PROJECT

FOSTERING THE DEVELOPMENT OF AN INDIGENOUS REFLECTION AND VISION REGARDING MARINE PLANNING AND CONSERVATION INITIATIVES

Technical sheet for the topic Indigenous knowledge in MPAs and MSP processes.

FNQLSDI
First Nations of Quebec and Labrador Sustainable Development Institute

The objective of this sheet is to support and inform the thinking of First Nations as well as the Department of Fisheries and Oceans Canada (DFO) within the framework of this project. DFO, and more specifically the Marine Planning and Conservation Division (MPCD), Quebec region, is the partner department of this project.

As a reminder, the objective of this project is to allow the communities concerned by the Estuary and Gulf of St. Lawrence Bioregion to develop a reflection and a vision on the topics of marine planning and conservation, in preparation for discussions with the government of Canada on these topics.

This sheet is a working document which aims to shed some light on the topic of "Integration of Indigenous knowledge into the process of establishing marine protected areas (MPAs) and marine spatial planning (MSP) processes," advanced by DFO.

This technical sheet was produced in May 2021 by the First Nations of Quebec and Labrador Sustainable Development Institute (FNQLSDI).

TECHNICAL SHEET FOR THE TOPIC INDIGENOUS KNOWLEDGE IN MPAs AND MSP PROCESSES

SECTION 1:
Introductory notes

SECTION 2:
Description of the topic

SECTION 3:
Portrait of the situation

SECTION 4:
Avenues for reflection — exploration of some practices

REFERENCES

Section 1.
Introductory Notes

Although the documentation aimed at better supporting the reflections within the framework of this project is intended for both First Nations and DFO, this sheet includes sections that are sometimes more relevant for DFO, sometimes more relevant for First Nations. For the latter, the interest of this sheet lies mainly in the information concerning the steps taken by the federal government, and DFO in particular. Moreover, in order to respect the right to self-determination and the sovereignty of information of the First Nations[1], it is with each of them that DFO will have to engage upstream of a knowledge-sharing process. Following the same principles, DFO must be aware that it is up to each First Nation to determine whether the avenues for reflection proposed in section 4 of the sheet are relevant to it and, if so, how they can be considered adapted to its realities, its protocols or its system of governance and knowledge management.

In addition, the concept of "integration of Indigenous knowledge" needs to be revised, in particular for this reason:

> The word "integrate" might mean for some that this knowledge must be attached to a pre-determined whole, or even merge with it. This means that the integrity of Indigenous knowledge is compromised, since instead of a dual system of knowledge (Indigenous knowledge and Western and/or scientific knowledge) that complement each other and forge links, the concept rather refers to a system of Western and/or scientific knowledge which imposes itself as the framework in which Indigenous knowledge must be "integrated." For these reasons, the quotes will be kept throughout the sheet when reference is made to this concept.

Note: The paragraph above is a translation from the French version of the sheet. The meaning of the word "integrate" is slightly different between French and English. Nevertheless, we chose to leave that paragraph for your information, so that you know what has been said about the concept in the French version of the sheet.

In short, we have to change the paradigm. Approaches to sharing knowledge between First Nations and departments must leave a rather unilateral departmental framework to become real exchanges, which would then be imbued with the vision of the world and the knowledge of each First Nation. Knowledge of and respect for First Nations information governance principles by departments is an essential element in the implementation of reconciliation and departmental commitments relating to Indigenous knowledge. Respectful sharing of knowledge ensures that First Nations' worldviews are at the heart of decisions that affect them.

Therefore, instead of the concept of "integration," we must put ourselves in the spirit of respectful sharing of knowledge, recognition of Indigenous knowledge, complementarity of knowledge.

To provide a first insight into the issue of Indigenous knowledge within the framework of this project, the FNQLSDI team was inspired, among other things, by the "**First Nations in Quebec and Labrador's Research Protocol**" and the "**Quebec First Nations Information Governance Framework**" produced by the First Nations of Quebec and Labrador Health and Social Services Commission (FNQLHSSC). In addition, the FNQLSDI team spoke with Professor Thomas Burelli of the University of Ottawa. The FNQLSDI would like to thank Professor Burelli for the generous sharing of his time, expertise and knowledge.

