MINUTES OF THE MEETING
STEERING COMMITTEE

Meeting Nº 60
Friday, September 11, 2023
2:00 p.m. to 4:30 p.m.
Videoconference on TEAMS

Present:	Daniel Brosseau	Hydro-Québec
	Marc Dunn	Niskamoon Corporation
	Luc Duquette	Hydro-Québec
	Carine Durocher	Hydro-Québec
	Jean-Philippe Gilbert	Hydro-Québec
	Louie Kanatewat	Cree Nation of Chisasibi
	John Lameboy	Cree Nation of Chisasibi
	Mélanie Leblanc	Niskamoon Corporation
	Marie-Eve Lemieux	Hydro-Québec
	Gregory Mayappo	Cree Nation of Eastmain
	Johanna Ménélas	Hydro-Québec
	Ernest Moses	Cree Nation of Waskaganish
	Ernie Rabbitskin	Niskamoon Corporation
	Robbie Tapiatic	Cree Nation of Chisasibi
	Alain Tremblay	Hydro-Québec
Guest:	Réal Courcelles	Hydro-Québec
	Kaleigh Davis	University of British Columbia
	Jens Ehn	University of Manitoba
	Paul del Giorgio	University of Quebec in Montreal
	Murray Humphries	McGill University
	Julián Idrobo	University of British Columbia
	Nicole Knight	University of British Columbia
	Zou Zou Kuzyk	University of Manitoba
	Michaela de Melo	Postdoctoral Scholar UQAM
	Allyson Menzies	Postdoctoral Scholar University of Guelph
	Fanny Noisette	Institut des Sciences de la Mer de Rimouski
	Mary O'Connor	University of British Columbia
Absence:	James Bobbish	Cree Nation of Chisasibi
	Félix Boulanger	EMRWB representative Nation Government
	Josée Lefebvre	Canadian Wildlife Service
	Geraldine Mark	Cree Nation of Wemindji
	Graeme Morin	Cree Nation Government

Roderick Pachano	Cree Nation of Chisasibi

MEETING CHAIR AND SECRETARY

Luc Duquette chaired the meeting, and Johanna Ménélas acted as the meeting secretary.

PROPOSED AGENDA

1. Approval of the Agenda
2. Réal Courcelles' Retirement
3. Introduction of New Committee Coordinator and Secretary
4. Presentation of the Coastal Habitat Comprehensive Research Project (CHCRP) Phase II Research Program
5. Discussion on Timeline for Phase I Research Video Summary
6. Finalization of Phase I and Research Data Collection by Niskamoon
7. Miscellaneous
8. Summary and Next Steps
9. Next meeting

ROUND TABLE

A round-table introduction allowed everyone to become acquainted.

1. Approval of the Agenda

The Chair reviewed the agenda, and no additional points were proposed. Therefore, the agenda was approved as presented.

2. Réal Courcelles' Retirement

Réal Courcelles (**Mr. Courcelles**) began the discussion by recounting the start of the Steering Committee (**the Committee**) and extending his heartfelt appreciation to all present. He conveyed his best wishes for the future endeavors of each member.

In response to Mr. Courcelles' sentiments, several Committee members expressed their gratitude and admiration for Mr. Courcelles' invaluable contributions over the course of his tenure.

3. Introduction of New Committee Coordinator and Secretary: Johanna Ménélas

Johanna Ménélas (**the Secretary**) introduced herself as the newly recruited team member responsible for coordination and secretarial duties within the Committee. She briefly outlined her responsibilities and explained that she would be coordinating various committee meetings, including those of the present Committee.

4. **Presentation of the Coastal Habitat Comprehensive Research Project (CHCRP) Phase II Research Program**

Mélanie Leblanc (**Mrs. Leblanc**) began by addressing the group and setting the stage for the presentation that would follow, with Zou Zou Kuzyk's (**Mrs. Kuzyk**) taking the lead. She wanted to underscore several key points:

Firstly, she emphasized that the presentation scheduled for today would serve as a summary of the document "*Prospective for CHCRP Phase II*" ("**the Document**") distributed a few weeks ago. A copy of the Document has been attached to these minutes for reference. This Document had been meticulously prepared during the summer months. An initial intention had been to conduct a community tour, but unfortunately, due to forest fires, this tour had to be canceled.

Mrs. Leblanc stressed the importance of viewing the Document as a preliminary draft, one that would continue to evolve. It was designed to be highly flexible, welcoming comments and input from land users in the coming months.

She then highlighted the differences between the first phase and the second phase. In the first phase, all funding for the research had been provided by Niskamoon, the Cree Nation Government (**CNG**), and Hydro-Québec (**HQ**). However, in this second phase, the objective was to seek external funding. Timing was a crucial factor in this endeavor since it typically takes several months to make funding accessible to researchers.

In summary, the purpose of today's presentation was twofold:

1. To present a draft to the Committee, providing an overview of where they stood in the research program for Phase II.
2. To seek the green light and approval from the Committee to submit the research for funding.

Mrs. Kuzyk proceeded to the presentation titled "*Presenting CHCRP Phase II - Preliminary Research Program and Budget*," during which Mary O'Connor (**Mrs. O'Connor**) and Julián Idrobo (**Mr. Idrobo**) took turns presenting their respective sections. A copy of the presentation has been attached to these minutes for reference. Additionally, during the presentation, Ally Menzies (**Mrs. Menzies**) introduced herself as a Postdoctoral Scholar of the University of Guelph.

Mrs. O'Connor highlighted the reflection process that had taken place based on feedback from the Committee and land users. The objective was to identify which aspects of the project should be retained to continue the collaborative learning process. They presented a visual representation of the project, which showed three interconnected projects in different shades of blue. They emphasized that these three projects were essentially part of one large project. The organizational structure, including the steering committee, remained intact. The only change introduced was the addition of a research coordination committee comprising the leaders of each project team to ensure continuous communication and coordination both before and after interactions with the Committee. Mrs. Leblanc's role with Niskamoon was clarified, and she would be directly involved in each project as well as act as

a liaison with the CNG, local governments, and organizations. They sought feedback from the Committee to refine this approach.

Marc Dunn (**Mr. Dunn**) raised an important point regarding the role played by Mrs. Kuzyk in integrating different aspects of the project for the beneficiaries. He inquired how this role would be distributed among the coordination committee and Mrs. Leblanc. Mrs. O'Connor confirmed that Mrs. Kuzyk's role would continue to be vital, although the workload would be shared. They recognized the effectiveness of Mrs. Kuzyk's leadership and expressed openness to improving this aspect further.

Mr. Courcelles emphasized the importance of Mrs. Leblanc's involvement in the research process since she is consistently present at Niskamoon board meetings. He highlighted the significance of Mrs. Leblanc being well-informed about the research progress and activities, considering her role within the Niskamoon board.

Mrs. O'Connor introduced the NSERC Alliance Program, which was designed for research partnerships with non-academic groups, including industry, communities, non-profits, and government entities. She explained that NSERC would match partner funds at a two-to-one ratio, making it an advantageous opportunity for extending project funding. Most of the Alliance funds were intended for research costs, including community engagement, training, and collaborations.

Robbie Tapiatic (**Mr. Tapiatic**) expressed concern about how the project's funding would be perceived by the public and communities. He emphasized the need for clear communication to demonstrate that the project had contributions from various sources, not just the community. He stressed the importance of presenting this information effectively, especially considering his role in dealing with the communities and the potential public perception of the funding.

Mrs. O'Connor clarified that they had chosen to discuss potential partners with the steering committee before reaching out to them. This allowed the steering committee to provide input on preferred partners and express any concerns regarding specific partners.

Paul Del Giorgio (**Mr. Del Giorgio**) echoed Mr. Tapiatic's concerns about public perception and emphasized the fundamental difference between phase I and II. Phase II aimed to bring resources from outside the community, and this had to be communicated transparently to avoid misconceptions. He also highlighted the goal of expanding partnerships beyond Niskamoon's contributions.

Mr. Dunn acknowledged the challenges brought about by the forest fires and the delayed discussions with communities. He stressed the need to demonstrate the project's long-term value and its role in understanding complex issues faced by land users on the coast. Mr. Dunn emphasized the importance of convincing stakeholders and land users that the project was worth the investment. He also mentioned the need to meet NSERC's timelines to have the project in place for the next summer.

Mr. Tapiatic inquired about the funding allocation, specifically the $600,000 per year over five years. He expressed a preference for reducing that amount to allocate more funds to land users. He emphasized

the importance of community benefit and avoiding potential conflicts with the public due to perceived excessive funding for research.

Mrs. O'Connor clarified that the numbers presented were not a formal budget proposal but were meant to illustrate leveraging opportunities. She emphasized that a significant portion of the project involved building the monitoring program, which extended beyond research. She acknowledged the need to clarify that not all funds were dedicated to research.

Ernest Moses (**Mr. Moses**) asked about the timing of guaranteed NSERC funding availability, to which Mrs. O'Connor explained that it typically takes about six months from application submission for NSERC to confirm funding. She mentioned the hope of hearing back by April or May to allow for summer planning. Mr. Moses also inquired about the maximum funding available. Mrs. O'Connor explained that the amount depended on contributions from partners, with a maximum cap of $1 million per year for the entire project. The more partners contributed, the more NSERC would provide.

There was a discussion about the project's approach, with Mr. Moses suggesting a focus on community involvement as a potential strategy to access more funding. Mrs. O'Connor acknowledged the importance of community engagement and expressed a willingness to collaborate with partners who were active in the communities.

Mrs. O'Connor also discussed the project's flexibility, emphasizing that success metrics were based on partner satisfaction, and plans could be adapted based on community preferences.

Mrs. Leblanc followed by discussing presentations to Chief and Council of the coastal communities, emphasizing efforts to maximize community engagement. Carine Durocher (**Mrs. Durocher**) suggested simplifying the component names for better communication within Cree communities, which was met with agreement.

Mr. Courcelles raised a significant question concerning the governance structure of the alliance program, particularly in light of Mrs. Leblanc's increased involvement. He expressed concerns about potential differences from the typical alliance governance structure. In response, it was explained that the alliance program officer had been consulted on this matter. It was emphasized that the program aims for partner involvement at every stage, not solely at the project's conclusion. This approach was seen as highly favorable and aligned with the program's intended purpose. Notably, NSERC had no objections to the proposal being divided into three separate parts rather than one comprehensive proposal, which further indicated alignment with the program's objectives.

Mr. Courcelles also inquired about the possibility of incorporating HQ's financial contributions for the hydrometric stations and the corporate e-address study into the 2-to-1 ratio. In response, it was clarified that NSERC's policy regarding in-kind contributions had recently changed. In-kind support is no longer leveraged to the same extent as before. Only cash directly entering the research project can be matched by NSERC. This policy adjustment came into effect approximately a month and a half ago.

