Gaa Bi Ombaashid Migizi Soaring Eagle Project

Final Report: 2001 Project Activities
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Educating Aboriginal Youth
Using Traditional Ecological Knowledge
And
Western Environmental Science

Table of Contents

- A. Executive Summary
- B. Introduction
- C. Results and Discussion
- Overview of Course Components:
- Pre-planning Stage
- Program Structure Components
- Program Participant Screening and Interviews
- Two Day Orientation
- Four Week Summer
- Four Week Winter
- Two Week Spring
- Aboriginal Knowledge Components Covered
- Western Science Components Covered
- Staffing:
- Project Principles (Core Group) including Roles and Responsibilities
- First Nation Instructors and Elders
- Non Aboriginal Instructors
- Additional Staff
- Positive Benefits to the Community Economy and Environment
- Meeting the Program and Funding Agencies Objectives:
- Support and promotion of innovation in the Environmental and Sustainable Development Industries.
- Encouraging environmentally sound decisions and actions.
- Stimulating economic development and diversification that will improve the quality of life, and strengthen community identity, throughout Manitoba.
- Promoting research and demonstrating new initiatives not addressed by existing programs

D. Next Steps

- Timelines for next phase and/or project completion
- Conclusions
- Sustainability of the Initiative
- Success of the Project
- Project Evaluation

E. Financial Information

F. Appendices

- Project Promotional Materials
- Sample Course Materials
- Resource and Curriculum Materials:
- Printed
- · Video
- Web Site
- Excerpts from Student Evaluations of the program
- Comments by Instructional Staff and Resource People
- Draft Proposals Developed by Project Participants

A. Executive Summary

The Soaring Eagle Project pilot program was successful in meeting its goals and objectives. The course start date was June 26, 2001 and the completion date for the first year students was April 12, 2002. During this time, a naming ceremony was held and the program became known as Gaa Bi Ombaashid Migizi. This project was developed as a partnership program between the University of Manitoba, Trent University, the Boreal Forest Network and Hollow Water First Nation. The purpose of the project was to deliver an education program in Western Environmental Science and Traditional Ecological Knowledge to rural youth of First Nation ancestry, in a culturally relevant context. This need was identified as one not being met by existing educational programs. The creation and development of this program was community driven.

This project provided participants with the opportunity to begin their studies in the Environmental Sciences and Traditional Ecological Knowledge in a culturally respectful learning environment in their traditional territory. Generally, this type of education has only been provided in a classroom environment that is physically far removed from the participant's community. Prior to Gaa Bi Ombaashid Migizi being offered, academic educators and First Nation communities identified that the distance between a university and the students home communities was a problem because students were so far removed from their existing support networks. First Nation communities have limited budgets and face the expenditure and potential loss of significant financial resources when students move away from the community and later choose not to continue their science education. This program provides an opportunity for the students to expose themselves to the choices that are available to them upon completion of this field of studies.

The projects' design and structure was developed to allow the curriculum to be relevant to the daily lives of the students. Their formative and summative evaluations have been positive towards the project.

The course structure in the first year was comprised of a 28 day in the summer and a 14 day winter/spring or 8 weeks in total course instruction. This proved to be beneficial in a number of ways. Firstly, this approach allowed the curriculum delivery to take place during different seasons. This increased the diversity in both TEK and science aspects of the program. This also meant that the students' research incorporated seasonal variances and allowed their studies and observations to reflect environmental acclimatization in the region under study. Secondly, this approach allowed for a much more protracted involvement with students, whereby projects would be identified in the summer, and proposals written and submitted during the winter/spring. Thirdly, dividing the course in this manner lessened the periods of time that students were separated from family into shorter more manageable lengths. This elevated the level of comfort for the participants and strengthened the projects' goal of being culturally respectful. What follows is a more detailed description of the various project undertakings and activities that were designed to meet the overall goals and objectives of the first year of a 3-year pilot project.