Section 2.
Description of the topic

2.1 "The integration of Indigenous knowledge" into the process of establishing MPAs and MSP processes: definition of the topic

The definition of this topic should be divided into three parts:

- **Indigenous knowledge**
- **The "Integration of Indigenous knowledge"**
- **The process of implementing an MPA and the MSP process**

2.1.1 Indigenous knowledge

Let us remember once again that it is each First Nation that is best placed to define what its knowledge is. Nevertheless, here are some definitions:

The FNQLHSSC recalls that according to the World Intellectual Property Organization, "Traditional knowledge is knowledge, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity[2]."

The AFNQL proposes this definition for traditional knowledge: "Deep Indigenous understanding of the complex inter-relations of elements in their environment (biophysical, economic, social, cultural and spiritual); knowledge gained and transmitted over time. It should be noted that this knowledge is dynamic and ever-changing, just like the environment[3]."

"Generally, First Nations transmit knowledge from generation to generation, and it belongs collectively to community members[3]."

"[…] Indigenous knowledge are both the support and the expression of the worldviews specific to each Indigenous group[5]."

"Traditional ecological knowledge is a cumulative body of knowledge, practices and beliefs, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationships of living beings (including humans) with one another and with their environment[4]."

2.1.2 The "integration of Indigenous knowledge"

In the context of this project, it seems that the "integration of Indigenous knowledge" into the process of establishing MPAs and the MSP processes corresponds to the collection of knowledge shared by the First Nations communities in order to join them to the body of data used by the federal and provincial governments in these processes.

In order to recognize and take into account Indigenous knowledge in government processes, its "integration" into reports or other decision-support tools should be clearly presented and emphasized. More specifically, it should be possible to see explicitly how Indigenous knowledge has contributed to the research and analysis on which decisions about the establishment of MPAs or MSP processes are based.

2.1.3 The process of implementing MPAs and MSP processes

Whether it is vis-à-vis the process of establishing marine protected areas (MPAs) in general, Indigenous conservation sites more specifically, or even marine spatial planning (MSP), the First Nations have the opportunity to showcase their knowledge.

Without going into detail on the topics of MPAs, Indigenous conservation sites and MSP (we invite you instead to refer to their respective technical sheets), we would especially like to insist here on the content of these processes in terms of knowledge. Here is a brief overview:

For MPAs as well as Indigenous conservation sites, data and knowledge could play a major role, especially for the first 3 stages of establishing a protected site:

- **Site identification;**
- **Ecological or biophysical, social, cultural and economic assessment (data collection);**
- **Development of regulatory intent (conservation objectives, regulatory measures, limits and selection of authorized activities).**

* Note also that data and knowledge could play a major role in the management of MPAs.

For MSP, data and knowledge seem to form the central decision-making aid tool, in particular for the establishment of management plans for marine spaces.

The MPCD indicates its willingness to integrate Indigenous knowledge and science into the MSP process. In addition, the MPCD considers that the Atlas of Marine St. Lawrence Mi'gmaq and Maliseet Sites and their Uses could ultimately support the First Nations communities in their participation in MSP. These projects have been implemented by the Mamu Innu Kaikusseht Agency (AMIK) and the Association de gestion halieutique Mi'gmaq et Malécite (AGHAMM).

Originally, these atlases were more aimed at increasing the capacity to collect and organize georeferenced data on the uses and sites of importance in coastal and maritime environments[6].

REFLECTION:

First of all, the MPCD will need to clarify how it envisages governance and data management within the framework of MSP, which includes the issue of confidentiality protection.

GOVERNANCE VS INFORMATION MANAGEMENT

" **Information governance** refers to strategic considerations such as the establishment of policies, standards and procedures that dictate how information assets are to be organized, structured, accessed and used, while also defining the roles and responsibilities of the entities concerned.

Information management, on the other hand, refers to operational aspects including input, archiving and the application of protocols[1]. "

2.2 Key elements to consider about the topic

Element 1 - Change the paradigm for approaches and practices relative to Indigenous knowledge

As indicated at the very beginning of the sheet, "integration" is a concept to be revised in order to deal with sharing processes involving Indigenous knowledge.

It should also be remembered that it is the First Nations communities who are able to determine what the best approaches and practices are in terms of the recognition and sharing of knowledge. As stated in the First Nations in Quebec and Labrador's Research Protocol, "**It is understood that each nation, if not each First Nations community, is in the best position to explain what traditional knowledge means to them, the way knowledge is transmitted and who can access it. They must be consulted for any information about that knowledge**[3]."

As examples, approaches such as the "Two-Eyed Approach" or "Ethical Space" (see section 3.1.1) further promote the interaction of Indigenous knowledge with other knowledge in a more holistic way and not simply as a product, a piece of data used at a given moment in a process already underway.