Mr. Dunn sought information on the level of commitment required from partners to advance with the alliance application, specifically whether letters of intent or firm commitments were necessary. It was explained that partners must be unequivocal about their upfront contributions. Commitments should accurately reflect the actual funds they are prepared to provide. NSERC expects a well-organized approach to partner recruitment and budget planning. The partners' financial contributions should be included in the budget section of the proposal. While no formal letters are needed, there are forms for partners to complete, outlining the nature of their partnership and the agreed-upon budget amounts.

Additionally, Mr. Dunn inquired about the funding distribution process, drawing a comparison with Phase I. It was clarified that, for Phase II, NSERC allows partners to contribute directly to the project, bypassing Niskamoon if they prefer. Alternatively, a larger contribution from Niskamoon could also be considered. Regardless of the chosen approach, the project's overall strength remains intact.

During the meeting, Mr. Courcelles raised an essential question regarding the management of the project's budget and cash flow, specifically inquiring about the responsible party for handling these funds. In response, it was clarified that the universities play a pivotal role in budget management, with cash transactions funneled through the universities via contractual agreements. Although specific individuals may oversee budget aspects, the overall financial accountability is shared between NSERC and the university, based on the budget initially submitted with the application.

Mr. Courcelles sought further clarification regarding the signatories of the contracts, particularly whether these contracts were established between the universities and NSERC. The explanation provided was that these contracts entail a tripartite agreement, involving the universities, NSERC, and the partnering organizations. In Phase II, Niskamoon signs on as a partner, and it is the university that actively manages the funds. This marks a departure from Phase I, where research contracts were directly signed between Niskamoon and the universities.

Continuing the discussion, Mr. Courcelles delved into the issue of contract recipients and data sharing within the context of this three-party contract structure. He inquired about who would be the primary recipient of the generated data. The response indicated that the ultimate recipients of the data generated would primarily be the communities involved. The specifics of data distribution can be outlined in the agreements reached. In concluding his questions, Mr. Courcelles expressed his gratitude for the provided responses while acknowledging that the overall process appeared to be somewhat complex.

Mr. Del Giorgio clarified that the Alliance program, by its nature, involves partnerships. While each alliance may have unique characteristics, there's a standard framework provided by NSERC regarding data transfer and intellectual property. Oversight from universities ensures compliance. Mr. Del Giorgio emphasized that this program supports collaborations.

Mr. Dunn elaborated on the next steps, indicating that they would bring this matter to the Niskamoon board. Niskamoon plans to obtain funding commitments from various Cree entities to share the financial responsibility, as they've done in the past. Additionally, they need band council resolutions from the four coastal communities supporting Phase II.

The Chair asked about the submission timeline, to which Mrs. O'Connor explained that while there's no strict NSERC deadline, they aim for the end of October. This timeline balances the need to secure partners' support with the urgency of planning fieldwork.

The Chair then inquired about who is leading the effort to find additional partners. Mr. Dunn explained that Mrs. Leblanc, as a Niskamoon employee, plays a significant role, and they support her in this task.

Mr. Dunn introduced the idea of revisiting the possibility of HQ providing financial support for Phase II, particularly in the context of geographical research components. He raised a crucial concern related to accessing HQ's permanent stations, acknowledging the historical challenges tied to obtaining consent on specific trap lines. It was emphasized that without clear and unequivocal consent, Niskamoon would be unable to proceed in those areas. This concern was highlighted for the sake of transparency, even though a definitive solution had yet to be identified.

Mrs. Durocher recommended further dialogues involving Jean-Philippe Gilbert (**Mr. Gilbert**) and Mrs. Leblanc, with an emphasis on examining potential areas of alignment or overlap with Mr. Gilbert's plans. Mr. Dunn proposed the idea of arranging a meeting, and Luc expressed interest in participating. Mr. Dunn confirmed that invitations would be extended to all HQ representatives serving on the steering committee.

Towards the conclusion of the discussion, Mr. Dunn inquired if there were any major concerns or issues that needed to be brought to the attention of the Niskamoon Board in their upcoming meeting, seeking clarity on the matter. Mrs. Durocher expressed a concern that led to the discussion of point 6 on the agenda, hence the meeting proceeded directly to address that item.

5. **Discussion on Timeline for Phase I Research Video Summary**

Following the discussion of concerns in point 4, the meeting proceeded to address point 6, and subsequently, point 5 was discussed.

Mr. Courcelles inquired about when we would be able to view the video, seeking clarification on its status.

Mrs. Leblanc provided an explanation. She mentioned that a presentation had been made in March, but there were some suggestions regarding the need to revise the recommendations presented in the video. Additionally, there were concerns about how the decline of eelgrass was described in the video. These issues require further work, and it was necessary to communicate these revisions to the steering committee. Once there is an agreement on the revisions, the video can be considered finalized, as there hasn't been an opportunity to make these changes since the initial meeting.

Mr. Dunn emphasized the significance of the video project, echoing Mr. Courcelles' previous remarks. He stressed that the video is likely to be the primary means through which people engage with the research project, as many may not read the full report. Therefore, ensuring the video's completion is of utmost importance.

6. **Finalization of Phase I and Research Data Collection by Niskamoon**

Following the concerns addressed in point 4, the meeting transitioned to discussing point 6.

Mrs. Durocher raised a question about the budget allocation related to data sharing, collection, and organization that was presented in the budget. She expressed her belief that finalizing phase I of the research and ensuring that Niskamoon has all the required raw data should take priority. She inquired about the progress in this regard.

Mrs. Leblanc responded to Mrs. Durocher's query. She clarified that the budget allocation in question pertained to the compilation of raw data. While Niskamoon possesses some of this data, other data, particularly ocean data, has not yet been collected. She mentioned her intention to work on collecting all the raw data in collaboration with Caroline FinK-Mercier (**Mrs. Fink-Mercier**), who have experience with the River team and Ocean team's data. The goal is to organize this data in a user-friendly format for Cree entities or biologists and to prepare it for use in the second phase of the project.

Mrs. Durocher expressed her concern about ensuring that data gathering takes place during phase I and that any needed organization can be addressed in phase II. She emphasized the importance of not losing the data if budget constraints arise.

Mrs. Leblanc acknowledged the issue of finding a suitable location to store the raw data, which had not been accounted for in phase I. She mentioned the need to create a cloud or another storage space for this data, discussing options such as external disks.

Mr. Dunn added to the discussion, underscoring the significance of the data and how it has been somewhat overshadowed by other project priorities. He emphasized the importance of not losing sight of the data-related considerations in the midst of project activities.

7. **Miscellaneous**
    - **Paper Submissions**

Mrs. Durocher raised a point regarding an article that was sent at the end of August. She acknowledged that there might not be enough time for a discussion during this meeting but proposed setting a deadline or a mechanism for channeling comments.

Mr. Dunn reflected on the importance of the article and suggested that they should schedule a meeting to discuss it. He emphasized that this foundational article outlines the structure of how the research happened in phase I.

Mrs. Leblanc mentioned another article from Mrs. Kuzyk team that needs to be reviewed, albeit it's more technical in nature.

Mr. Dunn brought up the matter of Lindsey Carlson (**Mrs. Carlson**), the brant goose researcher who was initially scheduled to present in November 2022 but was postponed due to an incident with minutes.

He emphasized the importance of her presentation, especially given that it's overdue by a year and could impact their work.

The Chair concurred that all three points raised warranted meetings, with a preference for scheduling them in early October. It was agreed that due to budget constraints and the need to close the books on phase I, the meetings would be conducted online.

Mrs. Leblanc shared that they plan to submit the "building knowledge" paper to Arctic Science by September 30th and proposed scheduling a meeting before that date. An agreement was reached for a meeting on September 26th, allowing three days before the submission deadline.

Confirmation from all steering committee members was sought regarding their desire for co-authorship on the paper. While it was emphasized that there is no set limit on co-authors, Mrs. Kuzyk stressed the importance of co-authors feeling ethically comfortable with this designation.

Mr. Dunn recommended that all questions related to the article review should be deferred to the upcoming meeting. He encouraged everyone to take a look at the paper, even if not reading it in its entirety, to ensure they are comfortable with its content. Mr. Dunn expressed his view that it would be a nice gesture for every member to be a co-author since they all made contributions to the paper's development collectively. However, it was noted that co-authorship is not obligatory but an opportunity to highlight the collaborative efforts of the members.

8. Next Meeting

Following the agreement for the review of the submitted articles, it was decided that the next meeting will be held on September 26th in the afternoon, from 1:00 p.m. to 3:00 p.m., via Teams.

9. Summary and Next Steps

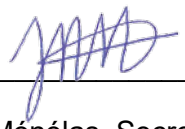
In the final segment of the meeting, the Secretary provided a concise summary of the next steps to be taken:

- The next meeting is scheduled for September 26th in the afternoon, from 1:00 PM to 3:00 PM. During this meeting, there will be three presentations. The manuscripts that were sent for review will be discussed, along with a presentation from October 2022.
- Mr. Dunn raised a question regarding the two articles manuscripts, requesting that they be recirculated to ensure they are readily accessible to everyone.
- It was noted that while there are no strict deadlines for the NSERC Alliance grants, it would be advantageous to have everything set by the end of October.
- The Committee will require a resolution from Niskamoon board and approval.
- The possibility of another meeting by the end of October was mentioned, depending on the progress of obtaining resolutions and board approvals.
- The Secretary clarified that during the next meeting, there will not be a review of the minutes. Instead, the review of the minutes will be scheduled for the upcoming October meeting.

- A discussion ensued about the finalization of phase I video summary. An inquiry was made regarding when the revised version, complete with comments, could be expected. Mrs. Leblanc assured that she would provide an update on this timeline soon.

ADJOURNMENT OF THE MEETING

Considering that the allotted time has elapsed, the meeting is adjourned at 16:34 P.M.



Johanna Ménélas, Secretary

Prospective for CHCRP Phase II

Tracking, understanding and managing change in coastal Eeyou Istchee

Bélanger, B., del Giorgio, P., Davis, K. E., Ehn, J., Fink-Mercier, C., Humphries, M., Idrobo, C.J., Knight, N., Kuzyk, Z., Leblanc, M.L., LeTourneux, F., Menzies, A., Noisette, F., O'Connor, M. I.

September 11, 2023

Table of Contents

Introduction

This document provides a high-level overview of 'Phase II' of the partnership on coastal habitat change in Eeyou Istchee, focusing on changes and actions to enhance eelgrass and the goose hunt (Figure 1). Phase II builds on Phase I and specifically the Integration Report (Kuzyk et al. 2023[1]) and carries forward project architecture and the way of working that emphasizes collaboration and knowledge exchange among Cree, researchers and other partners. The main goal is to conduct research on the changing landscape and coastal environment and hunting practices to support sustained, Cree-led monitoring and action into the future.