B. Introduction

This report is intended to provide a comprehensive statement of the goals and objectives, activities, and results of the first year of this three year pilot program, "Gaa Bi Ombaashid Migizi (Soaring Eagle School) - A Traditional Ecological Knowledge and Western Science Training Program for Aboriginal Youth." The intent of the Gaa Bi Ombaashid Migizi was to design and deliver a community based environmental education program - on a year-to-year basis - for Aboriginal youth (ages 18-30) in eastern Manitoba. As a result of this project, students gained a sound understanding of the underlying principles behind Western Environmental Science and those of Traditional Ecological Knowledge (TEK). Through exposure to this combined knowledge, participants in this three-year pilot program will develop a better understanding of critical principles and issues in this field, and will begin to develop the ability to apply positive long-range solutions to present and future environmental issues facing their community.

One of the primary goals of the project was to insure the learning environment was relevant to the community and culturally respectful to participants. A large diverse group of specialists, including people

from the community, industry, universities, Aboriginal Elders and Traditional Land users provided a well-rounded, strong knowledge base of understanding for the participants. This, in turn, fostered a cross fertilization of knowledge and facilitated a better cultural understanding between Hollow Water First Nation, other First Nation communities, the academic and scientific communities, and resource based industries about various environmental issues that face the community.

§ Specific goals of the project included:

- Providing a culturally respectful and relevant environmental education for rural based Aboriginal youth during 2001/2002 in the traditional territory of Hollow Water First Nation;
- Both T.E.K. and Western Science were taught in a hands on, experiential learning based environment;
- Fostering awareness for local environmental issues;
- Promoting sustainable solutions to local environmental issues;
- Fostering scientific literacy amongst the students;
- Supporting educated environmental decision making amongst Aboriginal communities in Manitoba:
- Developing the capacity for Aboriginal communities in Manitoba to engage in sustainable resource development and environmental protection issues.

C. Results and Discussion

§ Overview of Course Components:

Pre-Planning Stage:

Once sufficient resources were in place to proceed with this project, the Core Group responsible for the delivery of the project convened to start the process of planning and designing a curriculum for the program that fulfilled the intended goals and objectives of the project.

An initial 4-day strategy meeting was conducted in April 2001, which resulted in the following key developments:

- Organized a course schedule,
- · Planned a budget,
- Compiled a list that identified possible instructors,
- Instituted a work plan,
- Carried out a logistical evaluation and a equipment / material needs assessment,
- Developed a list of relevant learning materials,
- Prepared a program schedule.
- Finalized and posted a job description for a cook and guide/ site maintenance person,
- Designed advertising materials,
- Formulated a questionnaire for interviewing potential program participants,
- Created a task management plan.

There were subsequent meetings and conference calls between the individuals identified as the Core Group to modify the master program plan.

When all of the course design elements were finalized, program leaflets and posters were designed and distributed to promote the project and to seek formal applications from prospective program participants.

§ Program Structure Components:

The structure of the project incorporated design characteristics to achieve the culturally relevant and appropriate goals established by the project. The Core Group recognized that to achieve the goal of introducing the fundamental concepts of Western Environmental Science and Traditional Ecological Knowledge to project participants, it would be necessary to adopt a variety of educational methods from both cultures. This insured the success of meeting the project's stated objectives.

The Methods used included:

- Field Trips,
- Journal and Final Report Writing,
- Photography,
- Poster Presentations,
- Handout Materials,
- Videos.
- Guest Instructors/Elders Teachings,
- Daily Sharing Circles and.
- Sweat Lodge/Ceremonies.

To gauge interest levels throughout the project each participant was required to maintain a daily journal, complete weekly project evaluations, take photographs, and participate in weekly Sharing Circles. Upon completion of the project students submitted a final written report outlining what they learned from their project its success in fulfilling its stated objectives and a questionnaire regarding their overall feelings about course composition and structure.

Responses from the participants in the project were positive and some excerpts are included in the appendices of this report.