> " The Two-Eyed Approach as described by Elder Albert Marshall "consists of looking with one eye at the strengths and methods of Indigenous knowledge, and with the other at the strengths and methods linked to Western (and/or scientific) knowledge, while learning to use these two eyes simultaneously, in the interest of all[7]. "

Element 2 - **Recognition and respect for Indigenous knowledge**

It cannot be said enough: Indigenous knowledge are intrinsically linked to the very identity of Indigenous peoples. It is essential to approach this knowledge as well as the individuals and communities who carry it with the greatest care, recognizing and respecting the meaning and the unique value of this knowledge. This is about the ethics of the process and the ethics of the parties who engage in a process of exchanges with Indigenous peoples.

It should be remembered that this knowledge that communities possess today are the fruit of a journey over several millennia, at the heart of which lies a unique relationship between Indigenous peoples and their territory and its resources.

Element 3 - **First Nations OCAP® Principles**

When departments or other parties engage in a knowledge-sharing process with First Nations, they must respect existing protocols as well as the **OCAP® principles (ownership, control, access and possession),** which apply to the information heritage of the First Nations[1].

Ownership: Refers to the relationship of First Nations communities with their cultural knowledge, data and information. A community or group has collective ownership of its information just as an individual owns their personal information. The principle of ownership includes intellectual property rights.

Control: First Nations, their communities or their representatives must control how information about them is collected, used and disclosed. This principle extends to all aspects of information management (collection, use, sharing and destruction of information).

Access: Regardless of where information is stored, First Nations must have access to it. First Nations also have the right to manage access to and make decisions about their collective information. When First Nations are not custodians of their information, agreements can be made to manage their access.

Possession: Possession is a mechanism that ensures First Nations control their information. First Nations are better able to assume ownership and control of their information, and access to it, when it is in their possession. Possession refers to the physical location of information.
Source: FNQLHSSC, 2019.

It should also be noted that these principles include the fact that First Nations have the right to choose not to share their knowledge and to withdraw at any time during the sharing process.

Element 4 - Information security and confidentiality

Respect for the confidentiality of knowledge is a key element of a relationship of trust and all necessary measures must be taken to ensure the confidentiality of shared data and the application of the highest security standards[1].

Some knowledge may be confidential, for example precise information about the places or times when members of a First Nation exercise their practices in the territory, or even as to the type or quantity of resources taken. If this information is essential for decision-making, for example to ensure the avoidance of impacts on places of practice, concrete means must be implemented to guarantee its confidentiality. Confidentiality protocols must be developed in collaboration with the First Nation and knowledge carriers.

Element 5 - The interest for First Nations communities in a knowledge-sharing process

We must indeed talk about knowledge-sharing and not about a unilateral transfer of knowledge from First Nations to government departments. The benefits of exchanges must be significant on both sides. The paradigm of "use" of Indigenous knowledge must change, in particular in favor of a respectful sharing that also meets the needs and expectations of First Nations.

As mentioned in the introductory notes to this sheet, respectful sharing of knowledge ensures that First Nations' worldviews are at the heart of decisions that affect them. The sharing of knowledge must absolutely generate positive spinoffs for the First Nations. The approach by, for and with First Nations advocated in this sheet reflects the right of First Nations to self-determination.

Element 6 - "Knowledge integration" vs. the rest of the exchange process between First Nations and other actors

If there is "integration of knowledge", it should be understood that it should be part of a process of exchange that includes other phases and which above all requires **continuous feedback and validation**.

Feedback from departments and other actors to First Nations should extend over the duration of a process. It should not be done unilaterally, that is, it should not only serve to inform communities. Rather, it must generate exchanges that can lead to changes in the initiative or in decision-making.

Feedback should ensure that data collection and analysis respect the vision and values of the community. Ultimately, the feedback should enable the First Nation to see the results of knowledge sharing and generate benefits.

Let us remember that the "integration of knowledge" should not be considered as a unique moment when we simply come to collect the knowledge and "leave with it." Recognition and respect for Indigenous knowledge involves much more than that.

Section 3.
Portrait of the situation

3.1 Current situation

3.1.1 A new approach by the Government of Canada to Indigenous knowledge

In recent years, the government has stepped up initiatives aimed at reconciliation with Indigenous peoples. In this context, the federal departments are particularly committed to initiating or continuing their reflections on ways to improve their practices in order to consider Indigenous knowledge as evidence, just like scientific data, in the orientation of public policies and environmental reviews of projects.

