHIC PUBLIC DOMAIN CC BY-NC-ND 4.0 REID ET 2020. "TWO-EYED SEEING": AN INDIGENOUS FRAMEWORK TO TRANSFORM FISHERIES RESEARCH AND MANAGEMENT.

ACKNOWLEDGE HISTORY. CHECK YOUR BIAS.

What do you see?

These two photos were taken at the same location more than a century apart.

As part of the Mountain Legacy Project, authors Carmen Wong and Gùdia (Mary Jane) Johnson each wrote about their impressions of this image retake. From a Western Science perspective, it reveals the impact of climate change with the toe of a glacier in retreat. From Gùdia's lens, it recalls a history when Indigenous peoples inhabited the land.

How can Western Science do better to consider Indigenous people's history and relationship with the natural environment?





PHOTO CREDIT: MOUNTAIN LEGACY PROJECT (2018, 1900)



PHOTO CREDIT: YUKON ARCHIVES, ELMER HARP JR. FONDS, 2006/2, #228

The reality is, you don't do anything in this life without somebody else's assistance, somebody else's ability, somebody else's know-how.... Something that you may put words to is never founded only on your understanding. It's based on a multitude of people that have been walking ahead of you.

GÙDIA (MARY JANE) JOHNSON LHU'ÀÀN MÂN KU DAŃ KLUANE FIRST NATION ELDER

KWÄK'ÄN | SIGNAL FIRE | THE STORY BEHIND THIS IMAGE

The title of the *Signal Fire* film comes from this photo of a kwäk'än which is Dan Kwánje (Southern Tutchone) for signal fire. In the past, kwäk'än were used as a call for help. In this 1948 photo, Gǎ lhêla - Moose Johnson is signalling on behalf of the Andover-Harvard Archaeological Expedition that he is guiding, for a boat pickup across Kluane Lake. None of the First Nation guides were acknowledged for their knowledge and contributions that led to the expedition's archaeological "finds". The failure to cite the aid of Indigenous Knowledge in such an expedition is just one of many similar examples in Canada.

How can scientists and academic publications better acknowledge contributions of Indigenous people? Do you have any examples of where/how this has been done well?