§ Program Participant Screening and Interviews:

It was agreed from the onset of this project that the selected participants to the project would be paid a per diem, which they would receive once they had successfully completed the project. The rationale behind this decision was to:

- Insure that each participant chosen completed the program.
- Provide participants with a means to sustain themselves and their families during the program.
- Encourage participation from a more diverse list of applicants.

A program leaflet with an application form was circulated widely during a 3-week period. Every effort to solicit applications from prospective participants in and outside of the community was made. The project received 24 applications by the deadline date of May 18, 2001 demonstrating a high level of interest from within the community.

An Applicant Review Committee, which included three members of the Core Group and Band Council members of Hollow Water First Nation reviewed and pre-assessed all of the applications based on a predetermined set of criteria. Of the 24 applicants the Committee interviewed 20 using a pre-designed questionnaire. As a result of this interviewing process 8 applicants were selected to 8 students were chosen to participate in the project.

Two-Day Orientation Session:

The selected program participants attended a two-day orientation

session (May 26 and 27) before starting the initial summer portion of the project. The orientation session was designed to accomplish the following objectives:

- Introduce participants to each other and to the Core Group responsible for implementation of the project.
- Inform participants of the goals, objectives, expectations and outcomes of the project.
- Set out the ground rules, roles, and responsibilities for both the participants and the Core Group.
- Conduct a needs assessment and review a list of personal equipment that each participant would require for the program.
- Review and make last minute modifications to the project schedule with participants.
- Review safety procedures.
- § Four Week Summer Segment:
- q Week One May 28/June 1:

A five-day field trip to Black Island, was organized to provide an opportunity to develop and solidify positive group dynamics between the Core Instructors and the participants.

In addition, the participants were:

- Instructed about the cultural significance of Black Island to the Ojibway People,
- Educated on the application and meaning of Traditional Ecological Knowledge,
- Involved in basic outdoor/wilderness activities.
- · Introduced to traditional teachings,
- · Performed basic plant identification and learned about their traditional uses,
- Taught how to describe plant communities using ecological sampling methods,
- Learned to in identifying basic animal markings and tracks.

q Week Two - June 4/June 8:

The second week of the project included the following activities:

- · Evaluation by the participants of what had been learned during the previous weeks field trip to Black Island.
- Sweat Lodge Teachings, Sharing Circles and Ceremonies.
- A full day of instruction on various topics related to Aboriginal People and the environment.
- A one-day field trip to Sandy River to quantify effects of burning and salvage logging.
- Classroom work and guest speakers.
- A one-day field trip with experts from Tembec/Pine Falls Paper Company and the Ministry of Conservation to view and discuss modern forestry harvesting methods and operations.
- A full day analyzing and discussing forestry related issues based on the field trip with Tembec/PFPC and the students.
- Participation in a project Naming Ceremony.
- A full day reviewing and learning about Land Use Planning and Traditional Land Use Studies. This included a meeting between the participants and members of the Hollow Water Land Use Planning Team to learn first hand about the ongoing Land Use Study that has been undertaken by Hollow Water.
- Video presentation and discussion on Traditional Land Uses.
- Evaluation of the second week by participants and Core Instructors.

q Week Three - June 11/June 15:

Third week activities consisted of:

- A full day session with a guest Elder regarding the clan system origin and meaning.
- A day and a half session on how to write project proposals, budgets, fund raising strategies, and the development of basic oral / written interviewing skills.
- A full day session with two aquatic scientists to discuss the state of Lake Winnipeg. This was followed up with a field trip on Lake Winnipeg with a Hollow Water fisherman and the aquatic scientist.
- A half-day session with two female Elders and a video presentation.
- A half-day session on expectations for the participants' final report.

q Week Four - June 18/June 22:

The fourth and final week of the summer portion of the project included the following activities:

- A half-day session with two Conservation Officers to learn about their roles and responsibilities.
- A half-day session with two Elders to learn about wildlife movement, habits and patterns.
- A full day session with a wildlife biologist and wildlife technician from the Department of Conservation.
- A two-day field trip to Whiteshell Provincial Park to visit the Petroform sites to learn their meanings and participate in a Ceremony.
- Handing in daily journals and final report for evaluation.
- Full day of Sharing Circles and ceremonies.