For example, DFO and other federal departments are working on the development of an **Indigenous Knowledge Policy Framework**. In addition, the mandate letter of the Minister of Fisheries, Oceans and the Canadian Coast Guard mentions that the plan to protect 25% of Canada's oceans by 2025 and 30% by 2030 "should be grounded in science, Indigenous knowledge and local perspectives." The mandate letter also states that there is a need to "use good scientific evidence and traditional Indigenous knowledge **when making decisions** affecting fish stocks and ecosystem management[8]."

On the other hand, for 'integrating of Indigenous knowledge", the MPCD refers to the report *We Rise Together* from the Indigenous Circle of Experts (ICE), which deals with the establishment of Indigenous Protected and Conservation Areas (IPCAs) in the spirit and practice of reconciliation, and which sets out, among other things, the principle of **ethical space**.

ETHICAL SPACE

" Fundamental principle of engagement which defines equitable relations and which respects the integrity of all knowledge systems. This ethical space, built in particular through mutual respect, provides a place for collaboration and counsel, sharing and cross-validation. "

Source: ICE, 2018.

In addition, in the context of the process for establishing MPAs, a National Advisory Panel on Marine Protected Area Standards (NAP) was set up to gather reflections and make recommendations on the protection standards to be adopted in federal MPAs. This committee, which ensures Indigenous re-presentation, also has the mandate to "examine Indigenous approaches and governance," working in concert with the ICE, which has developed recommendations in this regard[9].

In its 2018 report, the NAP makes several references to Indigenous knowledge. Let us underline here, among other things, a passage which indicates that the design of MPAs will have to be flexible to take account of various circumstances: "Each MPA or Indigenous Protected Area will be rooted in the needs of a particular region and community and its design will reflect the knowledge, needs, and aspirations of coastal communities and Indigenous peoples[9]."

Note also that the NAP recalls that **Indigenous knowledge is not a checkbox in a list" and that knowledge must be "incorporated respectfully and not co-opted or used unilaterally by non-Indigenous people[9]."**

In short, both the actions of the Government of Canada and those of external committees have repeatedly underlined, in the space of a few months, the importance of Indigenous knowledge, particularly vis-à-vis MSP or MPA initiatives (or other marine conservation projects).

3.1.2 Governance and management of Indigenous knowledge

Les Premières Nations ont chacune leurs propres réalités et processus quant à la gouvernance et la gestion de leurs savoirs. Ainsi, pour rappel, il faut absolument respecter ces 2 éléments fondamentaux en la matière :

1. Each First Nation being the guardian of its own knowledge, it is best placed to take a position on its governance and management. Let us repeat here that the First Nations must be consulted for all information relating to its knowledge[3].

2. When departments or other parties engage in an exchange process with First Nations on Indigenous knowledge, they must respect existing protocols as well as the principles of OCAP®.

It should also be remembered that collectively, the First Nations in Quebec have adopted a number of tools to support their approaches to information and knowledge governance and management[1], in particular the **First Nations in Quebec and Labrador's Research Protocol** and the **Quebec First Nations Information Governance Framework** produced by the First Nations of Quebec and Labrador Health and Social Services Commission (FNQLHSSC).

3.2 Upcoming changes/Next steps

In line with the Government of Canada's new approach to Indigenous knowledge, the MPCD is questioning how to proceed to adequately "integrate" Indigenous knowledge into the current process of setting up MPAs as well as into MSP processes that are in development.

What are the avenues for reflection or action to suggest, whether for internal preparation or for the intention of the MPCD? What are the issues?

OBSERVATION:

You should know that these federal government processes are not immune to the changing environment of the information world and about which the FNQLHSSC has a certain warning:

"We are currently witnessing an extraordinary evolution in technology and information, which has resulted in the development of new information management systems, the matching of data from various sources, new ways of storing information (the "cloud"), and the emergence of open data portals, to name but a few examples. Although these developments bring new opportunities, they also raise ethical questions about confidentiality and information security[1]."

Section 4.
Avenues for reflection - exploration of some practices

Some avenues for reflection presented in this section are shared in the optic where a department (or other party) approaches First Nations regarding their knowledge. However, this content could also be useful in a situation where it is a First Nation approaching a department (or other party) for knowledge sharing.

