

Two-Eyed Seeing: Request for proposal for film production



Project Summary

To film, edit, and produce two short documentaries based on two fisheries research projects led by the Saugeen Ojibway Nation (SON) and partner organizations including the Ontario Ministry of Natural Resources and Forestry (OMNRF), Parks Canada Agency (PCA), and academic partners.

Both projects use a “Two-Eyed Seeing approach” yet have different focus areas and messages to convey. We anticipate the production of each film will happen concurrently. Both projects seek to bridge knowledge systems between Indigenous knowledge (ex. SON-based ecological knowledge) and Western science, and involve community-based research including semi-structured interviews, mapping, and workshops with community members. SON community members possess a wealth of multi-generational knowledge and understandings of Lake Huron’s ecosystem and fish populations within the SON traditional territory.

Please see [Project Background](#) for further information on both projects. We are open to creative individuals who will help us clarify our outcomes.

Film 1: Together with Giigoonyag (TWG) Initiative

The Together with Giigoonyag initiative is a five-year project funded by the Government of Canada’s Nature Legacy program and supported with additional resources from the SON, the OMNRF, and Trent University. The research focuses on changes in Lake Huron ecosystems with a particular focus on dikameg (lake whitefish) decline including habitat use, spawning shoals, recruitment, population dynamics, and interactions with other species in the food web (see project description). The timeline for this project is 2020-2025.

The SON community as well as research scientists within the Great Lakes have identified a knowledge gap in relation to dikameg declines, movement, and behaviour. To address these gaps in understanding, the Together with Giigoonyag initiative will involve several different research projects including the development of an acoustic telemetry array for Lake Huron.

In 2020, project partners tagged dikameg with acoustic transmitters and installed two acoustic receivers in a location identified by the SON community. In 2021, acoustic receivers will be installed throughout Georgian Bay and more dikameg will be tagged during the spawning season in the fall. Transmitters are electronic tags that broadcast a series of “pings” (sound pulses) into the surrounding water. These tags will be surgically implanted into fish of interest and released back into the wild. Listening stations (receivers) are placed on the bottom of the lake at various locations to “listen” for tagged fish as they swim by. The receivers are periodically retrieved and the information they have recorded is downloaded for further analysis. This is the first time that an acoustic telemetry project of this scale is undertaken in Lake Huron.

Key Objectives of Film 1:

- A series of short videos (3-5) minutes or a longer video (10 minutes) about the research for educational and outreach purposes for both the SON community and visitors to SON’s traditional territory.
- To share joint-research projects including acoustic telemetry between PCA, OMNRF and SON about lake whitefish declines within SON’s territorial waters
- To describe research partnership intent and including principles of working in ethical space (Logo)
- Documenting community engagement processes and including how IEK interviews and mapping informed data collection process.

Film 2: Great Lakes Fishery Commission – “Engaging traditional indigenous knowledge and scientific analysis to examine the role of lake trout in recent declines of lake whitefish”

SON community members have long expressed concerns regarding the role of lake trout rehabilitation in contributing to the decline of dikameg within SON’s traditional waters. The intent of this project is to investigate the interactions between these species using both quantitative analysis (stomach content and isotope analysis in the lab) and qualitative analysis of SONEK (interviews, mapping) with respect to these concerns. A key component of this project is knowledge co-production and the creation new knowledge through learning together and the Two-Eyed Seeing approach. This project is in collaboration with OMNRF, SON, Trent University, Queen’s University, Bagida’waad Alliance, and Lakehead University. The timeline for this project is 2021-2023. The project will support two master’s students from Trent University and Queen’s University.

A major focus of this film will be documenting the process of co-learning between research partners and the SON community. The purpose of this film is not only to document the field work, but to focus on the co-learning process that happens through ethical space including how new knowledge is generated through dialogue, working through conflict, the structure workshop process, and the role of ceremony. This will

provide pertinent information and context for the Great Lakes Fishery Commission and other agencies throughout the Great-Lakes Basin as Two-Eyed Seeing is becoming a mainstream approach among scientists and the need for Indigenous inclusion in research and management is being advocated for.

Key Objectives/Purpose for Film 2:

- A 15-20-minute film including interviews with members of the research team, the filming of workshops with SON communities, and footage from SON community members.
- To provide a useful product to communicate back to the SON community members.
- To provide an overview of the project and share important lesson with the Great Lakes Fishery Commission and Science Transfer Board.
- Fostering a great understanding and appreciation of co-learning and the “Two-Eyed Seeing approach” throughout the Great Lakes Basin.
- To document the learning process of SON community members and research partners (ex. reflective interviews at the end of the project about co-learning).
- Documenting the co-learning and co-production of knowledge process between academic partners, SON, and OMNRF to share broader implications to other fishery agencies.
- More focus on filming the structured workshop process in Year 2 (2022-2023), including the pipe ceremony as conflict resolution.
- Showcasing how we work with two different knowledge systems and use differences as an opportunity for learning and for new information.