§ Two Week Winter/Spring Segment:

The winter/spring program was structured to have participants work on a community based project that the participants had identified, during the summer session, as a key interest area.

This component of the winter/spring program included:

- Preparing and writing a community based funding proposal.
- Preparing a budget for the community based project.
- Preparing a project task schedule.
- Meeting with prospective funding agency representatives to promote the community based projects.

Two proposals have been drafted and participants will be submitting these to the appropriate funding agencies. The proposals are included in the appendices of this report. The two proposals demonstrate Gaa Bi Ombaashid Migizi's potential in promoting capacity building and innovative initiative work. In addition, participants took part in a one week TEK field trip to a community trapline, participated in a commercial winter fishing operation, and learned outdoor winter survival skills.

- q Week 1-April 2/April 6 activities included:
- Five-day field trip to Delta Marsh Research Field Station.
- Web research related to project funding.
- Further development of the participants' Community Based Project Proposal.
- Introductions and discussion with potential funding representatives.
- q Week 2 April 7 12 activities included:
- Sacred Teachings and Ceremonies,
- Outdoor survival training,
- Instruction on tree cookie cutting and extracting information from samples such as tree age and disease recognition.
- Discussions on climate change
- Instruction on Trapping,
- Sweat Lodge Ceremony and Teachings,
- · Writing final reports and resumes,
- Review.

§ Aboriginal Knowledge Component Topics Covered:

- · Indigenous Environmental Philosophies
- · Indigenous Environmental Values
- Traditional Anishinabe World View
- Dominant World View
- · Colonization, Colonialization
- · The Indian Act
- · Treaty Rights
- Aboriginal Rights
- Community Animation
- Traditional Ecological Knowledge-characteristics, use, protection of TEK
- · Working with Elders
- Co-management of Natural Resources
- Environmental Conflict and Resolution
- Land Use Mapping
- Traditional medicinal plant identification

Western Science Components Covered:

- Plant identification.
- Methods of describing plant communities.
- How to use ecological sampling methods.
- Animal identification-markings, tracks, habits and movement patterns.
- Quantification of burning and salvage logging.

- Modern forest harvesting methods and operations.
- Analysis and discussion of forestry related issues,
- Land use planning and traditional land use studies,
- Proposal writing, task scheduling, budget forecasting, methods of raising funds, and development of basic oral/written interviewing skills,
- Aquatics- a Toxologist discusses the state of Lake Winnipeg.
- Roles and responsibilities of Conservation Officers.
- Roles and responsibilities of Wildlife Biologists and Wildlife Technicians.
- Tree cookie cutting and extracting information.

§ Staffing:

A List of The Project Principals (Core Group) including Roles and Responsibilities:

· Core Group:

§ Leanne Simpson, Ph.D., Director of Indigenous Environmental Studies and Assistant Professor, Trent University.

q Roles and Responsibilities:

Curriculum Design, Primary Instructor, Project Management, Fundraising

- § Stephane McLachlan, Ph.D., Assistant Professor, Environmental Sciences and Botany, University of Manitoba
- q Roles and Responsibilities:

Curriculum Design, Primary Instructor, Project Management, Applicant Review, Committee, Fundraising

§ Garry Raven, Anishinaabe Elder, Hollow Water First Nation, member BFN, Wanipigow, MB

q Roles and Responsibilities:

Curriculum Design, Primary Instructor, Project Management, Project Site Manager, Applicant Review Committee, Fundraising

- § Don Sullivan, B.A., Coordinator, Boreal Forest Network.
- q Roles and Responsibilities:
 - Curriculum Design; Project Management; Fundraising; Report Writing; Program Instructor; Transportation
- § Val Wood, B.A., Project Administrator.
- q Roles and Responsibilities:
 - Curriculum Design; Project Administration; Project Management; Applicant Review Committee