Remember that the First Nations are in the best position to determine whether these avenues for reflection are relevant to them and, if they are relevant, how they can be adapted to their realities, protocols, etc. Furthermore, this section does not claim to present an exhaustive portrait of the practices to be explored, nor a political or legal position on how to consult the First Nations.

Before presenting some ideas for practices for each of the stages of the knowledge-exchange process, this section first suggests some avenues for reflection on the roles and responsibilities of both sides during this process.

4.1 Roles and responsibilities of parties in an exchange process involving Indigenous knowledge

First Nation

The First Nation and its members involved in knowledge sharing act as knowledge carriers and experts. **As a preparation for any process involving a department or other party, it may be useful for them to:**

- **Define their expectations, needs and concerns;**
- **Determine which sensitive knowledge must remain confidential;**
- **Work on the establishment of research protocols and methodologies;**
- **Establish methods to ensure access to knowledge managed by the community, and its confidentiality.**
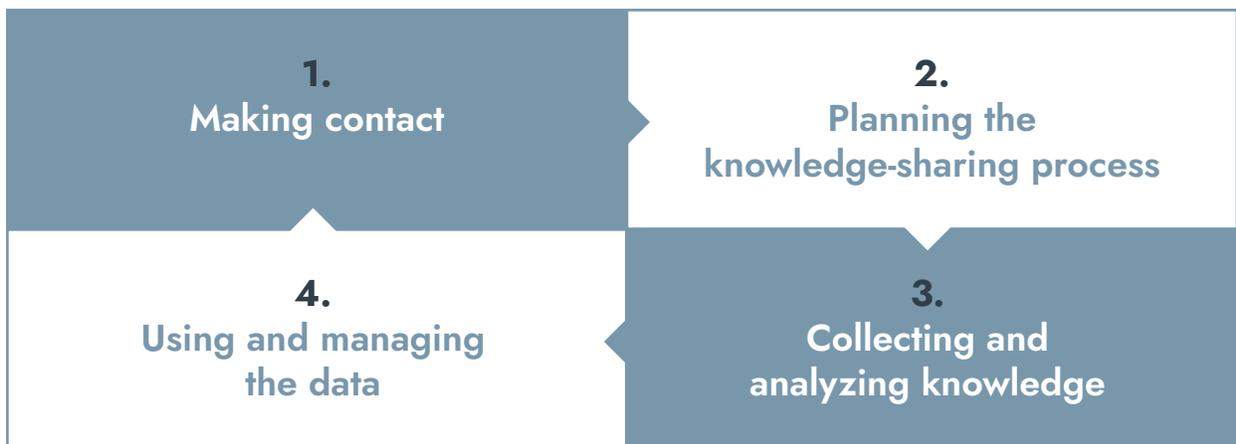
Department (or other party)

The various departments act as applicants to the First Nations communities. They must in particular:

Practices
• Duly take into account Indigenous knowledge, along with scientific knowledge, in analysis and decision-making and maintain the integrity of knowledge throughout the initiative;
• Ensure that the process is carried out in the interests of First Nations;
• Respect existing protocols and OCAP® principles;
• Adequately train the staff of federal departments on Indigenous rights and realities;
• Ensure communication and coordination between departments to avoid overburdening the First Nations with a multiplication of requests;
• Provide financial and technical support to First Nations to ensure their full participation throughout the knowledge collection and inclusion process (e.g., offering support for capacity building or for conservation and management of knowledge);
• Perform the necessary validations with the First Nation at each step of the initiative;
• Ensure the full participation of First Nations throughout the initiative;
• Provide feedback to carriers on the inclusion of their knowledge and respect their perspective on the use of the information;
• Ensure compliance with constitutional obligations in terms of consultation with First Nations when certain procedural aspects are delegated to promoters or third parties.

4.2 Ideas of practices to explore for each step of a knowledge-sharing process

In general, we could identify 4 phases to a knowledge-sharing process between a First Nation and a department or other party, **in addition to feedback and validation that take place continuously throughout the process.**

1. Making contact	2. Planning the knowledge-sharing process
4. Using and managing the data	3. Collecting and analyzing knowledge

4.2.1 The making contact phase

Presentation step of the initiative

Practices to be explored by both sides depending on the distribution of roles and responsibilities

- The community must specify to the department with whom in the community it must establish the first contact according to its own protocols, by first contacting the Band Council for example;

- The other party should provide clear and comprehensive information on the initiative in question and among other things on how it plans to collect, take into account, integrate and protect Indigenous knowledge;

- The other party must be flexible and adapt its approach and its specific initiative (project for example) according to the capacities of the community, its concerns and its aspirations;

- Professor Burelli suggests determining how knowledge will be approached: according to a model more oriented towards traditional knowledge or scientific or Western knowledge? According to a hybrid model?

