WORKING TOGETHER

towards relevant environmental monitoring and research in the NWT

Community engagement is crucial to developing more relevant research and monitoring, and as such is becoming more important to funders and licensing authorities. While scientists have made great strides in working with northern partners, community stakeholders (residents, local governments and regulatory authorities) still indicate that there is room for improvement. *The Working Together: Towards Relevant Environmental Monitoring & Research in the NWT* document was developed by the Cumulative Impact Monitoring Program (CIMP) and the Aurora Research Institute (ARI) as a guide to help the NWT research and monitoring community improve the significance and success of their programs by working more effectively with community partners. The framework of the guidance document is based on the Pathway approach which was developed by CIMP to support research and monitoring in the north[1].

Workshops and interviews were held with dozens of monitoring and research experts – from government, regulatory agencies, communities, and academia – who work in the NWT. An abundance of wisdom was whittled down to the most commonly provided approaches and advice, which are included here. A separate Appendix (available on the ARI website) has also been compiled to capture the overflow of additional ideas that couldn't be included in this document.

What we heard from these experts was that relevant research projects produce information that is useful at the community level and depend on successful relationships with northern partners. We also heard concern from researchers about the financial implications of engagement. The ideas for community engagement presented here provide a spectrum that can be customized to individual program budgets and needs. While intended to support up-and-coming scientists, the advice and ideas presented here will be of value to experienced researchers, co-management boards, as well as governments and agencies.

[1] While this document is structured around the nine-step Pathway, it was noted by many that projects do not always follow a linear progression; they are often the result of an iterative process.

The upside to spending time in communities is huge: you become identified in the community as someone whose work is valuable and useful. I think you gain the direct perspective of what the community is interested in and what their needs are.

-Andrew Applejohn,
Environment and Natural Resources - GNWT

IT'S ABOUT BUILDING RELATIONSHIPS

Meaningful participation by members of the community means they are part of the research team. With good community participation and a sense of ownership of the research project, many good things result, such as research capacity and the development of a meaningful, long lasting relationship with the community.

-Michael English, Wilfred Laurier University

Research does not always have a positive reputation in the north. Communities have seen countless researchers come and go, taking samples and data to build their careers and leaving communities feeling used. Some communities have had experiences with unethical, irresponsible or incompetent researchers who have caused harm. Researchers should expect to earn the trust of community members by building relationships. It is also important to remember that every situation is unique; research teams need to work with the community to understand if and how they would like to be involved and provide opportunities for meaningful participation.

A better connection with the community can help improve understanding of local priorities and concerns, making projects more meaningful. If a project is important to a community, it is more likely that they will be interested in participating. Spending the time and making the effort to build relationships demonstrates interest in working with, not just in, communities – a few extra days at the beginning or end of your trip can go a long way. It is important to keep in contact throughout the life of a project, especially during the off-season. If visiting is not feasible, using the phone to connect is often better than email. Remember, building trust and respect takes time; community partners will appreciate your long term commitment.

Tips on building community relations

- *Talk to people to find out how to introduce yourself properly in the community – there may be protocols that can help ensure you start off on the right foot.*
- *Spending time on the land is a great way to connect with community members and learn about the place you are researching. If your field camp is accessible to the community, try having a weekly tea for public outreach and information sharing.*
- *All partners should be upfront and open about their goals, expectations, concerns, timelines, budget and experience.*

You need to keep in touch with people.. call them. Regular, respectful and constant communication – much of it informally – is key.

-Lois Harwood, Department of Fisheries and Oceans Canada

Start Early

The biggest thing is to highlight early communication with communities – as this will help both the communities and the researchers. It will prevent researchers from initiating work the communities are not interested in and will assist communities in identifying which researchers can meet their needs and address community concerns. ***-Tim Heron, NWT Métis Nation***

DO YOUR HOMEWORK

Before visiting or starting a research project in a community, it is vital to do some homework. This includes learning about the community and understanding previous research by spending time on local organizations' websites, following news stories, and speaking with researchers who have worked there already. Understanding the roles of the various community and regional organizations will help to identify key contacts. It is also important to identify research teams or initiatives that are currently working in your area of interest and look for ways to work together, if possible. Community partners will appreciate any effort made to reduce replication of studies.