Scope of Work

The scope of work will include the development of a story script, as well as the filming, editing and production. We are seeking a highly accomplished digital film maker, with a proven track record in producing a high-quality documentary style video. The primary deliverable will be documentary style digital videos.

We anticipate that the filming of these two films will happen concurrently over a three year period.

Scope of Services (not limited to):

- 1) Work collaboratively with project partners to develop a story script and approach. This includes pre-production such as developing a story line, scouting locations, and coordinating scheduling to get the required shots.
- 2) Filmmaker is responsible for developing a shot list.
- 3) Integration of raw footage and photos filmed by the SON community during the project fieldwork.

- 4) During production, the film maker will be responsible for bringing equipment needed and hiring camera operators.
 Post-Production - the film maker is responsible all audio and video editing.
 Assume at least 3 draft cuts of each video, which will be reviewed by all partners.

Rules of Submission and Selection Process

- 1) Letter of Interest and CV
- 2) A presentation outlining your experience and approach to the project to partners and the SON joint-fishery committee

Audience

The primary audience is the SON. These videos will also be used to build bridges between non-Indigenous communities and SON as well as provide education on the value of this type of approach to the public, academic institutions, and government agencies including the Great Lakes Fishery Commission.

Budget

	Year 1	Year 2	Year 3	Total
TWG	\$ 8,300.00	\$15,000.00	\$3,300.00	\$26,600.00
GLFC	\$ 3,300.00	\$15,000.00	\$3,300.00	\$21,600.00
Total	\$11,600.00	\$30,000.00	\$6,600.00	\$48,200.00

Selection

The section committee will consist of representatives from OMNRF, PCA, and SON. The selection will be approved by the SON Joint Council.

Timeline

Proposal submission: June 28, 2021

Project duration: July 1, 2021 – March 31, 2023

Contact information

Further questions or proposal to be directed to:

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Appendix

Project Background

Two-eyed seeing approach

Two-Eyed Seeing (Etuaptmumk in Mi'kmaw) is a term coined by Dr. Albert Marshall who defines it as “learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of mainstream knowledges and ways of knowing, and to use both these eyes together, for the benefit of all.” This concept is a guiding principle for the Together with Giigoonyag initiative and our research on the interactions between lake whitefish and lake trout. It embraces different perspectives and promotes mutual understanding. By applying both SON-based ecological knowledge and Western science-based knowledge, the ongoing SON fisheries research will provide deeper insight than either knowledge system alone.

Project 1: Together with Giigoonyag (TWG) research initiative

The Together with Giigoonyag research initiative is concerned with investigating declines in lake whitefish, lake whitefish and lake trout movement, and applying a two-eyed seeing approach to fisheries research. This research initiative is in collaboration with the Saugeen Ojibway Nation (SON), the Ontario Ministry of Natural Resources and Forestry (OMNRF), and Parks Canada – Fathom Five National Marine Park. As a community-based research initiative, Together with Giigoonyag will be guided by a set of principles and ethics as well as a community-based advisory board. The Together with Giigoonyag research initiative is intended to create a place for knowledge systems to interact with mutual respect and understanding. Within this initiative are several different research projects that are focused on different aspects of the fishery and lake whitefish in Georgian Bay and Lake Huron as follows:

SON-based ecological knowledge and mapping interviews (2021-2022)

Community-based researchers will be conducting SON-based ecological knowledge interviews regarding lake whitefish and stocked fish with knowledge keepers including fish harvesters and Elders from the SON. These interviews will include a mapping

component to identify important information such as spawning shoals, key movement corridors, seasonal occurrences, and culturally significant locations. This knowledge will be analyzed and used to inform other components of the *Together with Giigoonyag initiative*, *SON/OMNRF Stocking Review*, *Engaging traditional indigenous knowledge and scientific analysis to examine the role of lake trout in recent declines of lake whitefish*, and ongoing Nation-to-Nation dialogue. The interview process is expected to last up to two years with a high potential for follow-up interviews given the breadth of the three research initiatives.

Lake whitefish larvae research (2021-2025)

Mature lake whitefish gather and spawn in the fall over shallow and rocky shoals along the shores of Lake Huron and Georgian Bay. The eggs overwinter and hatch as larval fish the following spring. At present, there is limited knowledge of the factors that affect spawning success (e.g., invasive species, algal blooms, and climate change). This component of the project will include conducting larval fish and plankton surveys.

Habitat and shoal assessment (2021-2025)

There is limited knowledge from a Western science perspective of the status of historical and contemporary spawning shoals in the SON territory. The results from mapping SON-based ecological knowledge will inform the application of remote sensing technology (CHASING M2 PRO ROV, SONAR, etc.) to better understand important fish habitat.