Phase II is a consortium of integrated projects and programs focused around three organizing questions that will take place over five years (2024-2028) (Figure 1). The approach involves research, monitoring and action, and each is progressed iteratively (Figure 2).

CHCRP Phase II research questions

I. How are coastal ecosystems changing, and how is this change most effectively monitored to support eelgrass natural recovery and restoration?
II. How are changing landscape and climate influencing rivers and consequently coastal ecosystems, and how can rivers be effectively monitored in the long-term to build capacity in Eeyou Istchee ?
III. How is environmental change affecting Cree coastal use, goose harvest, and biocultural continuity, and what strategies can be implemented to mitigate these impacts?

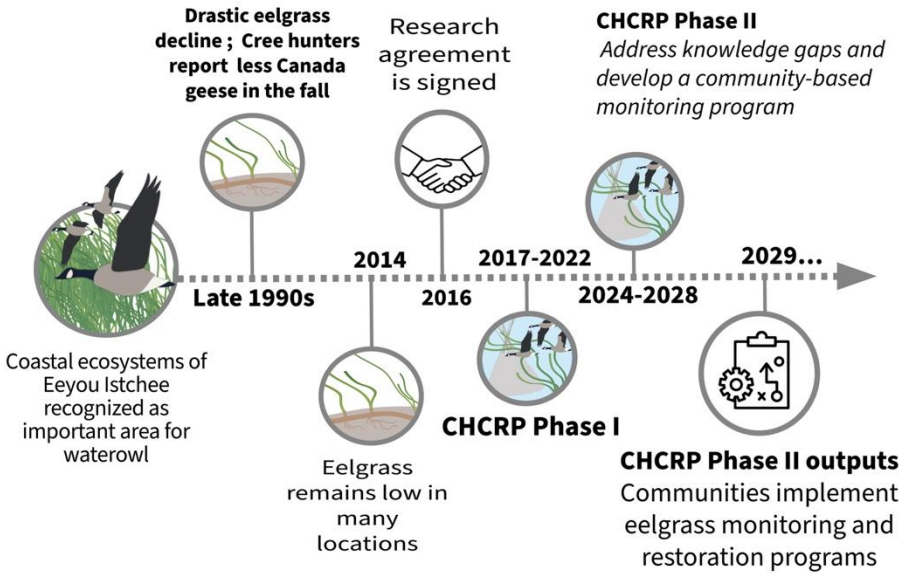


Figure 1. Timeline of CHCRP development.

[1] Kuzyk, Z.A., Leblanc, M.L., O'Connor, M., Idrobo, J., Giroux, J.-F., del Giorgio, P., Bélanger, S., Noisette, F., Fink- Mercier, C., de Melo, M., Walch, D., Ehn, J., Gosselin, M., Neumeier, U., Sorais, M., Davis, K., and Leblon, B., 2023. Understanding Shkaapaashkw: Eelgrass Health and Goose Presence in Eastern James Bay. Final Report from the Eeyou Coastal Habitat Comprehensive Research Project (CHCRP). Prepared for Niskamoon Corporation. University of Manitoba, Winnipeg MB Canada. The document can be downloaded at: https://canwin-datahub. ad.umanitoba.ca/data/fr/project/eeyou-coastal-habitat-project https://doi.org/10.34992/4k4z-tf96

CHCRP Phase II Research Projects

To tackle these questions, the CHCRP Phase II has three research projects, which are the Coastal Ecosystems Project, Landscape Change Project and Eeyou Biocultural Project (Figure 2; project summary provided below).

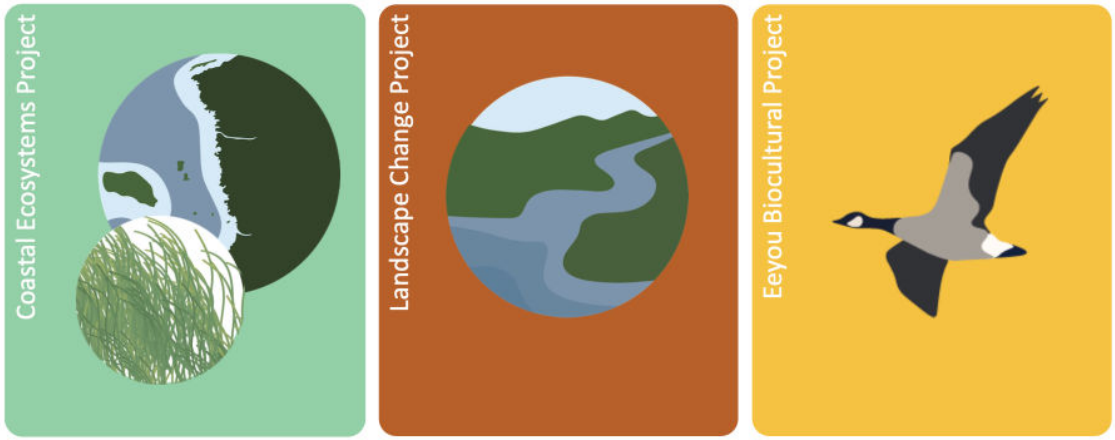


Figure 2. CHCRP Phase II research components. The three components were developed using feedback and suggestions from land users about the first phase of the project at the CHCRP Symposium ("Cree Café") in Chisasibi on September 29th, 2022, and the workshop in Montréal on March 9th, 2023. The projects were also designed to complement each other.

Coastal Ecosystems Project

Full title: Coastal ecosystem change: Research to support long-term observation and potential restoration in a changing and vulnerable ecosystem

PIs: Mary O'Connor (UBC), Fanny Noisette (ISMER), Zou Zou Kyzyk (UofM), Jens Ehn (UofM), Simon Bélanger (UQAR)
Personnel: ~ 2 postdocs, ~ 6 graduate students, 1 permanent tech, seasonal techs
Research costs: salaries, travel, field work

Overview: The overarching goals of this partnership are to conduct new research to support the design of a community-led eelgrass monitoring program and to evaluate potential for eelgrass restoration in the context of climate- and development-driven environmental change. This partnership builds on existing relationships between Cree communities of eastern James Bay, Quebec, and an interdisciplinary team of researchers that has developed over the last 5 years (figure). The partnership centers on understanding how recent climate and development driven change has caused an ecosystem collapse and slow recovery, and guiding Cree decisions about how to manage their environment and activities in the figure. Together, we will develop new knowledge through community partnered scientific research to understand the status and vulnerabilities of a major ecological and cultural foundation species - eelgrass. This new understanding is directed toward informing and supporting the Cree community's decisions about restoration and management of eelgrass, and their development and implementation of a long-lasting ecological monitoring program. Specifically, we will pursue the following goals:

Goal 1: Assess eelgrass status and trends with Cree land users

Goal 2: Understand interannual variability of the environment (climate, ocean, ice)

Goal 3: Identify vulnerabilities of eelgrass to environmental change, and capacity for recovery from loss

Goal 4: Identify opportunities and potential challenges for restoration. Develop tools for monitoring, including protocols, data pipelines, partnership networks and web dashboards.

Main activities: Eelgrass health assessments, inventories and research directed toward informing Cree-led restoration and monitoring (if desired). This involves field work at many sites for assessment over several years, and at a few sites for deeper observation and study of eelgrass growth (and failure) several times in the growing season. Research will specifically target light limitation, vulnerability events such as heat waves and fires, sediment resuspension. Research and application will specifically target development of methods for monitoring and knowledge to support restoration activities after Phase II.

Partners: Niskamoon, ERMB, CNG?, non-profits and government, if desired.

Eeyou Biocultural Project

Full title: Eeyou Biocultural Continuity of Goose Harvest and Coastal Use

PI's: Murray Humphreys (McGill), Allyson Menzies (University of Calgary), Julián Idrobo (University of Calgary)
Personnel: ~ 1 research associate, ~ 1 postdoc, ~ 7 graduate students (4PhD, 3MSc)
Research costs: salaries, travel, field work

Scope
Eeyou land users requested at the end of the first phase of the CHRP to deepen the available knowledge about geese abundance and its relation to habitat change. They expressed a need for information and tools to monitor the social and ecological aspects of the goose hunt, including habitat change, biodiversity, hunting practices, and the assessment of habitat enhancement projects. The proposed project aims to address these priorities by monitoring the Eeyou Istchee coast as a social-ecological and biocultural system with specific data and monitoring requirements. The ultimate goal of this monitoring is to inform an Eeyou-driven action plan that strengthens strategies for the continuity of goose harvesting grounded in their knowledge, relationships, and values while incorporating recent advances in waterfowl science and biodiversity monitoring. We propose an inclusive approach that considers the people, wildlife, and interconnected marine, freshwater, and terrestrial ecosystems that define the James Bay coastline.

What
This will be a mixed-methods, community-based monitoring project focused on:

i) Cree knowledge, harvest, and land use
ii) waterfowl ecology
iii) habitat change and enhancement.

The project will be led by Julián Idrobo (Research Associate) focused primarily on Eeyou biocultural continuity and Frederic LeTourneux (Post-doctoral fellow) focused primarily on waterfowl ecology. Masters' projects will also be organized according to these subthemes. Biocultural MSc projects will focus on Cree knowledge observations of coastal harvest and local food use, as well as habitat change and enhancement. Ecological MSc projects will focus on i) waterfowl monitoring using complementary techniques (i.e., Acoustic Recording Units, drones, aerial surveys), ii) isotopic and eDNA approaches for assessing waterfowl diets, flyways and nesting sites, and coastal biodiversity inclusive of birds, fish, and invertebrates. Two PhD projects will connect across biocultural and ecological subthemes, including one PhD project focused on a coastal biocultural knowledge atlas inclusive of Cree knowledge of coastal Eeyou Istchee and ecological sciences and a second PhD project focused on opportunities for biocultural continuity grounded in a synthesis of Cree experience of change and environmental drivers of goose ecology and coastal biodiversity.

Partners
We envision Niskamoon will contribute as the primary partner in terms of funding, knowledge co-creation, and use of the results and toolkits generated. A second anticipated partner is the **Eeyou Marine Region Wildlife Board** in respect of their mandate for wildlife research in the Eeyou Marine Region. Anticipated areas of collaboration with the EMRWB include i) biodiversity monitoring through the use of Acoustic Recording and eDNA technologies and ii) contaminant analysis of fish and bird species harvested along the coast. A third potential partner is the **Cree Trappers Association**, with co-funding and partnership opportunities focused on interfacing land-user observations of wildlife, harvest, and habitat with CTA's Geoportal initiatives. A fourth potential partner is the **Canadian Wildlife**

Service, with co-funding and partnership focused on waterfowl surveys and development of survey toolkits inclusive of land user observations. A fifth potential partner is the **Cree Nation Government** with collaboration focused on mapping habitats and their relation to current land use.