§ First Nation Instructors & Elders involved in the Project:

- Gord Kern-Assembly of Manitoba Chiefs/Environmental Coordinator
- Darren Thomas-University of Manitoba/Environmental Sciences.
- Garry Raven-Principle Instructor/ Hosting Elder, Hollow Water F.N.
- Shawna Morgan- Centre for Indigenous Environmental Resources: Climate Change
- Mark Thompson-Elder, Presenter/Pine Falls, MB.
- Lawrence Henry- Elder/Rosseu River F.N.
- Edith Johnstone- Elder/Hollow Water F.N.
- Frank Moneyas- Councillor / Hollow Water F.N.
- Leanne Simpson-Principle Instructor, Trent University Indigenous Studies Program
- Wesley Moneyas-Fisherman/Hollow Water F.N.
- Henry Phillips-Fisherman, Elder/ Hollow Water
- Randall Bird-Elder/Guide, Hollow Water F.N.
- Raymond Raven-Elder, Traditional Spiritual Advisor/ Hollow Water F.N.
- Daphne Sinclair- Hollow Water F.N. Aboriginal Land Use Planning Study Representative

- Rene Barker- Hollow Water F.N. Aboriginal Land Use Planning Study Representative
- Donald Bird- Hollow Water F.N. Elder
- Rene Spence- Councillor, Hollow Water F.N.

§ Non Aboriginal Instructors and Presenters to the Project:

- · Michael Stainton-Aquatic Specialist
- Hedi Kling-Water Toxoligist
- Stephane McLachlan-Environmental Scientist and Principle Instructor
- Russ Mead- Manager/Delta Marsh
- Vince Crichton-Wildlife Biologist
- · Dean Berezanski-Wildlife Technician
- Vince Keanan-Woodland Operation Manager
- Stan Kaczanowski-Forestry Manager
- Brian Stefanuak-Natural Resource Officer
- Matt Seniuk-Natural Resource Officer
- Don Sullivan-Principle Instructor
- Mike Molinski-Environmental & Natural Resource Officer (DIANA)
- Joanne Strong-Journalist/Writer

§ Additional Staff:

In addition, the project employed a full-time Cook, a Guide/Site Maintenance Person, a Project Administrator and Project Manager, a video technician, and a project liaison person for the duration of the program. The Soaring Eagle Project was the largest single summer employer in Hollow Water First Nation apart from the Band Administration.

§ Positive Benefits To The Community Economy And Environment:

- Community:

The primary location for the project was in the traditional territory of the Hollow Water First Nation. Field trip destinations included; Rice River, Black Island, Whiteshell Provincial Park and Delta Marsh Research Field Station. Hollow Water First Nation is located 75 km north of Pine Falls, MB, and covers 4010 acres. It is accessible by road throughout the year. The band is signatory to Treaty 5 signed in 1875 and its people speak the Anishinaabe (Ojibway) language.

Approximately, 460 people live on the reserve with another 455 living off the reserve. Located in the boreal shield in eastern Manitoba, this is a landscape dominated by 150 year-old pine and spruce forests. Much of the traditional lands are in the process of being harvested by Pine Falls Paper Co. In 1999, approximately 49,000ha of the forest surrounding Hollow Water were burned. Some of the affected area has been salvage logged and replanted with black and white spruce, and other portions have been allowed to regenerate naturally.

Gaa Bi Ombaashid Migizi was aimed at developing a respect for, and working knowledge of both traditional knowledge and science related to forests as well as the effects of fire and harvesting. The project acted to promote, preserve, and enhance the knowledge base that already exists regarding the traditional land use area of Hollow Water First Nation.

