

**Transcript for the SSCF 2024-25 Funding Submission (Fall Intake - Adaptation Stream):
*Wetlands Community Monitoring and Stewardship Initiative Project***

One-sentence project description:*

Building on the gains of KCC's currently funded SSCF project, this project aims to inform and empower the local community with the knowledge to identify, assess and care for community wetlands, with the goal of forging a long-term community-based stewardship/land planning leadership body that is i) trained in the proper delineation, assessment, ongoing monitoring and protection of the community's wetlands; and ii) prepared to collaborate closely with government bodies to supplement existing human and financial resources with on-site, informed knowledge and assistance. 82/100 words

Although your project falls primarily under the adaptation stream, does it also incorporate any mitigation components? *

Yes

Please describe the mitigation components:

Field training will be incorporating wetlands assessment and carbon absorption and uptake measurement protocols as part of its ongoing monitoring program, enabling communities to establish the carbon reduction value of their wetlands and strive for maximum protection of the best performers, thereby contributing to the achievement of carbon reduction targets. Wetlands monitoring and protection will also mitigate the effects of global warming by safeguarding the ecoservices they provide, including protecting lands from forest fires, floods, storm surge, erosion, sea level rise, drought, and biodiversity loss.

In addition, the on-site, real-time data collected during the anticipated, large-scale fieldwork will be contributed to the soon-to-be-piloted *Survey 123* mobile database that uploads data in real time to the Federal Database, helping to fill the significant data gap in wetland inventories, assessments and mapping in Nova Scotia. Finally, there is a critical shortage of soil information related to carbon sequestration, especially in Eastern Canada, which means that communities and municipalities are missing vital data to make informed decisions that will ensure that development happens in a responsible and sustainable manner. The data generated by the ongoing wetlands soil assessments will serve to better guide community decisions on wetlands protection according to proven carbon sequestration capacity. 200/200 words

Does your project directly benefit an equity-deserving group and/or community? *

Yes

Please describe how your project will directly benefit an equity-deserving group and/or community:*

The project is being developed in continued close collaboration with the Acadia First Nations Ecology Program (AFN-EP), with whom KCC now has an ongoing stewardship collaboration agreement and whose Ecology Manager has joined the KCC Board to help better lead the process. During this intake project, the planned fieldwork will be extended beyond the Shaubac Wetlands to designated AFN-stewarded lands,

providing valuable experience and data to assist the AFN-EP in assessing their wetlands protection measures in support of carbon reduction. 84/100 words

Relevance to community needs and challenges

(15 points)

Please concisely describe the project, providing an overview of what it will involve, how it will be undertaken and what specific challenge or opportunity it aims to address:*

Due to the current housing crisis, residential development needs across Canada are at an all-time high. In the Kingsburg area in particular, this is compounded by an influx of second-home buyers seeking to escape the amplified impact of climate change and COVID on densely populated cities across Canada.

Unfortunately, the corresponding need to increase **the speed and volume of residential development is putting wetlands at risk of being altered — or in more and more cases, completely infilled — without proper information and assessment beforehand.**

Within this context, **a number of critical, unanticipated blocks to properly delineating and assessing wetlands have been identified during our current SCCF project:**

- In the Municipality of the District of Lunenburg (MODL), documented protocol, proper oversight and staff resources are insufficient to perform the required wetlands assessments.
- At the Provincial level, human resources are not available to perform wetland assessments.
- By default, the key responsibility for the wetlands assessment then falls to the individual landowner/contracted wetlands “expert” to accurately perform the wetland assessments that provide the basis to obtain i) permission from the province to alter the wetland in return for monetary compensation; and ii) a building permit from the Municipality to proceed with the project.

The above means that the onus for wetlands assessment is placed on the proponent and the contracted “expert” -- paid by the proponent—thus inviting bias error.

In addition, a massive data gap exists in wetland inventories, assessments and mapping in Nova Scotia, as well as a critical shortage of soil information related to carbon sequestration, especially in Eastern Canada, meaning that communities and municipalities are missing vital data to make informed decisions that will ensure that development happens in a responsible and sustainable manner.

ECCC is also in need of updating the Federal Database for soil indexes to make accurate estimates for soil carbon sequestration measurements in environmental impact assessments, including a development project’s potential to release said carbon back into the atmosphere due to site disturbance.