Outcomes

This project aims to develop capacity for the Eeyou community to effectively monitor and safeguard Eeyou Istchee based on their specific needs and deep understanding of the land. Together, we will co-produce a Cree knowledge repository and monitoring tools that prioritize the role of land users, their wildlife observations, and habitat assessments in understanding and responding to environmental change in Eeyou Istchee. The approaches we aim to co-produce during the life of this project will integrate community-based and interdisciplinary methodologies for waterfowl and biodiversity monitoring that contribute to and complement Cree knowledge, allowing us to work towards Cree-driven solutions that ensure biocultural continuity. Our emphasis lies on collaborative knowledge production, fostering a participatory approach to decision-making processes.

Specific outcomes include:

- A living Cree knowledge Atlas that serves as a repository of knowledge of wildlife and habitats of Eeyou Istchee.
- A Community-based biocultural monitoring toolkit for monitoring goose harvest and coastal use grounded in Cree knowledge and co-created with interdisciplinary waterfowl scientists.
- Knowledge for adaptive management of geese and coastal habitat in Eeyou Istchee.

Landscape Change Project

Full title: Assessing climate and human driven landscape changes in the James Bay, and how these are affecting the coastal habitats: Rivers as sentinels of change in Eastern James Bay

PI's: Paul del Giorgio (UQAM), Simon Belanger (UQAR)
Personnel: ~ 1 postdoc, ~ graduate students (PhD, MSC)
Research costs: salaries, travel, field work

The territory of the Eastern James Bay is changing rapidly in response to climate and land use changes, which are modifying both the regional hydrology and the landscape. The temporal patterns of river discharge reflect the watershed balance between precipitation and evapotranspiration, and therefore integrate key climatic and environmental changes. Whereas the riverine transport of materials such as dissolved organic matter, nutrients and suspended solids also reflects watershed features such as underlying geology, land cover, wetlands and soil properties, as well as natural and human alterations to watersheds (e.g., wildfires, deforestation, agriculture, damming and mining). Rivers are therefore sentinels of both, climate (through hydrology that integrates precipitation and evapotranspiration) and landscape processes, as wildfires, erosion events, and other changes that can ultimately influence the export of particulate materials and nutrients from land into surface waters. It is thus relevant to monitor the landscape from a river perspective, especially in the context of accelerating climate change, recurrent extreme events, and increasing human activity. In addition, the changes in terrestrial inputs and loaded materials (suspended solids, nutrients, CDOM) may have consequences on aquatic life, water quality and the functioning of coastal habitats, particularly within the river plumes, and it is important to understand these river / coastal interactions.

The project will have the following main components:

1) Long-term monitoring program of river discharge in the instrumented rivers, to understand the connection between the variation in streamflow, climate trends and extreme weather events
2) High frequency monitoring of key riverine constituents (CDOM, turbidity, pH, N) in some instrumented rivers to address links to hydrologic and watershed events
3) Discrete sampling of complementary river physical, chemical, and biological conditions in instrumented and non- instrumented rivers to derive more general river / landscape relationships
4) Determination of trends in riverine exports to the James Bay, and links to climate and watershed alterations
5) Linking riverine exports to proximal coastal conditions and change, through a combination of discrete sampling in and around river plumes and remote sensing
6) Establish a combined instrument based and community-based sampling program to monitor water properties at the outlet of La Grande River to assess patterns in CDOM, turbidity and nutrients affecting the plume of the river
7) Remote sensing component
    a. reconstruction of long-term trends in CDOM and turbidity in major James Bay rivers
    b. mapping of CDOM and turbidity in river plumes and near shore areas of the James Bay and links to riverine inputs

c. assess the light availability for eelgrass using a satellite-based modeling approach
d. fire history in the territory, and links to riverine inputs to the Bay
e. landscape changes within watersheds

8) Work with partners to make use of meteorological and hydrological data in support of their own programs and guidelines

These research components are designed to address fundamental questions related to climate and human driven landscape changes in the James Bay, and how these are affecting rivers and coastal habitats of the Eastern James Bay, and in particular, how they may influence eelgrass growth and recovery. The components also provide the framework for a long-term monitoring and training program that addresses research and policy needs of the Eeyou Istchee Nation and its various communities.

PHASE II workflow

Monitoring
We understand that Cree-led monitoring of eelgrass, rivers and geese is a goal of the communities, their leadership and Niskamoon. The research questions above are directed toward developing critical knowledge to enable an effective and sustainable monitoring program to allow Cree to observe and act on environmental change in their territory (Figure 2a). Phase II aims to produce not only the knowledge essential to design the monitoring program but also to outline training, data processing and visualization tools, and architecture of a monitoring program that can be effective in understanding change and demonstrating it to others through robust detection and attribution of change that includes Cree observations and science.

Action plan
The action plan includes Cree programs and decisions about management, restoration, monitoring, mitigation, adaptation and other responses to environmental change. The Cree partners and communities will lead the action plan development and implementation, informed and supported by the outcomes of the research program through an iterative process in Phase II.

The three research components of Phase II will work towards a common set of action goals, that include 1) developing research outcomes that are mutually compatible, complementary and relevant to community needs, 2) setting the basic framework for an effective long-term monitoring plan, 3) building long-term capacity through training and infrastructure development within the communities, 4) effectively integrating, communicating and transferring results to partners and stakeholders (Figure 2b).

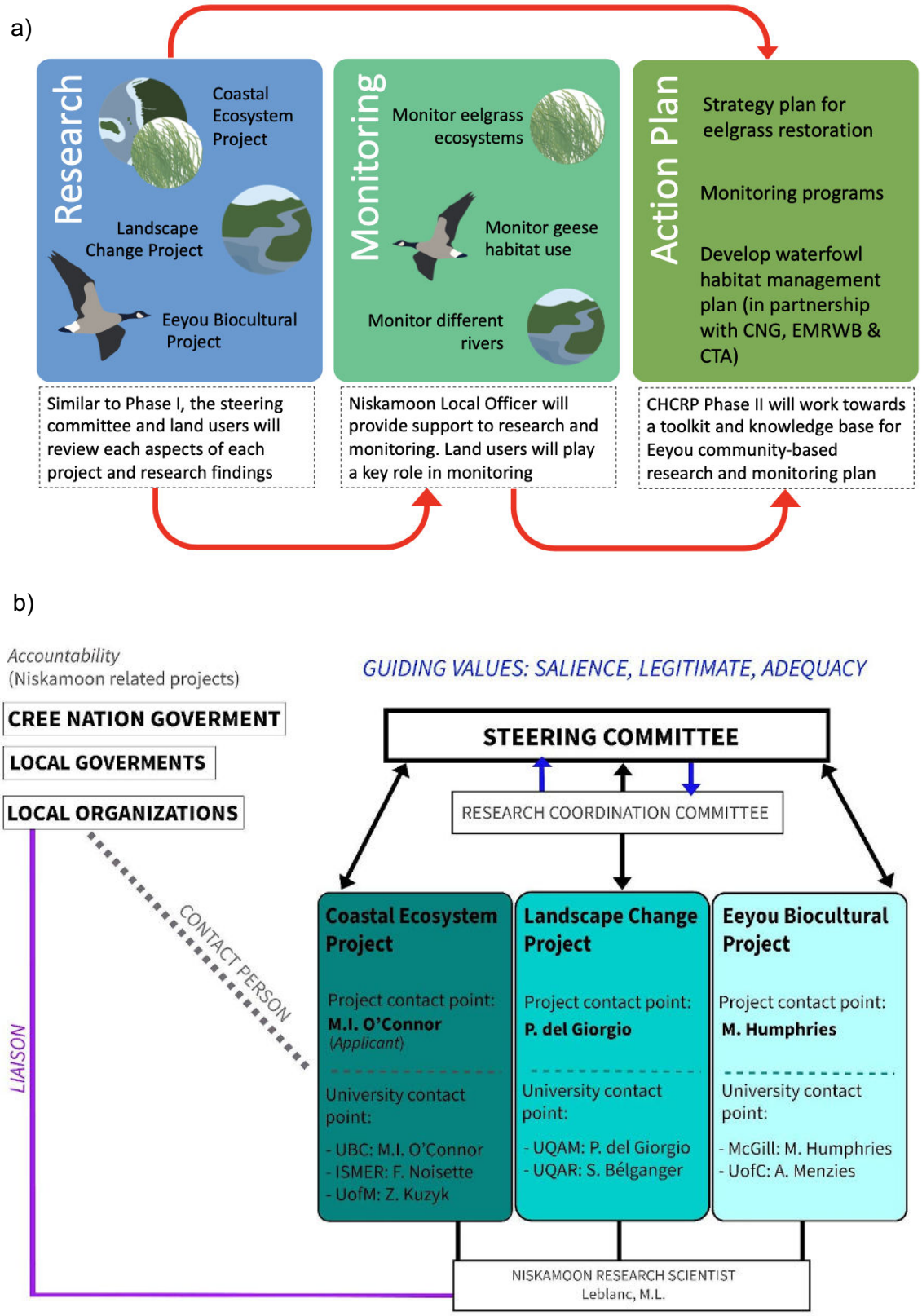


Figure 2 a- CHCRP Phase II activities and workflow, b- project organization. The research coordinating committee is comprised of PIs of Phase II.

FUNDING PHASE II

After discussions with Niskamoon and among the researchers, we will take the approach of leveraging Niskamoon funds and contributions from other partners through grants, including NSERC Alliance partnership grants. Overall, the Phase II research program will be funded through a suite of grants, each tailored to specific project goals and funding opportunities (Table 1).

Table 1 Overall the Phase II funding program

Funded by Niskamoon/NSERC Alliance Grants
● Coastal Ecosystems Project (O'Connor, Noisette, Kuzyk, Ehn) ● Landscape Change Project (del Giorgio, Belanger) ● Eeyou Biocultural Project (Humphries, Menzies, Idrobo)
Funded by other sources (complementary CHCRP Phase II projects)
● James Bay oceanography and carbon cycling (Kuzyk) ● Coastal mapping and bathymetry (Bélanger)
Still Seeking funding
● Biodiversity

NSERC Alliance. Alliance grants support partnerships between academics and non-academic partners (communities, organizations, government, industry). Main criteria include that the partners require the research and will use the outcomes, and grant funds trainees (PhD students, Postdocs, etc). While Alliance grants will fund partnerships in which the partners do not contribute funds (in kind or cash), when partners do contribute funds, NSERC matches these cash contributions at a 2:1 ratio. We have identified three Alliance proposals, one for each of the research project listed above (Figure 2a).

Partners on Alliance Grants. Partners, financial contributions, roles and benefits need to be discussed at the outset of the application process (2023). In addition to Niskamoon, it may be appropriate to include other partners (CNG, CTA, Hydro-Québec; if there is interest from Niskamoon, we could explore non-profit partners like Ducks Unlimited or WWF, or Parks Canada, ECCC or DFO).