- The community would benefit from inviting the other party to present its initiative to the whole community by visiting its territory.

The place and form of such a meeting has the potential to be decisive in the rest of the exchange process. For example, there is a big difference between meeting in a city hotel complex or in a gathering place in a First Nations community. Also, a meeting marked by the customs or ways of doing things of the community would be preferred over a meeting whose form and structure have already been established by the other party. Furthermore, offering the other party outings on the territory, in the heart of the elements, of nature, is also likely to change their vision of things and the specific initiative in question.

Step of defining communication and dispute resolution methods

Practices to be explored by both sides depending on the distribution of roles and responsibilities

- Plan the frequency of meetings and feedback;

- Ensure that knowledge carriers are informed and participate adequately and that they receive the assistance necessary for their understanding and participation;

- If necessary, provide a translation service;

- Use appropriate means of communication;

- Provide modalities for settling disputes in the event of conflicts.

4.2.2 Planning phase of the knowledge-sharing process

Step of the definition of the First Nation's priorities

The department must be aware that the definition of the First Nation's priorities must imperatively be carried out before the collection of knowledge is initiated.

Practices to explore with respect to departmental roles and responsibilities

- Provide the community with adequate preparation time and adequate funding so that it can proceed internally, depending on the situation and its protocols, in defining its priorities;

- Allow the necessary time for consensus building in order to determine a precise number of priorities and valued components*, particularly given the holistic nature of the environment for First Nations.

* Valued components can be species, places, landscape elements, distinct cultural traits, etc., which may be affected by a project or initiative and which are deemed to be of priority interest by each of the communities concerned.

Step of identifying existing data and needs analysis

The First Nation can then determine what knowledge of potential interest to the initiative is available and accessible.

Practices to explore with respect to departmental roles and responsibilities

- Provide the community with the means to create interactive tools (e.g., maps, applications, etc.) and databases to facilitate communication and information sharing among its members and, eventually, if confidentiality conditions allow, between First Nations or with the government.

Step of developing the study parameters linked to the initiative

Once the priorities of the First Nation and the available data have been identified, it would be relevant to determine with them what angle of analysis and what type(s) of study(s) will better meet the agreed objectives.

Then come the parameters of the study, such as the required precision of the data, the geographical extent, the time period or the practiced activities on which the collection of knowledge will focus, etc. The idea is to target the needs for the collection of knowledge, in addition to defining the collection methods and the tools best suited to collect the necessary data.

The First Nation should be able to participate in the development of the mandate, work plan and methodology for data collection.

Practices to be explored by both sides depending on the distribution of roles and responsibilities:

- Design or choose the study in collaboration with the First Nation;

- If possible and if the community wishes and has the means, give the community the mandate to develop or carry out the study;

- If applicable, select the consultant in collaboration with the First Nation;

- Agree with knowledge carriers on the appropriate data collection method (e.g., group interview, round table, talking circle, participatory action research, etc.);

- Adapt your approach to the community rather than imposing a rigid approach;

- Clarify the methodology as early as possible.

Step of negotiating an agreement

Once the preliminary information has been shared and the research methodology clarified between the different parties, they must jointly set guidelines for their future collaboration. Many issues, such as confidentiality, control and ownership of data, can hamper the sharing of First Nations knowledge. Signing agreements allows these questions to be addressed before they become issues.

Depending on the circumstances of the initiative in question, discussions on the framework for collaboration may lead to the development of a **knowledge-sharing agreement** and a **confidentiality agreement**.

4.2.3 Step of collecting and analyzing knowledge

Communication and consent stage of knowledge carriers

The resource person in the community is best placed to communicate with knowledge carriers and organize the collection of Indigenous knowledge. However, departments may need to provide support at this step.

Note: It is essential to obtain the free, prior and informed consent of each knowledge carrier before the start of data collection.