The issues summarized above were not foreseen in our current SCCF-funded project. This second Climate Adaptation project will build on the gains of our current project, supplementing the government staff by i) involving and training significant community resources to properly delineate and assess wetland performance; ii) interacting closely with the federal database development team; and iii) raising public awareness of the demonstrated facts of wetlands’ contribution to mitigating climate change — facts that leave no doubt as to the importance of wetlands protection in creating a sustainable push-back against global warming.

This adaptation project is above all designed to ensure continuity with the gains of the first project, **so that what we are learning and the relationships we are forging with important government programs**

and staff, and within the local community will not be lost. Without this extension of funding from SCCF and our other contributors, the scope of KCC's work will need to be severely reduced beyond December 31, 2024. 488/500 words

Please describe the need for the project and how it will address an identified challenge or opportunity within the community (with the objective of removing or reducing greenhouse gas emissions and/or increasing capacity to adapt to climate change):*

As was so appropriately noted by SCCF during the fund's launch, government alone cannot accomplish what is required to combat global warming; nor can communities or conservation organizations do this alone. It will take a combined effort, coordinated by inclusive leadership that recognizes the overlapping interests of all three sectors, and that sees beyond personal stakes to act for the greater good. This project is well aligned to bring about such a community leadership by providing the large-scale practical collective fieldwork opportunity, learning, and inclusive framework that can lead to effective, long-term results.

93/100 words

How will you engage stakeholders or groups that will be impacted by the project to garner community support? Please identify any project partners who will be engaged/involved: *

Partners: Acadia First Nations/Ecology Program; MODL (Planning, Climate Change, Open Spaces); Dalhousie Professors: Lauren Somers, Andrew Medeiros; Masters Intern: Kobi Shapero); Mersey Tobiatic Research Institute (MTRI): Jeffie McNeil; Southwest Nova Biosphere Collaborative: Nick Hill

Community Engagement Plan:

- Form core (MODL/KCC/AFN-EP) stewarding committee; draft mission/goals/strategy/activities; determine wetland delineation geographic boundaries, identify potential stakeholders;
- Initial outreach to stakeholders: local land developers, real-estate agents, conservation leaders;
- Field training activity, educational workshops, data collection running throughout the project;

Public Meetings:

- I. Announce project/enlist volunteer stewards/solicit community lands for delineation;
- II. Report to community on plans/finalize volunteer stewards;
- III. Progress Report;
- IV. Project final report/future plans. 99/100 words

Core project impacts (30 points); Alignment with core objectives of the Fund

Please describe how the project enhances community capacity to adapt to climate change, and reduce vulnerability and exposure of human and natural systems within the community:

In terms of the above, the overriding deliverable of the project is a broadly-based volunteer community conservation and land planning group that -- in collaboration with appropriate government bodies -- will act as i) an ongoing stimulus for the enlistment and education of conservationist-minded community leaders; ii) an ongoing practically-based resource for protecting local lands and land-use planning; and iii) a safeguard for the inclusive leadership and social values that strengthen resilience and sustainability in face of climate change impacts and other threats, thereby reducing vulnerability. 84/100 words

What are the project's anticipated outcomes or results?

Please be specific: For example, number of physical assets made more resilient to climate variability and change, geographic coverage (hectares) of climate-related early warning systems and other risk reduction measures established and/or strengthened, number of individuals made aware of climate change threats and related appropriate responses, policies, plans, regulations and standards adopted or amended that include climate change adaptation, number of hectares of natural assets protected or strengthened in response to climate variability and change, etc.

Anticipated Project Outcomes:

- An innovative Municipal-Community conservation and land planning collaboration mechanism;
- A community "body of knowledge" on wetlands' importance for climate change;
- Experience-based knowledge of ecoservices provided by wetlands, and how to protect these;
- Ongoing education on wetland restoration techniques;
- Ongoing training by project partners on biodiversity/species-at-risk, and habitat assessments;
- A tested tool for ongoing, real-time, ground-up, accurate data accumulation on our community's wetlands through our input to the new federal database;
- Local capacity to measure wetlands' net carbon storage capacity, thus to assess carbon reduction performance.