Proposed contact person at CNG: Kaitlin Lloyd (Climate Change Manager, interim), Killian Abellon (Climate Change Coordinator), Christopher Beck (Coordinator of Marine Conservation) and Maya Longpré Croteau (Wildlife biologist, wildlife coordinator).

Other grant funding: There are other grant funds that could support components of the Phase II research plan. These include, but are not limited to, postdoctoral and graduate fellowships, MITACs, and other granting programs for training.

Research, activities and personnel salary not covered by grants: While Alliance grants provide funding to support trainees (PhD students, Postdocs, etc.), the program can only partially contribute to the following expenses: 1- salaries of Cree research collaborators; 2- project coordinators, research professional and technicians; and 3- costs associated to the development of communication and data management strategies and outreach activities.

BUDGET PHASE II

We present preliminary estimates of total project costs to illustrate the Alliance model (Table 2). Final estimates will reflect final research plans as well as final sets of partners and their interests and contributions.

Presently, we are considering three Alliance proposals, with the Eelgrass project led by O'Connor, Noisette and Kuzyk with Ehn, with Bélanger as collaborator; the Eeyou Biocultural Continuity project led by Humphries, Allyson Menzies (Red River Métis prof. University of Calgary) and Idrobo, and Landscape change led by del Giorgio and Bélanger following the guiding questions for phase II. This is a preliminary structure to advance the conversation and is open to revision and modification.

Table 2 Preliminary budget estimates to illustrate how the NSERC Alliance program leverages partner funds (2024-2028).*

		ANNUAL				FIVE YEARS	
Category	**Description**	**Nisk.**	**Partner 2**	**NSERC Alliance**	**Total**	**Total Nisk.**	**Total**
Research	**Coastal ecosystems project** (O'Connor)	200,000		400,000	600,000	1M§	3M
	Landscape change project (del Giorgio)	100,000	100,000	400,000	600,000	500,000	3M
	Eeyou biocultural project (Humphries)	200,000		400,000	600,000	1M§	3M
	Total	500,000	100,000	1.2M	1.8M	2.5M	9M
Community engagement	**Cree personnel** (Appendix 1)	100,000			100,000	500,000	500,000
	Land user participation	100,000			100,000	500,000	500,000
	Habitat enhancement**	100,000			100,000	500,000	500,000
	Total	300,000			280,000	1.5M	1.5M
Communication strategy	**Developing new web page for Phase II** (Appendix 2)	6,000			6,000	30,000	30,000
CHCRP data storing and access	**PCloud to stored data from all teams collected since 2017** (Appendix 3)	500			500	500	500
	Total	806,500	100,000	1.2M	2.1M	4M	10.5M

*Niskamoon equipment not included (drone, sampling material for Land Users).
**Niskamoon is eligible to apply for funding at Wildlife Habitat Canada for habitat enhancement projects.
§ The amount subject to change (decrease) depending on additional partners cash contributions.

Appendix 1 Cree Personnel

Table A1. Detailed information on Cree personnel in Phase II (2024-2028).

Position	Description
Cree Social Scientist *Mimie Neacappo* (contractual/part-time: 80 K annual for salary, travel, food and lodging)	Funds to cover the partial salary of Cree Social Scientist to take part in developing research project and interviews/surveys; participate in research activities (interpretations of results, co-author on reports and papers); mentor graduate students; develop a framework for storing Cree knowledge; facilitate meetings and workshops with land users and community members.
Cree fieldwork technicians (Summer part-time 20K)	Funds to cover the salary of one or two Cree fieldwork technicians. The technicians would participate in fieldwork activities with university-based fieldwork teams; the research team would provide training.

Appendix 2 Communication strategy for CHCRP Phase II

(Mélanie L. Leblanc)

During the first phase of the research, Strata360 created a website that provided information on the project, including composition of the SC, research teams, and Niskamoon Local Officers. The CHCRP website also has an interactive map with data on eelgrass, river discharge, and oceanic characteristics.

I am suggesting a new communication strategy for Phase II by constructing a new website that -

1. would link with other social media platforms (Instagram, YouTube, and CHCRP Facebook page, monitoring app…) and other partner websites (EMRWB, CTA, Niskamoon, CNG and university research labs);
2. would provide weekly and monthly up-to date information on project progress (monthly blog, newsletters, photos…);
3. would provide access to meeting minutes, reports and scientific papers.

The new Phase II website would eventually replace the first phase website (https://www.eeyoucoastalhabitat.ca/).

New website structure

Similar to the CHCRP Phase I website, the new website would present information on the CHCRP framework and Niskamoon local Officers. In addition to this, there would be a section dedicated to the Phase I of the project that would provide a short summary of major findings (short description and Phase I summary video). The section for Phase II would be divided into three different subsections for each research project. Each research team would provide more information on the research team and research goals. An additional section referred to Public Information is where the public would go to access meeting minutes, reports, and scientific papers from Phase I and II. A section Educational Resources providing access to posters and community presentations could also be added. Instead of implementing interactive maps in the website, I propose we use ArcGis Story Maps, which can be easily up-dated as new data is collected.

Similar to the EMRWB's website, the main page of the website would give up-to-date information about the research by sharing information on new publications, as well as information about upcoming events (community meetings and consultations, fieldwork activities, outreach activities…). These events would be publicized on the CHCRP Facebook page and the CHCRP Instagram account (to be launched). Any project videos would be posted on the web page event section and linked to the CHCRP YouTube channel (to be launched). The website could also provide information on data collected by monitoring apps.

In addition to a new website, land users who are interested would be given tailored reports of their traplines. These reports would include information about sample sites, photos, and

measurements. At meetings and consultations, land users will be approached to see whether they want to have access to this type of information.

Costs

The estimated cost to set up a website and graphic design would be around 10,000.00$. I would request a manual that would allow me to make regular updates. The estimated cost to maintain the website and consulting advice per year would be around 1,000.00$ to 2,000.00$ (depending on the updates). The ArcGis Story map subscription fees per year is approximately 900.00$. A more detailed budget could be presented to the Niskamoon Board in September.

Appendix 3 Data storage and Access across teams

(Mélanie L. Leblanc)

I suggest that Niskamoon purchase a cloud storage space (example PCloud) for the duration of the project so that research teams can store data, presentations, maps, reports and other material generated by the research. Storing the data into the same space will allow easier data sharing and access across all teams. Niskamoon staff will easily have access to presentations, reports and other material about the project. This space could also be used to store the data from Phase I. Once the project is completed, the data could be transferred to an external drive or another cloud storage space.

STEERING COMMITTEE MEETING

SEPTEMBER 11, 2023

PRESENTING CHCRP PHASE II **PRELIMINARY** RESEARCH PROGRAM AND BUDGET

Bélanger, B., del Giorgio, P., Davis, K. E., Ehn, J., Fink-Mercier, C., Humphries, M.M., Idrobo,C.J., Knight, N., Kuzyk, Z., Leblanc, M.L., LeTourneux, F., Menzies, A., Noisette, F., O'Connor, M. I.

START OF CHCRP

- SPRING 2022: LAND USER CONSULTATIONS IN CHISASIBI
- SUMMER 2022 : COMMUNITY TOUR FOR FEEDBACK ON PRELIMINARY FINDINGS
- RESEARCHERS COLLABORATE ON FINAL INTEGRATION REPORT

CHCRP *PHASE II*

- CONSULTATIONS WITH LAND USERS
- FIELDWORK
- FIRST SYMPOSIUM
- RESEARCH MEETINGS
- WORKSHOPS IN COMMUNITIES
- SCHOOL OUTREACH ACTIVITIES

- MARCH 2023: WORKSHOP FEEDBACK ON INTEGRAION REPORT AND NEXT STEPS IN PAHSE II

2017 2018 2020 2021 2022 2023 2024 2029

COVID-19

Cree partners keep large-scale eelgrass research on track during pandemic

All-Cree team retrieves 'priceless' data from the bottom of James Bay

SUMMER 2023 INTERGRATION REPORT FINALIZED

- FALL 2022: CHCRP SYMPOSIUM CHISASIBI AND WORKSHOP – CREE CAFÉ
- RESEARCHERS COLLABORATE ON FINAL INTERGRATION REPORT

SUMMER 2023 :
- FOREST FIRES
- PLANNED FIELDWORK CANCELLED
- COMMUNITY CONSULTATION FOR PHASE II POSTPONED
- PLANNED FALL AND SPRING TRIPS TO EEYOU ISTCHEE

CHCRP – Land Users' Feedback


Wemindji, 2019


Chisasibi, 2022


Wemindji, 2021


Wemindji, 2022


Wemindji, 2022


Chisasibi, 2022

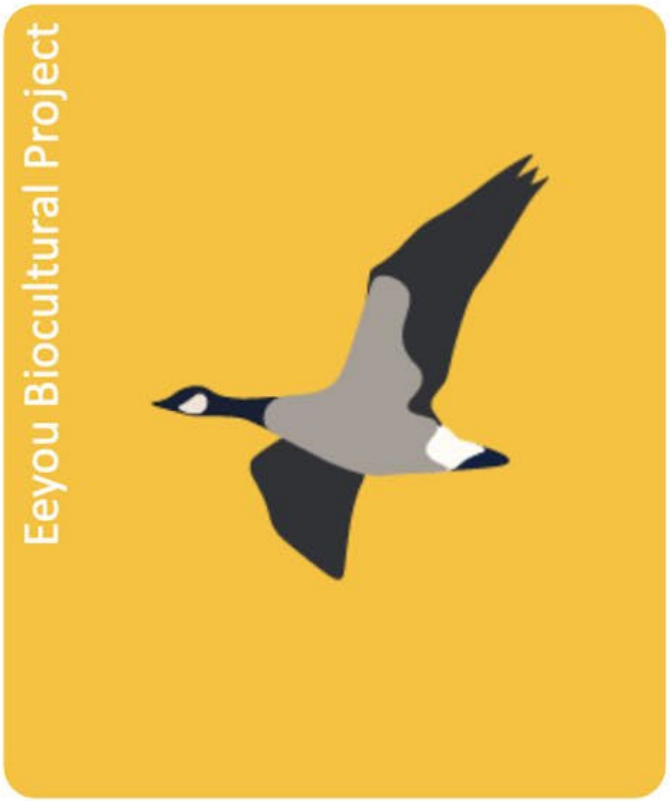
CHCRP Phase II research questions

1. How are coastal ecosystems changing, and how is this change most effectively monitored to support eelgrass natural recovery and restoration?