It is best to get community perspective early, even before formulating research questions or making data collection plans. Researchers will find that the effort will save them time later in the project and facilitate community engagement. Connecting with community early will also help in the research licensing process.

Research licensing in the NWT

Without exception, all research in the Northwest Territories must be licensed. This includes work in physical, social and biological sciences, as well as traditional knowledge. Different licenses may be required, depending on the subject – ARI's licensing website (www.accessnwt.ca) provides guidance on the licensing process and requirements. Community consultation is an important part of the process, and this requires plenty of lead time – license applications should be prepared 2 to 3 months in advance. ARI shares information about research projects through its Compendia of Research and a public database of research licenses.

Aurora Research Institute has community contact information as well as a searchable database that provides information on licensed research and researchers working in the NWT (data.nwtresearch.com).

1 DEFINE A PURPOSE

Start with community interests – find and develop research activities that address those concerns and interests.
-Peter Redvers, Crosscurrent Associates Ltd.

The first step of the Pathway provides a great opportunity to start building relationships and establish partnerships with community stakeholders. Communities often have information needs that they are unable to address due to a lack of funding and capacity; research that addresses local concerns will draw more involvement from the community. Not every project will match exactly with community priorities; however discussing the long-term context of a research project can help communities understand its merit and/or potential benefits.

Start a project by arranging consultations with the people and organizations who know the land and local interests. Staff at the band offices, resource/environment councils, regional co-management boards, and the appropriate government departments can help to network and identify key contacts. Include a plain language explanation of your project idea and give community members time to digest and ask questions. Community organizations deal with numerous researchers and projects – response time may depend on how busy the organization is at the time of contact.

A community meeting or workshop is often a good way to work together to develop a project's purpose, however, some communities suffer from workshop burn-out and may not be interested. Consider other ways of engaging: attending existing meetings, informal discussions, or meeting with land-users. There may be costs associated with initial meetings (hall rental, interpretation, honoraria, etc.) be sure to include this in budget considerations.

One effective way to navigate the early stages of collaboration is to find opportunities to get together in informal contexts. A lot of fruitful research has emerged from fieldwork and knowledge sharing camps.

-Trevor Lantz, University of Victoria

TIP: *An introductory brochure is a great way to get information about your project in the community. Create a plain language brochure with information about the proposed project and researchers, including photos, for distribution at meetings, around the community, and through mailbox drops. Be sure to include dates of community visits and field work.*

2 IDENTIFY KEY CONNECTIONS

If you're listening, and not talking, you learn a lot more about key connections.
-Andrew Applejohn, Environment and Natural Resources – GNWT

HOW DO THINGS CONNECT AND WHAT SHOULD WE TRACK?

The second step of the Pathway can help identify connections in the environment and what should be tracked. Local involvement can be beneficial at this stage. Community members, including decision makers and other stakeholders, can bring a broader perspective to the problem and may identify linkages that will make a research project more robust.

A researcher should seek input from as many people as possible who are familiar with the study area - community organizations can assist with identifying possible contacts. Having maps and photos available may help Elders and land users identify areas of concern or interest. Explore community mapping methodologies for ideas on how to collect more in-depth local knowledge of the research area.

Using traditional and local knowledge

Traditional and local knowledge (TK and LK), when used appropriately, can contribute important information to a project. TK and LK are often shared openly during meetings and within discussions, including identifying indicators of concern and environmental relationships (as well as timing and other logistical information).

If TK is going to be incorporated formally into a project, it needs to be under the purview of local communities. Additional consultations and an ethics approval are also required. Researchers without appropriate qualifications should not endeavour to collect or analyze TK independently; this may be an opportunity to partner with local cultural institutes or TK specialists.

3 REVIEW CURRENT INFORMATION

WHAT IS ALREADY KNOWN?