Acoustic telemetry (2020-2025)

Knowledge of a fish species' movement patterns is fundamental to understanding their biology. For a harvested species of ecological and cultural importance like lake whitefish, knowledge of its movement patterns is also critical information for decision makers. An acoustic telemetry system consists of two main components: transmitters and receivers. Transmitters are electronic tags that broadcast a series of "pings" (sound pulses) into the surrounding water. These tags will be surgically implanted into fish of interest and released back to the water. Listening stations (receivers) are placed on the bottom of the lake at various locations to "listen" for tagged fish as they swim by. The receivers are periodically retrieved and the information they have recorded is downloaded for scientific study. Using acoustic telemetry, this project will monitor the lake-wide movements of lake whitefish and lake trout, providing valuable data on home-range size and seasonal movements of various populations. This will be the first time that an acoustic telemetry project of this scale is undertaken in Lake Huron. Broader scale collaboration with agencies, Indigenous communities, and organizations will be encouraged. The telemetry array established through this project will be able to provide the basis for future projects tracking movements of other species in Lake Huron. In addition to this array, SON fisheries are proposing to install fine spatial scale arrays in identified locations of interest to increase understanding of lake whitefish behaviour (Bima'azh – project that is not directly a part of the documentaries).

Indicator monitoring and index netting (2020-2025)

Long-term monitoring is essential to understanding changes in fish communities and providing information for sustainable management. Index netting will be conducted to measure fish diversity and identify the status of species at risk. Through this project, new indicators will be developed to assess the status of key species and aquatic habitats as part of ecological monitoring program at Fathom Five National Marine Park. This “offshore” work will complement the broader scale coastal/inshore waters monitoring that is undertaken by the SON Environment Office.

Education and outreach

Education has been identified by leadership as a priority for not only on reserve individuals but also the wider community encompassed by the SON territory. Specific priorities and methodology will be determined by the SON. This includes the content of the materials as well as the various platforms that are appropriate to use to effectively disseminate the information.

Community engagement

Under the direction of and guidance from the SON, the project parties will carry out public and community engagement about the Together with Giigoonyag initiative and for the purposes of general education and outreach.

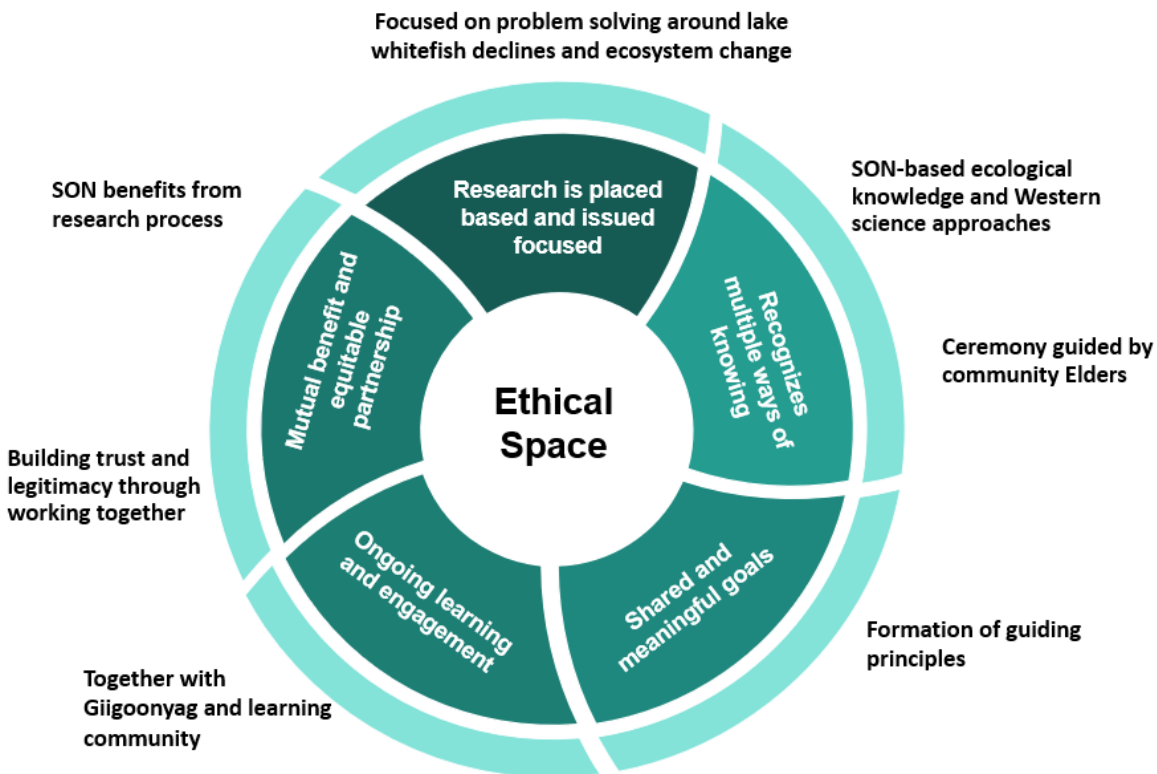
Project 2: Engaging traditional indigenous knowledge and scientific analysis to examine the role of lake trout in recent declines of lake whitefish (2021-2023)