Gaa Bi Ombaashid Migizi facilitated the development of community members' abilities to create additional capacities within their locale. The course has enhanced the self-determining role of youth from the community and in the future will continue the role of facilitator when called upon to do so. The following is a list of goals and objectives that were met:

- Expanded awareness and understanding of TEK and principals of Western Science.
- The course actively promoted and taught the principles of sustainable development and resource management.
- Increased the capacity building role of community members.
- · Increased the relevance of science within Aboriginal communities.
- The development of a place-specific and Aboriginal-focused, science oriented curriculum that could eventually be expanded into additional Aboriginal communities wherever they are located.
- Increased scientific literacy and capacity building within and by Aboriginal communities.

- Applied scientific and technical training that has a primary focus on management of natural resources and environmental conservation.
- The establishment of monitoring plans designed in concert with industry and academic communities.
- Developed a pro-active approach towards the validation of traditional knowledge within Aboriginal communities and society as a whole.
- Increased dialogue and a heightened understanding between practitioners of science and the holders of traditional worldviews.
- Increased access to post-secondary science based education for remote Aboriginal communities.
- · Heightened first hand awareness and knowledge of the environmental habitat surrounding Hollow Water First Nation.
- Increased knowledge resource management issues and sustainability initiatives in the surrounding lands (both commercial and non-commercial),
- Strengthened linkages between individuals and programs within the community,
- Ensured that project participants we qualified to step into junior positions with Hollow Water First Nation's Traditional Land Use Planning Survey Team.

§ Economy:

- The project provided local jobs and revenue for local Aboriginal youth and Elders;
- Provided newly trained and qualified students (community members) are now capable of developing viable funding proposals. These skills will increase the potential for the community's future development in a self-determining role and increase the likelihood of the participants gaining employment in the community.
- q Environmental Benefits:
- Educated environmental decision-making and action within local communities in Manitoba.
- Lead to the development of two new community-based environmental initiatives. (See Appendixes)

Other Benefits:

Instructors and presenters have benefited by the opportunity to learn from the Elders and community experts. Instructors have gained an increased respect and understanding of Traditional Environmental Knowledge and Aboriginal issues. Ultimately, this increased level of understanding will benefit Canada's educational programs, related industries, and First Nation communities. Improvements to existing programs, particularly related to course content and being culturally respectful towards differing worldviews and value systems will be beneficial.

§ Voluntary Participation:

- Boreal Forest Network support staff provided voluntary services to the project such as, transportation of Instructors and delivering course materials as required.
- One student who was not selected during the interview process voluntarily attended and successfully completed the project.

§ Meeting the Objectives of Funding Agents:

The following section of the report intends to demonstrate how Gaa Bi Ombaashid Migizi met the criteria of the funders and recognized the criteria of the various funding initiatives.

1.) Support and Promotion of Innovation in the Environment and Sustainable Development: Gaa Bi Ombaashid Migizi supported objectives by supplementing the existing Hollow Water First Nation Land Use Study Research Program and increasing their likelihood of success by supplementing their limited pool of qualified field employees.

The project was innovative by training the participants in a highly significant context (the students community and surroundings) unlike other environmental study programs where the student is isolated from community support and the course material is frequently presented in an abstract fashion. Future project plans include the development of a regional Website aimed at First Nation communities that will incorporate material from the course. Hollow Water has been empowered with useful tools that will enable them to follow a culturally respectful direction regarding resource extraction and third party

development activities. Through their participation in Gaa Bi Ombaashid Migizi, participants have become well grounded in their own cultural knowledge as well as the natural sciences.

Participants are now better equipped to deal with the local, national, and global environmental issues of the future that will affect their community.

As a result of Gaa Bi Ombaashid Migizi, the program participants have developed two proposals, which demonstrates an innovative approach to sustainable development and stewardship by incorporating traditional Indigenous land principles.