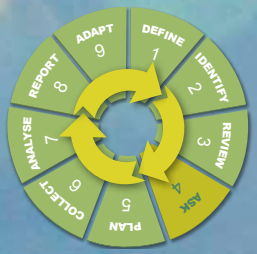
The third step of the Pathway goes beyond the goals of a standard literature review by identifying and incorporating local information into the scoping process. Community and territorial organizations have records of past projects, vulnerability assessments, state of knowledge reports, industry reviews and traditional and local knowledge studies – although not always in digital format. A researcher should try to contact Elders or long-term staff with 'corporate memory' to determine what information sources may be available. Small organizations may not have the staff or time to search for and scan sources that accommodate researchers' information requests. Consider hiring someone local to work on this and support local research capacity at the same time.

Resources

The following sources are helpful for gathering information on other NWT projects:

- *NWT Discovery Portal*
- *Aurora Research Institute*
- *ARI's NWT Research Database*
- *Licensing organizations*
- *Regulatory repositories*
- *NWT Watershed Stewardship*
- *NWT Protected Areas Strategy*
- *DFO Waves*
- *Northern Contaminants Program*
- *Community resource/environment councils*
- *Band offices/regional/Aboriginal government offices*
- *Arctic Science and Technology Information System*

Learn about projects that are considered to be successful by the community and model your work on those approaches.



4 ASK THE RIGHT QUESTIONS

Expectations are framed here – if you get the question right, the results are more likely to meet expectations. The more general the question, the less likely it is that people's expectations will be met. ***-Craig Machtans, Environment Canada***

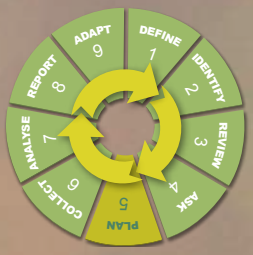
The fourth step of the Pathway defines the questions that will guide the collection and analysis of information. Research questions are the foundation of a project and are most useful if they address the problem as identified by multiple parties: researchers, decision-makers, the scientific literature, and communities. However, it can be difficult to incorporate input from varied interests and it is unlikely that one research question will satisfy everyone. Consider developing a set of questions so that the issue can be explored in different ways. This may mean some extra work in terms of data collection or analysis, but it will ensure that all stakeholders' concerns are being addressed.

Review of questions by decision-makers and communities will help determine if they are a good 'translation' of the original issue/concern and can also help ensure that questions will produce data that will be useful for local and regional decision-making. Stakeholders should recognize their concerns in the final questions - it will help build trust, keep projects locally relevant and ensure that expectations continue to be shared.

Be open with community members about the questions you need answered, even if they are complex – let your partners know that you are trying to strike a balance between addressing their questions and your own scientific priorities. Remind all partners that research can take time to answer all of the questions properly and that more questions may arise out of data that is being collected.

When developing questions, the broader context of the research should be taken into account: Does the community hope the research can be used for legal proceedings such as land claim or trans-boundary agreement negotiations? Will development in the area make use of the results? Does the project need to address cause and effect or only measure changes?

If people understand the questions that are being addressed, they will better understand the nature of your work and more likely to accept the results; also they will be able to contribute by telling your story to others in their community.
-Richard Binder, representing Inuvialuit interests



5 MAKE A PLAN

It's good to have a logistics person in the community who knows how things work. This makes things go smoothly.
-Alestine Andre, Tsiigehtchic resident

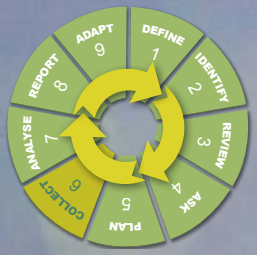
HOW WILL WE FIND ANSWERS?

Step 5 of the Pathway helps researchers develop a plan that details how, where, when, and by whom information will be collected, stored, and reported. At this point, a researcher should also consider how the project's data will be integrated with previous, ongoing/current, and future projects - and how project data will be kept and made accessible for others.

Collaborate with community partners to develop a plan for data collection. A common timeline will ensure that all partners are available to participate and allow for input from local knowledge holders; for example, land-users may know when a river is safe to travel, when or where fish are running, or the best locations to sample. This local and traditional knowledge will help maximize field time and reduce the potential for excursions that do not yield data. Local involvement in planning will also ease scheduling conflicts and identify formal or informal protocols for how research should be carried out in that particular community.