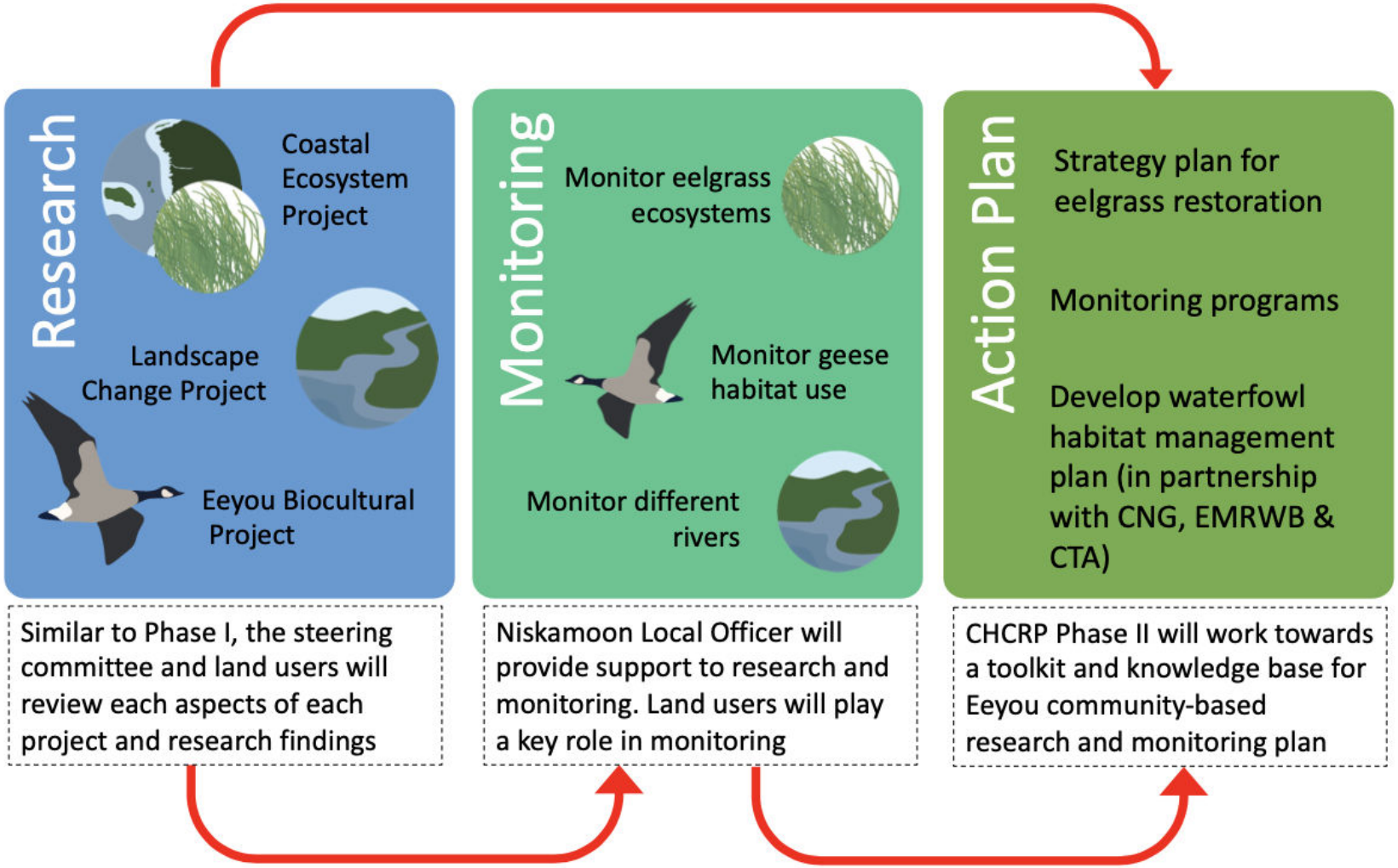
1. How are changing landscape and climate influencing rivers and consequently coastal ecosystems, and how can rivers be effectively monitored in the long term to build capacity in Eeyou Istchee?

1. How is environmental change affecting Cree coastal use, goose harvest, and biocultural continuity, and what strategies can be implemented to mitigate these impacts of change?

CHCRP Phase II Research Projects



CHCRP Phase II Workflow



Coastal Ecosystems Project

PI

Mary O'Connor
UBC

co-PI

Fanny Noisette

Zou Zou Kuzyk

Simon Bélanger

Partners

Melanie Leblanc
(Niskamoon)

Other Partners
(EMRB, CNG,
others?)

Project coordinator

Caroline Fink-Mercier

Post-doc fellow

Kaleigh Davis

Post-doc fellow

Nicole Knight

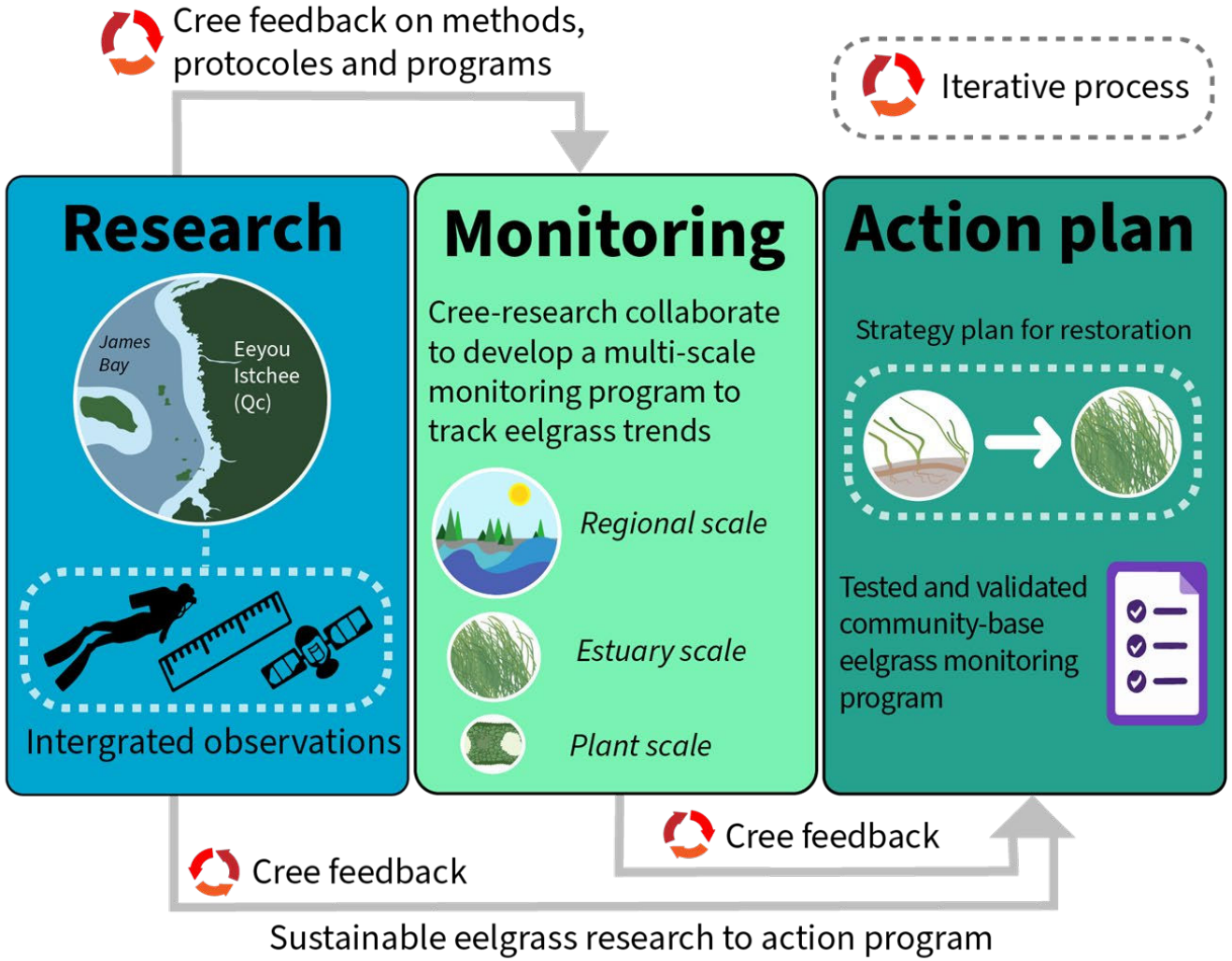
Coastal Ecosystems Project

Goal 1: Assess eelgrass status and trends with Cree land users

Goal 2: To understand interannual variability of the environment

Goal 3: Identify vulnerabilities of eelgrass and capacity for recovery from loss

Goal 4: Identify opportunities and potential challenges for restoration



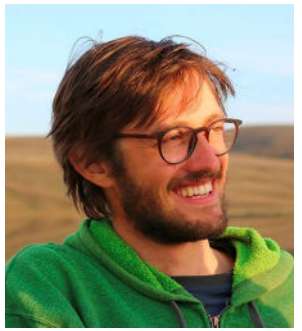
Eeyou Biocultural Project

PI
Murray Humphries
McGill

Co-PI
Ally Menzies
U of Calgary

Researcher
Melanie LeBlanc
Niskamoon

Research Associate
Julián Idrobo
U of Calgary



PostDoc
Frédéric LeTourneux
McGill

Indigenous Researcher
Mimie Neacappo
Niskamoon

Project Manager
Manuelle Landry-Cuerrier
McGill

and land users,
grad students and
research assistants…

Eeyou Biocultural Project

Develop and test tools for tracking biocultural diversity change in collaboration with Eeyou community members to inform Eeyou harvesting and environmental stewardship action plans