Practices to explore with respect to departmental roles and responsibilities

- Provide presentation documents for the initiative that are clear and popularized;

- Clearly explain the modalities of participation as well as the objectives of the integration and use of knowledge to the participants;

- Interact in the language desired by the First Nation and provide for the translation of documentation;

- Encourage the participation of less represented groups;

- Consider knowledge carriers as experts;

- Provide recognition and remuneration to at least cover project-related expenses for knowledge carriers (costs related to meals, travel and accommodation);

- Respect the availability of knowledge carriers and the time they need to agree to and get involved in the project, if they choose to do so;

- Make sure to communicate to knowledge carriers that they have the right to withdraw from the project, to oppose or to request changes in the way things are done;

- Put in place measures to ensure each participant of the confidentiality of their sharing;

- Ideally, do not impose consent forms at the start of discussions. These can be developed in collaboration with the knowledge carriers;

- Provide for an oral consent process, if that is what is preferred by the First Nation or knowledge carriers.

Data collection and processing steps

It is important to come to an agreement with the knowledge carriers beforehand to agree on the modalities of collecting the knowledge: the preferred method, the person responsible for the collection, etc. (refer to the step of developing study parameters, presented above).

Regarding the data processing stage, it should be emphasized that **if communities so wish, they should be responsible for processing the knowledge collected themselves**.

Practices to be explored by both sides depending on the distribution of roles and responsibilities

- For confidentiality reasons, create a database that brings together aggregated and general data, rather than nominative and more precise (if the community so wishes, it could require that this database be created and managed internally);

- Carry out data processing in collaboration with knowledge carriers, in particular for the stages of transcription and translation of interviews, data mapping and classification of qualitative and geographic data;

- Support the First Nations so that they carry out the data processing themselves if they wish;

- Ensure that confidential data is indicated as such in the database and that it is secure or made anonymous;

- If possible, set up modalities for the exchange and promotion of Indigenous knowledge to enable communities to work together on common issues;

- Have the information validated by knowledge carriers at all stages, including after the analysis.

Steps of analysis and "integration of knowledge"

Practices to be explored by both sides depending on the distribution of roles and responsibilities

- Fund communities and knowledge carriers and provide them with the means to collaborate in the analysis and inclusion of Indigenous knowledge. Communities that wish to do so must be able to carry out the data analysis themselves;

- Jointly agree on the data analysis methodology;

- Consider the probative value of scientific data and Indigenous knowledge as equivalent, which implies, among other things, not to attempt to "fit" Indigenous knowledge into a pre-established framework of analysis, but to draw inspiration from Indigenous knowledge to define the analytical framework;

- Ensure respect for the integrity of Indigenous knowledge (understand it, keep its context, do not fragment it, do not standardize it, etc.);

- In the reports, promote tools and a way of presenting the data that take into account the dynamism, the holistic and contextual character of Indigenous knowledge, as well as its qualitative and quantitative character;

- Present Indigenous and scientific knowledge equally, even when they differ;

- Ensure that the confidentiality of data that the First Nation or knowledge carriers have identified as confidential is preserved;

- Validate the interpretation of the data with the knowledge carriers;

- Recognize knowledge carriers and First Nations as co-authors or participants, according to established confidentiality protocols.

4.2.4 Data use and management phase

Step of decision-making and use of data

One of the main objectives of integrating Indigenous knowledge into government initiatives is to enhance the perspectives and knowledge necessary for informed decision-making by departments. The "integration of Indigenous knowledge" should thus lead to them being taking into account in the decisions resulting from the process.

Practices to explore with respect to departmental roles and responsibilities
• **Recognize the contribution of First Nations and knowledge carriers during the dissemination of results in reports;**
• **Share the results or conclusions and not the raw data, always ensuring confidentiality and anonymity;**
• **Provide feedback on how the Indigenous knowledge have been taken into account in decisions.**

Step of data management

The First Nations do not hand over or give away their knowledge; they share it. It should be remembered that the principles of OCAP® guide the implementation of procedures guaranteeing that the community can have its data at its disposal and have access to it in the long term. These principles also engage the question of the destruction or restitution of data. The way in which they will be applied and implemented must be agreed with the First Nation and can in particular be discussed during the negotiation of the agreement at the beginning of the collaboration process.

The issue of data confidentiality can be a major obstacle to knowledge sharing. In particular, certain carriers may refuse to share precise information, for example as to the places or times when they exercise their practices in the territory, or even as to the type or quantity of resources withdrawn. If this information is essential for decision-making, for example to ensure the avoidance of impacts on places of practice, means must be implemented to guarantee their confidentiality.