Develop a communications plan

If a communications plan is not in place already, now is also the time to develop one. A communications plan will identify the timing of potential opportunities for getting the word out and different methods that will be used. Effective and timely communications are important for a community to understand a project (and to help determine if it fits with their priorities). Unfortunately, the value of good communication is overlooked by many researchers. In order to make communication a priority, it may be useful to designate a member of the team as the lead communicator. This should be someone who has the experience, interest and personality to communicate effectively, not necessarily the lead researcher.



6 COLLECT INFORMATION

Transfer of knowledge through talking and thinking about a problem also occurs during fieldwork when people are really engaged with one another and immersed in the research. You must have the right people in place; they have to be capable, committed, well-equipped, respected and valued. ***-Lois Harwood, Department of Fisheries and Oceans Canada***

GATHERING THE OBSERVATIONS AND DATA

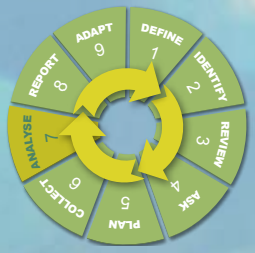
Step 6 explores how community members can participate in the data collection phase of a project. Good planning with clearly defined methods and a well-trained team will go a long way to ensuring cost-effective data collection. Team members may include researchers, technicians, land-users, TK holders and other community members.

Not only is local expertise beneficial to planning, involvement of community members in field work can ease logistics, improve safety of travel and field work, ensure respectful behaviour on the land, and may decrease field costs for long-term projects. It also provides an excellent opportunity for researchers to get to know the community better and for two-way knowledge sharing. Researchers should take some time to get feedback from field workers – their observations may provide a new perspective for the project or details that can help in planning for subsequent years.

COMMUNITY PARTICIPATION

Community participation in data collection can also help build local research capacity. Researchers may be concerned about data validity when working with those who have little experience or training, however different roles can be identified. It may depend on the data being collected, but some novel ways of including community at this step are: youth and culture camps, youth summer employment programs, school outreach, youth-Elder programming, and photography contests. Engaging youth and having them document their work through photos or video is a great way to involve community and can also pique interest when reporting back.

Be sure to work with field crews to ensure they understand the purpose for data being collected. Include a step to validate data. See the last page for tips on hiring locally.



7 ANALYSE INFORMATION

Local people and researchers need to collaborate at the interpretation level. What do the results mean? Is it normal? What are the implications to the environment or to me? -Stu MacMillan, Parks Canada - Wood Buffalo National Park

TURN OBSERVATION INTO USEFUL KNOWLEDGE

Step 7 of the Pathway is about turning data into useful information. While this is often the responsibility of scientists (who have specialized training), community members may provide unique perspective when interpreting and contextualizing data. Local field hires, land-users and Elders can provide important information and insight that are not included in the raw data, but may have bearing on the analysis: for example, landscape patterns, seasonality of change, animal behavior and patterns of movement. Soliciting community feedback should produce a more valid and relevant analysis.

Make an effort to use plain language and keep within the context of community interests when speaking with community members about your project.

When communicating information about analysis to communities, the focus should be on larger issues instead of scientific minutiae. Communication should be simple, engaging and incorporate many visuals. The research team should try to share data early, for example by emailing spreadsheets or creating a website where community partners can view and download data.

If they have the interest and capacity, some community members may also wish to participate more formally in data entry and analysis. In some cases, a demonstration of what happens to samples after they are collected may be appropriate; some researchers have taken it a step further by arranging visits to their labs. The level of interest in understanding or contributing to analysis and interpretation will vary by individual and topic. Researchers should focus their time on those who want to be involved.

8 REPORT FINDINGS

Sometimes researchers come in, engage and they're never heard from again… this creates problems for the next team.
-Stu MacMillan, Parks Canada - Wood Buffalo National Park

HOW SHOULD WE TELL OUR STORY?