Brief descriptions of these intended projects follow:

- Participants have formed the Soaring Eagle Environmental Association and have a completed proposal that will be submitted to the Manitoba Climate Change Action Fund. The proposal titled, "Hollow Water Youth and Climate Change: The Full Effect!" is an example of the positive capacity building initiatives that Gaa Bi Ombaashid Migizi has achieved. The goal of this project is to document the impacts, and increase awareness of climate change in the Aboriginal community of Hollow Water First Nation. This will be accomplished by documenting historical first person accounts about climate change and the relevant TEK information from Elders of Hollow Water First Nation and two neighbouring communities.
- This will lead to the presentation of findings to youth, community members and the Band Administration. In kind support for the project is being provided by the University of Manitoba, Trent University and the Boreal Forest Network.
- The second proposal developed by the Soaring Eagle Environmental Association is titled, "Black Island Environmental Interpretive Program Initiative." This proposal is being submitted to the Sustainable Development Initiative Fund. This project will involve two components. First, it aims to establish and promote an interpretive trail. Second, is the development of a waste management recycling station at Black Island, a historically significant location to the Ojibway people in the surrounding area. Education and promotion of waste management will be the key goals in this project.
- 2.) Encouraging environmentally sound decisions and actions:

Gaa Bi Ombaashid Migizi provided participants with exposure to the many facets of environmental research and sustainability initiatives.

This goal was achieved by drawing upon a large and diverse pool of resource personnel. Instructors were utilized from the community, government agencies, non-governmental organizations, universities and private sector industry representatives.

- 3.) Stimulating economic development and diversification that will improve the quality of life, and strengthen community identity, throughout Manitoba:
- Economic development and diversification will be achieved through the introduction of new programs that are developed by the participants and community.
- The pilot project was designed to be implemented into other aboriginal communities further strengthening community identity throughout the province.
- Academic representatives have expressed interest in the introduction of the program into their own curriculum.
- 4.) Promoting research and demonstrating new initiatives not addressed by existing programs: First Nation communities have expressed the need for some of their members to be trained in both Traditional Ecological Knowledge and Western Science in order to apply these skills to a wide variety of local environmental concerns in and around their traditional territories.

First Nations in Manitoba have also expressed a need for a community-based program that would allow their youth to remain in their communities while participating in a science-focused environmental education program. Gaa Bi Ombaashid Migizi is a solution to both of these concerns.

Universities have been slow to respond to the needs of Aboriginal students in terms of curriculum and program relevance in the sciences. At the same time, Canadian universities have found it difficult to attract and retain Aboriginal students in science based educational programs. Aboriginal students have been eager to participate in these programs, recgnizing their communities have a need for trained individuals in these fields of study and being confidant that these programs will be relevant to the realities experienced in contemporary Aboriginal communities. This pilot project addressed the needs of the various groups by:

- providing a primary focus upon community specific needs and direction.
- being both research and initiative driven.
- enhancing community participation by training participants and supplying some basic training that

will assist them if they decide to continue following environmental studies programs that are currently being offered elsewhere.

D. **Next Steps:**

Time Lines for next phase and/or project completion:

The first year of this project will be complete by the time this final report has been submitted. Initial funding was sought to fund the project for three years. After this time it is hoped that the project will be sustainable through the financial assistance of individually interested communities and other interested parties.

§ **Conclusions:**

The first year of Soaring Eagle Project has been an overwhelming success. Six of the initial eight participants have successfully completed the program. The success rate is remarkable and demonstrates the high level of interest among First Nation youth in the field of environmental studies. This project has had a positive impact students interested in pursuing environmental science studies in existing accredited programming. This is due to the directly applicable relevance and the economic solutions Gaa Bi Ombaashid Migizi has provided. Earlier, this report spoke about budgetary issues of communities, but in the past administrators of educational programs have also expended valuable personnel and financial resources on students who eventually lost interest. Gaa Bi Ombaashid Migizi demonstrates that a program with positive results can be achieved.

Sustainability of the Initiative:

Gaa Bi Ombaashid Migizi as a pilot program has demonstrated that it will succeed for the three years that funding is being provided. Beyond that, the program will remain dependant on a number of factors.

Participation level in Hollow Water First Nation and support have been significant factors in the success of this project. The number of initial applicants demonstrated that running additional courses would receive very positive response. Twenty-four applications were received when Gaa Bi Ombaashid Migizi was first introduced. Due to the initial positive response and large ratio of participants that have successfully completed the program, we feel that it is safe to anticipate that a second year will receive a similar or larger number of applicants.