Practices to be explored by both sides depending on the distribution of roles and responsibilities

- Agree on the modalities for implementing the principles with the First Nation;

- Respect the principles of OCAP® and existing protocols;

- Professor Thomas Burelli invites the exploration of the possibility of data being produced within the community and remaining in the hands of the community, i.e., without "data output." This implies that if a department wishes to have access to the data, it could do so only through a one-time consultation;

- Provide for modalities and support for data storage by and for the community;

- Prohibit the use of data for anything outside the scope of the initiative, the project, unless there is prior consent from the First Nation and knowledge carriers;

- If data is transferred to the department, the department should keep it in a restricted access archive. In addition, the department must keep it only for the period of the project for which it was shared, and then destroy any copies once that period is over. The department must also provide a certificate of destruction to the community and not share the data with other departments and agencies*;

- Have any person participating in the initiative sign confidentiality declarations.

* Since it has happened that Indigenous knowledge shared within the framework of specific projects has also been used by departments for purposes other than those of the projects in question, without the approval of First Nations communities and knowledge carriers, the guidelines for information security and confidentiality will need to be specified when developing knowledge-sharing and confidentiality agreements.

4.2.5 Feedback and validation (ongoing)

Feedback from departments to the First Nation spans the duration of the collaboration. It must not be carried out unilaterally, that is to say it must not serve only to inform the community, but rather it must generate exchanges that can lead to modifications to the initiative or to the decision making.

Feedback should ensure that data collection and analysis respects the vision and values of the community. Ultimately, the feedback should enable the First Nation to see the results of knowledge sharing and generate benefits.

Feedback modalities depend on the level of community participation and can be negotiated in an agreement. At a minimum, departments should provide feedback on the steps below:

- Following the definition of the methodology;
- Following data collection (e.g., providing a summary of interviews);
- Following the "integration of knowledge" (e.g., by specifying what knowledge has been integrated and how);
- Following any changes to the initiative (e.g., objectives, methodology, etc.).

WARNING:
No knowledge should be used in a report or study without having been validated with the knowledge holders and/ or the community.

At all of the initiative's steps, the absence of a response to feedback should not be considered approval.

Practices to explore with respect to departmental roles and responsibilities

- Provide feedback to the community and knowledge carriers for validation at all steps of the process, or as agreed with the First Nation in the memorandum of understanding;

- Provide satisfactory deadlines so that the First Nation has sufficient time to respond;

- Provide an appropriate mode of communication and form of feedback for knowledge carriers and the community (e.g., in the language of the First Nation in question);

- Present ad hoc reviews and a review at the end of the initiative to determine possible improvements to the collaboration process;

- Schedule a time for dissemination of the results of the initiative to the whole community.

CONTACTS AT THE FNQLSDI FOR ANY COMMENTS OR QUESTIONS REGARDING THIS SHEET OR THE PROJECT:

Laurie Leblanc-Rajotte, conservation project officer, marine planning and conservation project
lleblanc-rajotte@iddpnql.ca

Mylène Clavreul,
consultant — conservation project officer, marine planning and conservation project
mclavreul@iddpnql.ca

Generic FNQLSDI email address info@iddpnql.ca
and reception phone number: 418-843-9999

REFERENCES

1. **FNQLHSSC. (2019). Quebec First Nations Information Governance Framework.**

    READ THE ARTICLE

2. **World Intellectual Property Organization. (No date). Traditional Knowledge. cited in FNQLHSSC (2019)** *Op. Cit.*

    READ THE ARTICLE

3. **AFNQL. (2014). First Nations in Quebec and Labrador's Research Protocol.**

    READ THE ARTICLE

4. **Berkes, F. (1993). Traditional ecological knowledge in perspective. Traditional ecological knowledge: Concepts and cases 1.**

5. **Dowsley and Wenzel cited in Burelli. T. (2019). Ni vues, ni connues, études des contributions des acteurs des milieux autochtones et universitaires à l'encadrement de la circulation des savoirs traditionnels au Canada, doctoral thesis, University of Ottawa.**

6. **Association de gestion halieutique Mi'gmaq et Malécite. (2021). Current projects: management, conservation and diversification.**

    READ THE ARTICLE

7. **Mi'gmawei Mawiomi Secretariat. (No date). Two-Eyed Seeing.**

   READ THE ARTICLE

8. **Government of Canada. (2019). Minister of Fisheries, Oceans and the Canadian Coast Guard Mandate Letter. Minister of Fisheries, Oceans and the Canadian Coast Guard Mandate Letter**

   READ THE ARTICLE

9. **DFO. (2018). Final Report of the National Advisory Panel on Marine Protected Area Standards.**

   READ THE ARTICLE