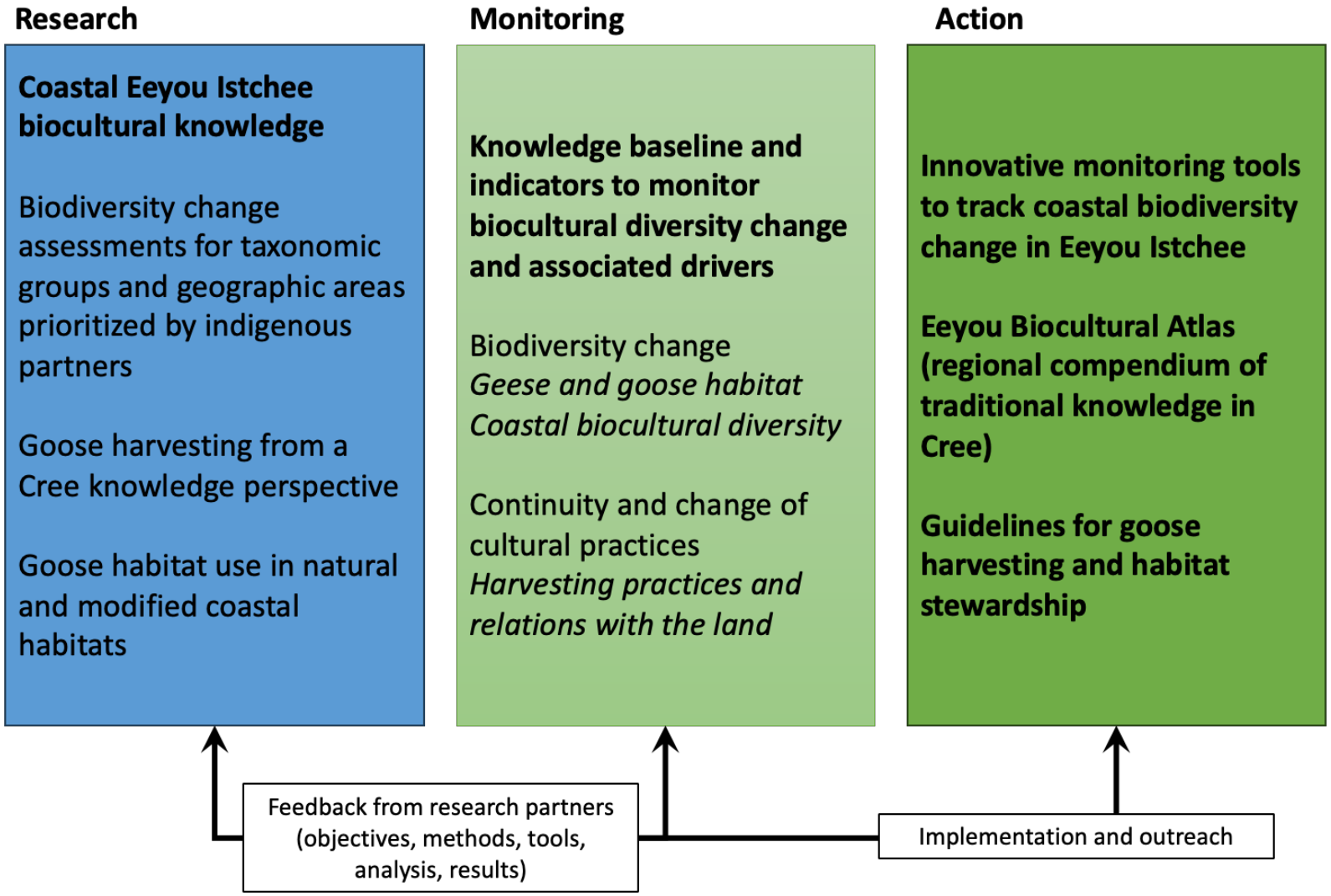
Eeyou Biocultural Project

Document and compile **Cree knowledge of environmental change** associated with land use, harvesting and biocultural diversity.

Develop community-based **tools connecting Cree traditional knowledge and Western Science to monitor the effects of environmental change on harvest and biodiversity**

Develop and implement a **methodology to monitor goose habitat enhancement projects**.

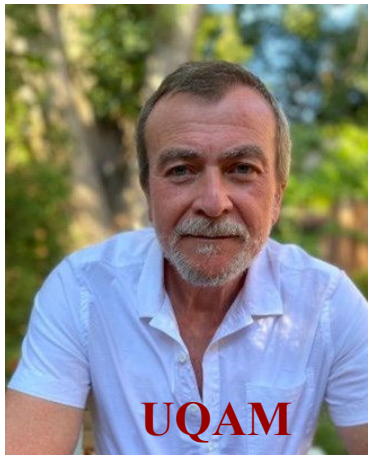
Determine **drivers of the distribution and habitat selection by geese in Eeyou Itschee.**



Landscape Change Project

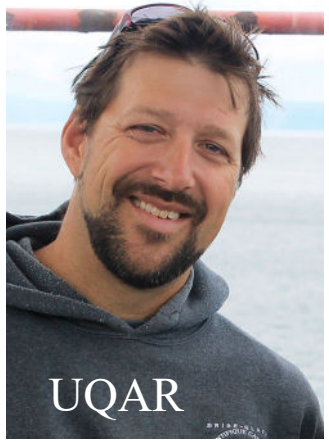
PI

Paul del Giorgio



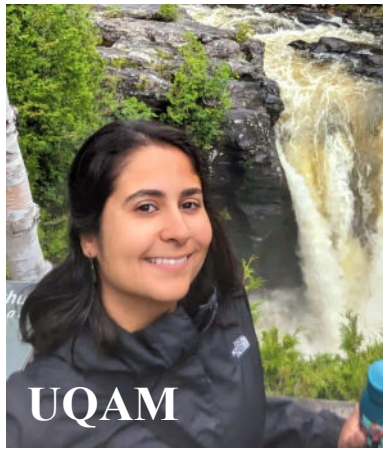
co-PI

Simon Bélanger



Post-doc fellow

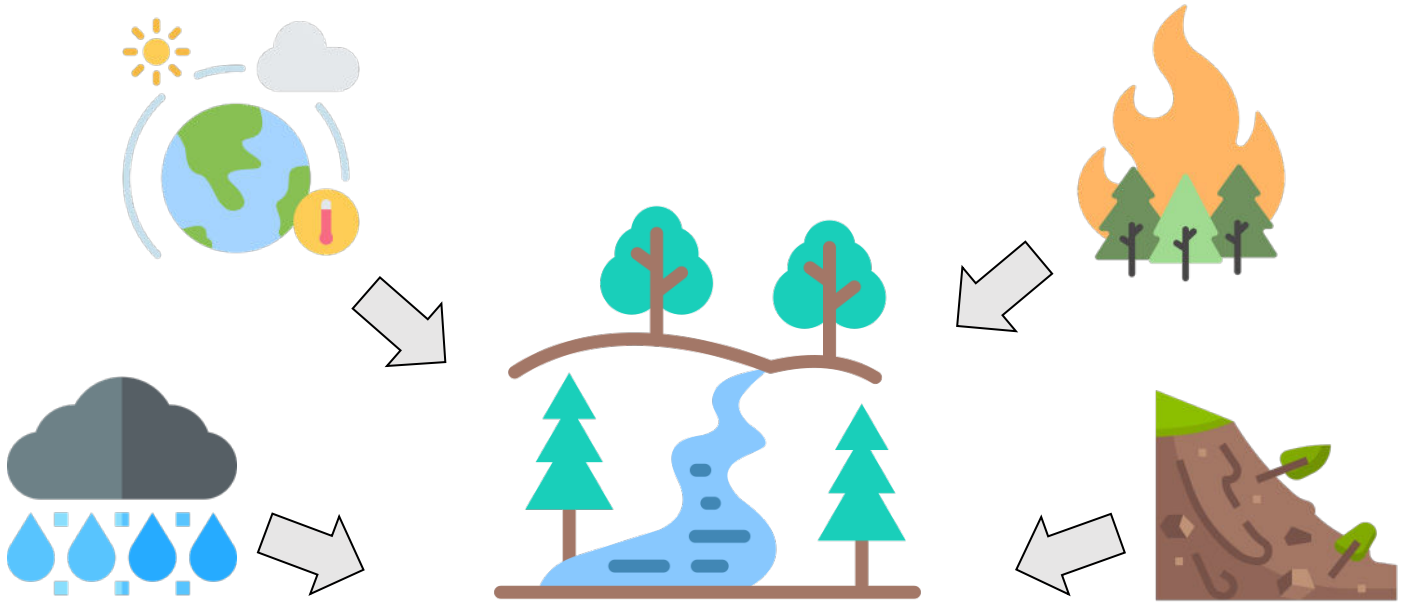
Michaela de Melo



+ project manager, new PhD and master students
+ partner staff

Landscape Change Project

Develop a framework using **Rivers** as **sentinels** of **climate** (through hydrology that integrates precipitation and evapotranspiration) and **landscape** (e.g. wildfires, land use, erosion) **change, which** will ultimately **influence the patterns of export** of water and **materials** (sediments, organic matter, nutrients) from land into the coastal waters.



Source figures: flaticon.com

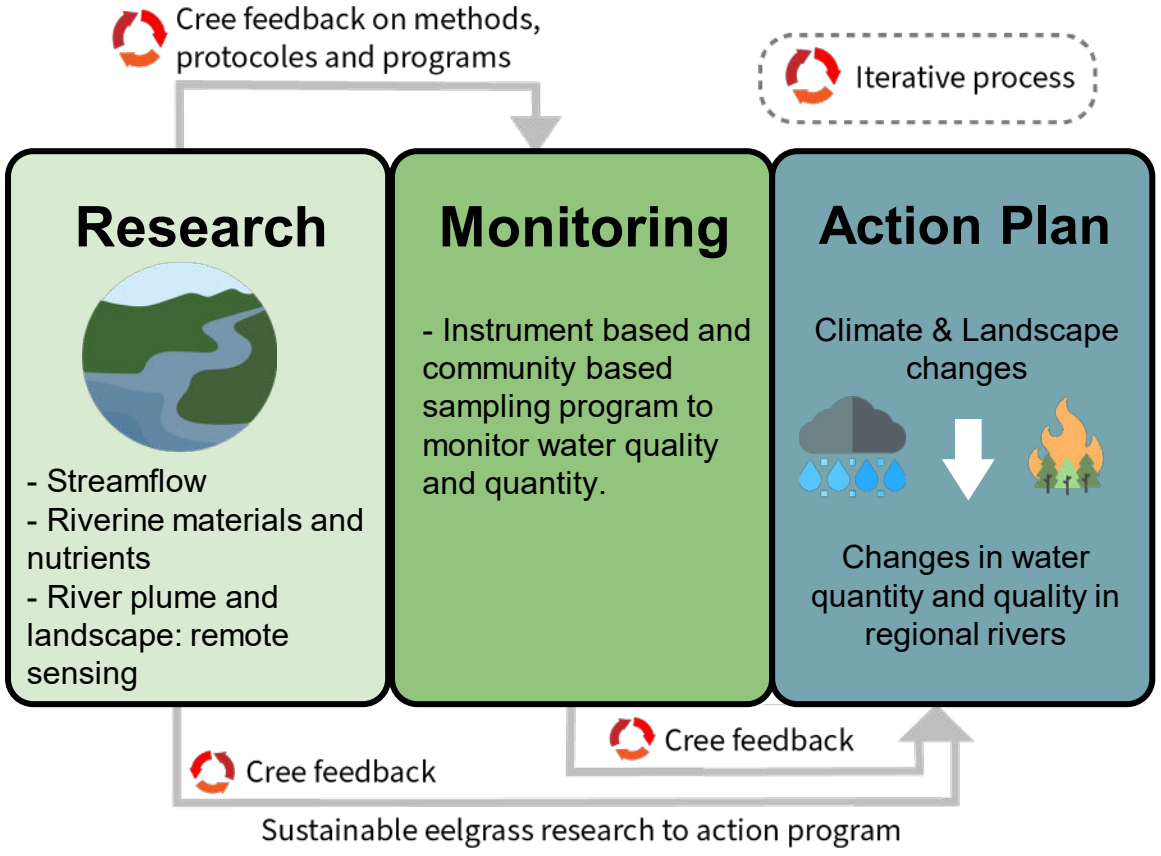
Landscape Change Project

Goal 1: Understand the connection between the **variation in streamflow, climate trends and extreme weather events.**