The eighth step of the Pathway addresses the "story" revealed by research and monitoring. It needs to be told to the right people in the right way. In-person delivery of results is considered best – but above all, it is important to report to communities first before publication elsewhere.

In terms of tangible products, research summaries and newsletters are considered quite useful (if developed using plain language). They can include the purpose, methods, results, as well as photos of the research team (including local contributors). Include a plain language discussion on the importance of the results for the community. If developing posters, they should be graphics-heavy and text-light, with copies available for different venues. The GNWT Department of Environment and Natural Resources has developed templates to simplify the process of reporting back to communities. These are available on the ARI and ENR websites. The research team should also provide copies of technical reports, theses, journal articles, and annotated bibliographies – communities want peer-reviewed science too. Consider co-presenting and providing co-author credit for community partners and/or youth who have provided significant input to the project.

GETTING THE WORD OUT

There are many other ways to get the word out – below are some ideas. Remember: local contacts are knowledgeable about the best ways to report in their community.

- Newspaper articles or radio spots – invite a local reporter to meetings and/or field work
- Develop a video (or make it part of a youth program)
- Present at an existing community meeting
- Coordinate with others to present results together
- Participate in a community event or trade show
- Bring community partners to a regional results meeting
- Hold a feast or meal
- Host informal discussions on-the-land
- Use social media: community Facebook pages are more heavily used than websites

Communities don't need jargon, but they do need information distilled to everyday language.
-Steve Ellis

In some situations, a researcher may be missing part of their audience if they only present and report in English. Ask northern partners about using an interpreter or translating into Aboriginal languages. A translator who has experience with scientific projects is best - be prepared to spend time with the translator in advance to fully explain the project.

COMMUNICATING EFFECTIVELY

It is important to remember that community organizations in the NWT deal with a multitude of researchers working in a wide range of fields, each with its own technical language. Using plain language, therefore, is key to effective communication with communities. Communications that are unclear may also undermine a community's confidence in a researcher and may even lead to mistrust. This is not a good start for developing a positive working relationship. The ARI website has information and resources to help with developing plain language skills.

Key things to consider in written communications products:

- Reviewed with a community partner
- Clarifies how results link to original questions
- Translated if appropriate
- Uses a narrative approach to tell a story
- Uses comparison, real-world measures and examples
- Limits the use of tables and statistics
- Uses graphics and visual aids
- Demonstrates field and analysis equipment
- Acknowledges participation of northern contributors

The space chosen for communications can have an impact on your discussion. While boardroom style meetings in government buildings or schools are common and comfortable for most researchers, community members may feel alienated in these spaces. Often the best place to have meaningful communication with Elders or community members is in their own spaces: at home or on the land.

PRESENTATIONS AND MEETINGS

There is nothing more frustrating for community members than not understanding what is being said. It is also disappointing for the communicator to see that the audience has tuned out or to be interrupted by questions that don't seem relevant. Effective verbal communication using plain language is critically important for conveying ideas in presentations, meetings, and one-on-one discussions.

Sensitivity to cultural differences in how people communicate will also help overcome barriers – all partners should be prepared to respect different ways of viewing the world. A scientist full of questions may be perceived as aggressive rather than passionate. An Elder's story provides a different understanding of the issue, even if it does not seem compatible with a scientific problem at first. It is not appropriate to interrupt an Elder when they are speaking, but once they are finished it is acceptable to ask questions and may be a great way to open the conversation. It is important to take deliberate pauses when speaking to give community members an opportunity to voice their ideas – community members may not feel comfortable interjecting. Silence is a normal part of communicating in many cultures and is not something to be feared.

You need to take your time; remember that you don't always have to be talking; listen to what the people have to say; silence could be an indicator that there are no issues at that time.
-Richard Binder, representing Inuvialuit interests

9 ADAPT TO CHANGES

It is so rewarding to do research that leads to recommendations that are acted upon... when communities are truly involved... then the community is going to take ownership of those recommendations. The project will have more impact.
-Deborah Simmons, Executive Director, Sahtú ʔehdzo Got'ı̨nę Gots'ę́ Nákedı / Sahtú Renewable Resources Board

SHOULD WE ADJUST OUR PROGRAM?