This project is titled “Engaging traditional indigenous knowledge and scientific analysis to examine the role of lake trout in recent declines of lake whitefish.” The intent of this project is to work with SON community members to share and synthesize SON-based ecological knowledge with the goal of achieving an improved understanding of the role of lake trout in lake whitefish declines. Whether interactions between the species might be playing a role in the lake whitefish declines has been a concern raised by SON fish harvesters in community engagement sessions. Complementary to this, a science-based approach will be used to quantitatively evaluate lake trout and lake whitefish interactions by looking at stomach contents and stable isotope analysis. Stable isotopes will be used to determine the degree of niche overlap between species and whether it has changed over time. We will be exchanging information and co-learning through regular interactions as a learning community with the Together with Giigoonyag Committee, SON community workshops, and a final structured workshop between OMNRF, SON, Great Lakes Fishery Commission (project funder), and the investigator team. This project is in collaboration with OMNRF, SON, Trent University, Queen’s University, Bagida’waad Alliance, and Lakehead University. The project will support two master’s students from Trent University and Queen’s University and use a “two-eyed seeing approach.” It took over 2-years to develop the funding proposal and to receive funding from the Great Lakes Fishery Commission.

The purpose of the 20-minute film is to provide an overview of the project and the important stories that need to be shared from our work. The objective of this film, a key deliverable, is to foster greater understanding of the two-eyed seeing approach within the GLFC and beyond. We are happy to discuss opportunities to work with the Science Transfer Board of the GLFC in creating the film.

Ethical Space Diagram

Ethical space is the central foundation and common ground of work using the Two-Eyed Seeing approach. We recognize that the two knowledge systems (SON's knowledge and Western science) come from different worldviews and epistemologies. Ethical space speaks to the space between these two knowledge systems and how to do cross-cultural research in an ethical way. We come to dialogue as human beings with open hearts and seek to address inherent power dynamics through equal participation and equity in research. We are accountable to the SON communities in our research together and work collaboratively based on values of transparency, accountability, respect, and reciprocity.



Adapted from Norstörms 2020

- i. Research is place based and issue focused: Our research is focused around the SON traditional territory and the Ontario waters of Lake Huron and Georgian Bay. We are focused on problem solving regarding lake whitefish declines and the influence of

ecosystem change on the waters in SON's traditional territory. The purpose of the project is to use both SON-based ecological knowledge and Western science to better understand and address key uncertainties and challenges with the lake whitefish population in Lake Huron and Georgian Bay.

- ii. Recognition of multiple-ways of knowing: We formally recognize that there are multiple ways of knowing. Our research methodology uses both SON's knowledge systems as well as quantitative Western science approaches. We are guided in ceremony by SON knowledge keepers and seek direction in our research. We use the Anishinaabe place names and Anishinaabe language whenever possible as guided by SON knowledge keepers.
- iii. Shared and meaningful goals: We have developed guiding principles that outline how we will work together in a good way. These principles include mutual respect, mutual understanding, equity in decision making, and the shared goal of working together to address the challenge at hand.
- iv. On-going learning and engagement: Our research aims to create co-learning opportunities between Parks Canada Agency, Ontario Ministry of Natural Resources and Forestry, and SON community members. We will design workshops and engagements to include a diverse range of knowledge and plan for learning, dialogue, and engagement in our research design. We believe that building trust and mutual learning is an important outcome of our research. Our project aims to work collaboratively, bringing together scientists, decision makers and knowledge holders including SON community members and fish harvesters. Knowledge co-production respects and includes both the SON's knowledge and Western science from Parks Canada Agency and Ontario Ministry of Natural Resources and Forestry, as well as academic partners. Respect for SON's knowledge includes understanding that SON members have inherent rights and jurisdiction over SON's knowledge as well as research and information collected by and about the SON communities, and on their traditional territories according to OCAP (Ownership, control, access, and possession).
- v. Mutual benefit and ethical partnership: All parties benefit from the research that is being undertaken. The research questions have been co-developed through dialogue with the SON communities. Our research partnership aims to make all knowledge, data, and information accessible to the SON communities through effective communication and outreach. We also aim for the SON communities to benefit from the research including hiring SON fish harvesters to participate in data collection.