Goal 2: Establish a **combined instrument based and community based sampling program to monitor water quality.**

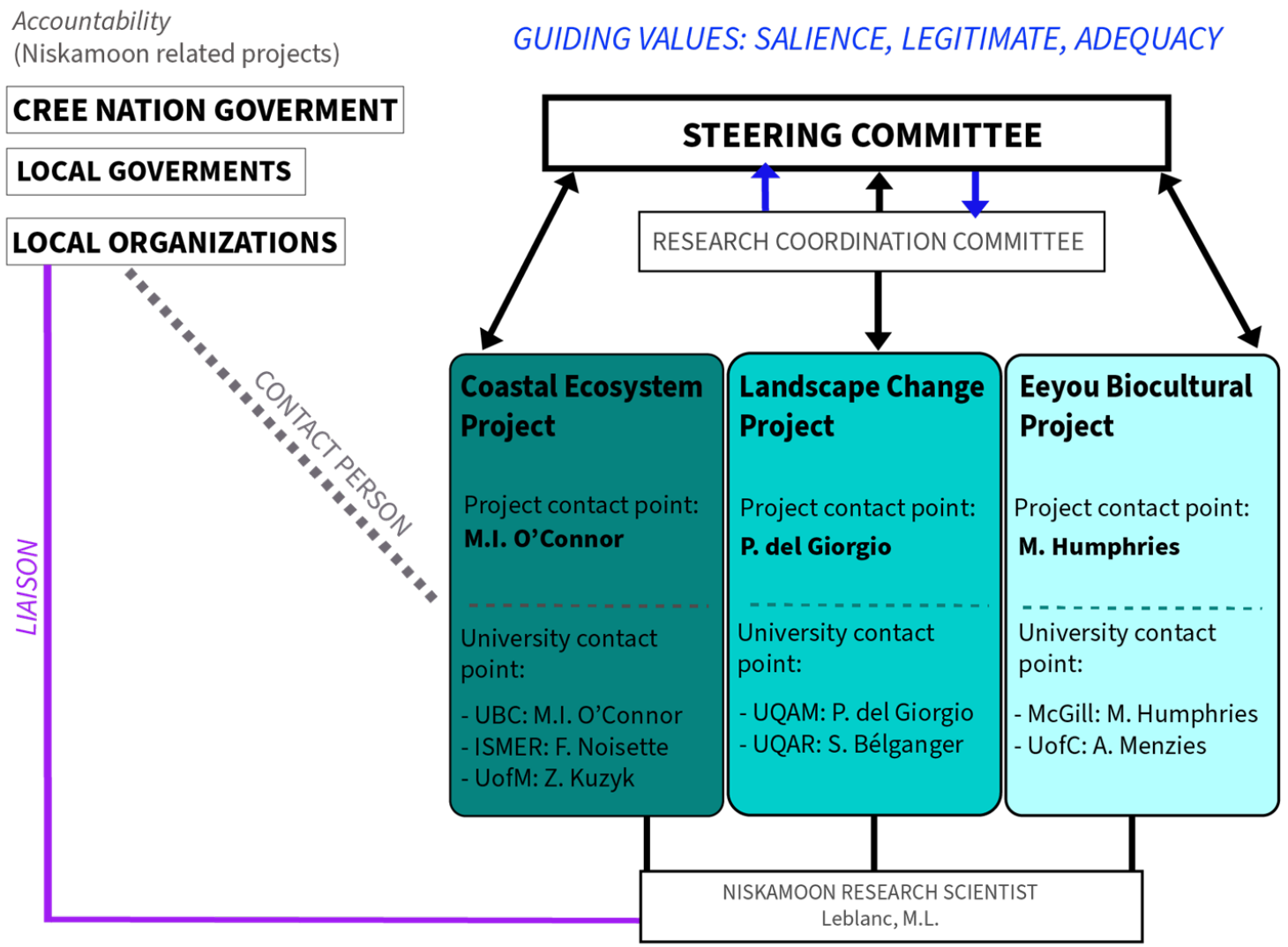
Goal 3: Link **key river constituents** (colored organic matter, suspended solids, nutrients) and **exports** to the James Bay to landscape properties.

Goal 4: Link **riverine exports to proximal coastal conditions and change using remote sensing**



CHCRP Phase II workflow

LOCAL ORGANIZATIONS
- **CTA**
- **EMRWB**
- **CREE NATION YOUTH COUNCIL**
- **ELDER COUNCILS**



Funding and Budget

- **Preliminary budget**
- **Additional partners to be determined**
- **Alliance Grants**
  - **2:1 matching grants**
  - **Submit grants this fall**

Table 2 Preliminary budget estimates to illustrate how the NSERC Alliance program leverages partner funds (2024-2028).*

		ANNUAL				FIVE YEARS	
Category	**Description**	**Nisk.**	**Partner 2**	**NSERC Alliance**	**Total**	**Total Nisk.§**	**Total**
Research	**Coastal ecosystems project** (O'Connor)	200,000	*TBD*	400,000	600,000	1M	3M
	Landscape change project (del Giorgio)	200,000	*TBD*	400,000	600,000	1M	3M
	Eeyou biocultural project (Humphries)	200,000	*TBD*	400,000	600,000	1M	3M
	Total	**600,000**	***TBD***	**1.2M**	**1.8M**	**3M**	**9M**
Community engagement	**Cree personnel** (Appendix 1)	100,000			100,000	500,000	500,000
	Land user participation*	100,000			100,000	500,000	500,000
	Habitat enhancement**	100,000			100,000	500,000	500,000
	Total	**300,000**			**300,000**	**1.5M**	**1.5M**
Communication strategy	**Developing new web page for Phase II** (Appendix 2)	6,000			6,000	30,000	30,000
CHCRP data storing and access	**PCloud to stored data from all teams collected since 2017** (Appendix 3)	500			500	500	500
	Total	**906,500**	**TBD**	**1.2M**	**2.1M**	**4.5M**	**10.5M**

*Niskamoon equipment not included (drone, sampling material for Land Users).
**Niskamoon is eligible to apply for funding at Wildlife Habitat Canada for habitat enhancement projects.
§ The amount subject to change (decrease) depending on additional partners cash contributions.

CHCRP Phase II

NEXT STEPS

- SECURE PARTNERS
- BUDGET APPROVAL

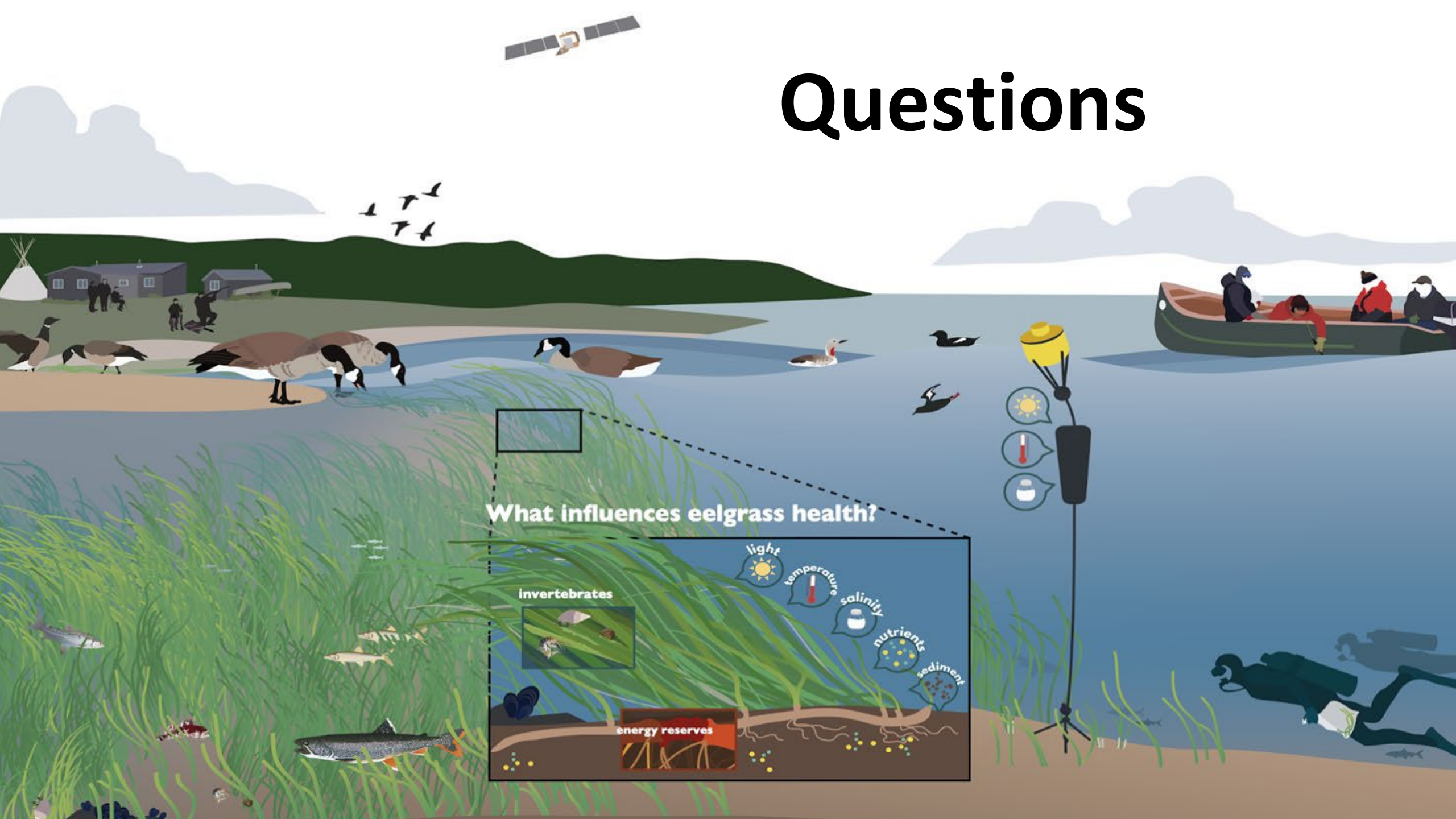
- SUBMIT ALLIANCE GRANTS

- COMMUNITY FEEDBACK
- PRESENTATIONS TO CHIEF AND COUNCIL OF CHISASIBI, WEMINDJI, EASTMAIN AND WASKAGANISH

- PRESENT NEW RESEARCH PAPERS FROM PHASE I TO SC
- FINISH VIDEO FROM THE FIRST PHASE

- PLANNING FIELDWORK 2024 AND VISIT TO TABUSINTAC

Questions


What influences eelgrass health?
light
temperature
salinity
nutrients
sediment
invertebrates
energy reserves