Step 9 of the Pathway allows researchers to assess their projects and consider whether any changes need to be made. Now is the time to stop and reflect on the project. Touch base with partners, team members and field assistants for overall feedback with an eye to making changes that keep the project relevant and functioning in the long term.

A meeting or teleconference after the first year of the project may be a good forum for the project team to discuss what went right, what could be done better, and other issues (like what to do if funding changes or some partners leave). The team may decide to continue, adjust, or halt a program depending on a variety of factors, such as local circumstances, funding, resources, environmental or legislative changes. Discussions about the need to adapt can also be integrated throughout the course of the project.

One project can lead to another. Once the relationships are built, it is easier to engage the community in new opportunities and jointly develop new projects.
-Sonia Wesche, Assistant Professor, University of Ottawa

Leave a legacy

Building real, working relationships with community partners can produce benefits for the community, the project, and future researchers. The creation and sharing of knowledge is an important legacy for any research project; however capacity – to plan, initiate and participate in research – is also an important legacy. If researchers are able to share their approaches, ideas and successes the stage will be set for more positive community involvement in research and monitoring in the future.

What does building legacy into a project look like?

- *Taking a half-day to participate in a school's culture camp can be the spark that ignites a child's passion for science*
- *Hiring a local field assistant may interest them enough to consider further education or take a larger role in community research*
- *Facilitating a workshop with community organizations or local boards to help them better understand and communicate their own research priorities to future researchers*

Hiring Locally

Research should build capacity; develop the on-the-ground support – that is what makes it sustainable.

-Steve Ellis

Many northern community partners are interested in participating in research and monitoring but may lack capacity – the resources and expertise – to do so. Building capacity in northern communities will facilitate long term research and monitoring projects and increase community participation in the future. Hiring locally is one way to create capacity and empower communities. It also benefits a project, as the skills and knowledge of land-users make them valuable assets to help carry out monitoring and field research. Larger projects may benefit from a local coordinator, who will use their local know-how and connections to establish strong communications and logistics. Relying solely on imported students or other non-northern help may frustrate northern stakeholders.

Who should you hire?

Ask your community partners to help identify potential fieldworkers and research assistants. Many projects benefit from using the same local hires year after year, although communities may have preferences about how work is spread out. Aim for people who will not be subject to political turnover and try to keep in touch outside of the field season if you are looking for continuity. Staying in touch during the off season is important for relationship building, and will also help keep researchers apprised of environmental or community changes. Consider building some redundancy into the team in case local availability changes.

Community members must be paid a reasonable northern wage that takes into account their knowledge, the cost of living in their community and the short-term nature of the work. It is reasonable to expect that field workers will have some skills or training before being hired (first aid/emergency response, for example), but project-specific training and yearly refreshers are often required. Be clear about the type and amount of work being offered.

Communities may often require materials or equipment to participate in projects. Sometimes there are administrative and maintenance burdens that need to be considered. Before buying anything for a community, ask what they need or would like in order to participate in your project.

Involving the community is important in two ways: one, they should be a part of gathering information because their skills and knowledge are amenable to monitoring the environment; and two, involvement in monitoring can also build a sense of confidence and empowerment in the community.

-Peter Redvers, Crosscurrent Associates Ltd.

Would you like to **BETTER ENGAGE** community members in your workshops?

Are you filling out a **GRANT APPLICATION** and wondering what to put in the “community engagement” section?

Have you had a field season disrupted (or worse!) due to **LOCAL LOGISTICS** issues?

Do you want to make your work **MORE RELEVANT** to northern communities or resource managers?

THIS DOCUMENT was compiled based on input from a wide range of sources: government employees, regulatory agencies, community members, and academics. Please see the Appendix document on the ARI website for a list of participating organizations, as well as detailed advice from these stakeholders on: best practices for engaging communities, the importance of timing and starting early with your communications, how to make the most of your field time, how to organize meetings and workshops, respectful research practices and much more.

NWT CIMP

AURORA RESEARCH INSTITUTE
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