92/100 words

How will the outcomes/results identified above help to manage and meaningfully address the impacts of climate change and/or increase community-readiness to respond to climate change impacts?*

The above results/outcomes will begin to provide our community with the educational and practical tools needed to foresee and effectively mitigate climate change impacts by providing baseline data so that we can measure the impact of climate change as time goes on, and also the impact of how climate action efforts are working to mitigate these impacts, thus providing the opportunity to pivot or adapt and utilize different methods that may have more impact to limit climate change's negative effects. 84 / 100 words

Please describe how the project will enhance what your organization would normally do in its business-as-usual activities:*

Our business-as-usual activity, simply stated, has been acquiring/stewarding ecologically significant lands and safeguarding public access to them. Our current SCCF project has taken us beyond this to acknowledge the value of our lands in mitigating climate change. Together with the AFN we are currently focussing on the critical carbon reduction potential of our wetlands and educating ourselves/our community on i) the basics of global warming; and ii) the necessity of building community sustainability

to counter it. The proposed project will take us/our community further into an even deeper relationship with the land, a critical factor for sustainable community leadership development. 87/100 words

What are the potential risks and/or uncertainties associated with the project? What steps will you take to mitigate them?*

Given that we are building on the accomplishments of the current SCCF project, we have already assembled an impressive team of knowledgeable advisors that will carry over to this Adaptation project. By next June we will have serious experience and formal training under our belts with wetlands monitoring, assessment, and carbon storage/uptake measurements, as well as a ready nucleus of new and impressive community volunteers on hand. To date, we have encountered -- and dealt with efficiently and effectively -- the usual challenges associated with brand-new undertakings, so no insurmountable challenges are foreseen. Matching funds confirmations are expected by March/April 2024. 99/100 words

**Co-benefits and secondary objectives
(10 points)**

Identify the co-benefits your project will have (please check all that apply). Co-benefits are the additional impacts of the project for the community, on top of the primary objective of mitigation or adaptation:*

- *social equity and reduce barriers to an equitable climate response
- *Build and contribute to community wellbeing and health
- *Work with, protect and enhance natural assets
- *Contribute to a broader long-term shift and build capacity for future climate change action
- *Generate shareable knowledge and support replication in other communities in Nova Scotia

Please ensure all selected co-benefits are closely aligned with the project's objectives and please describe their tangible outcomes.

Enhance social equity and reduce barriers to an equitable climate response.*

The project activities and deliverables are being fully shared by KCC and the AFN Ecology Program, with wetlands fieldwork and carbon measurements to be carried out on both of our lands. Both partners will be full beneficiaries of the invaluable climate change knowledge and experience gained from the project. Both partners intend to benefit from exposure to each other's fundamental relationship with the land -- the two-eyed seeing advantage. 68/150 words

Build and contribute to community wellbeing and health:*

The entire community base of this project will benefit i) from the emergence of a community conservation and land planning body committed to working with appropriate government bodies and each other in a collaborative and inclusive way for the greater community good; and ii) from the practical knowledge and awareness gained regarding climate change challenges coming our way. 60/150 words

Work with, protect and enhance natural assets:*

KCC, AFN-stewarded and community lands involved in this project will be the object of rigorous assessment and carbon measurement, leading to ongoing wetlands monitoring and support activity, including biodiversity inventory. in addition to these qualitative stewardship gains, we expect a

quantifiable gain that will come from our focus on making wetlands knowledge available and broadly accessible to the community that will result in i) an increase in the quantity of Hectares put under protection; and ii) a quantifiable contribution by wetlands on these lands to the carbon reduction targets.
88/150 words

Contribute to a broader long-term shift and build capacity for future climate change action:*

As per the projected project outcomes, the gains of this proposed project will stand on the shoulders of the current project accomplishments, which provide a solid basis from which to deepen and broaden the community's climate change readiness. 38/150 words

Generate shareable knowledge and support replication in other communities in Nova Scotia:*

Our successes and documented findings will be made available to any and all communities/government bodies who can utilize them 19/150 words.

Measurement and evaluation

(10 points)

Please explain how you plan to measure and evaluate the outcomes and results of the project that you identified in the section "Core project impacts":* Consider using the following prompts in answering this question:

- How will you determine the successes of specific activities and the impacts of the overall project?
- How will you calculate, quantify and/or assess the impacts of your project?

We will judge the success of the project by the degree to which:

- A core of the community's first-ever volunteer conservation/land planning group is established and functioning;
- Collaboration between this core and the appropriate Municipal bodies has been established;
- A community "body of knowledge" on wetlands' importance for climate change is documented and available to the entire community;
- Ongoing education workshops on wetland restoration techniques have been established and are growing in popularity;
- Ongoing training by project partners on biodiversity/species-at-risk, and habitat assessments is underway;
- A tested tool is now in use for ongoing, real-time, ground-up, accurate data accumulation pertaining to our community's wetlands through the mobile database *Survey123*.
- Local capacity to measure wetlands' net carbon storage capacity, thus to assess carbon reduction performance, has been established.

132 / 250 words