- Opportunities for Future Use, Dissemination and/or Replication of project Results:
- Qualified staff insured satisfactory results could be replicated in the future.
- 9999 Extensive archiving procedures will allow results to be demonstrated.
- Success of the Project:

Principal instructors brought a wealth of relevant knowledge to the program and previous experience teaching in this type of environment.

§ **Project Evaluation:**

The project evaluation process included formative and summative methods. Participants performed ongoing evaluations and completed a final questionnaire for assessment purposes. To insure openness and honesty in their remarks the participants were asked not to include their names on the summative 4-question survey form. The program was given a very high rating by all of the participants. Excerpts from these documents are included in the appendices of this report.

E. Financial Information:

Project Title: Soaring Eagle	Region: Eastern Manitoba	Project #: 20076
Contact Person:	Name of Organization:	Telephone#:
Don Sullivan	Boreal Forest Network	(204) 947-3081

Expected Completion Date:	Reporting Period – From:	
May, 2002	April/2001 To: May/2002	

SUMMARY OF TOTAL PROJECT REVENUE

(REPORTING YEAR: APRIL/ 2001 - MAY/ 2002)

PROJECT CONTRIBUTIONS TO DATE	CASH	HOLD BACK	IN-KIND	TOTAL
NSERC	\$23,300.00			\$23,300.00
SDIF	\$20,970.00			\$20,970.00
SDIF		\$2,330.00		\$2,330.00
Manitoba Model Forest	\$20,000.00			\$20,000.00
Manitoba Model Forest (hold back)		\$5,000.00		\$5,000.00
Boreal Forest Network	\$6,000.00		\$6,000.00	\$12,000.00
Raven's Creek Lodge			\$12,000.00	\$12,000.00
TOTAL PROJECT REVENUE	\$70,270.00	\$7,330.00	\$18,000.00	\$95,600.00

SUMMARY OF TOTAL PROJECT EXPENDITURES

(REPORTING YEAR: APRIL/2001 - MAY/2002)

TOTAL PROJECT EXPENDITURES	CASH	IN-KIND	TOTAL
Project Staffing:			
Project Administrator	\$4,000.00		
Primary Instructors	\$5.000.00		
Guest Instructors/Elders	\$3,940.00		
Project Site Manager	\$5,000.00		
Cook	\$2,700.00		
Guide/Maintenance	\$1,600.00		
BFN Project Liaison Officer	\$6,000.00		
TOTAL STAFFING EXPENDITURES:	\$28,240.00		\$28,240.00

Student Per Diems:			
7	#0.400.00		
7 participants @ 6 weeks X \$200.00 per week	\$8,400.00		
1 participant @ 4 weeks X \$200.00 per week	\$800.00		
1 participant @ 2 weeks x \$200.00 per week	\$400.00		
TOTAL STUDENT PER DIEMS:	\$9,600.00		\$9,600.00
Transportation:			
Fuel	\$2,586.69		
Travel/Transportation	\$4,513.98	\$1,500.00	
Travel/Trailsportation	ψ+,515.56	Ψ1,500.00	
TOTAL TRANSPORTATION:	\$7,100.67	\$1,500.00	\$8,600.67
Lodging and Accommodation:			
Raven Creek Lodge		\$12,000.00	
TOTAL LODGING/ACCOMMODATIONS		\$12,000.00	\$12,000.00
TOTAL FOOD:	\$3,706.98		\$3,706.98
Project Supplies			
Project Supplies: Course Materials	\$2,780.49		
	\$3,340.63		
Field Trip Expenditures Student Supplies	\$2,573.57		
	\$6,148.94		
Office Expenditure/Equipment General Supplies	\$3,749.62		
General Supplies	ψο,7 10.02		
TOTAL PROJECT SUPPLIES:	\$18,593.25		\$18,593.25
TOTAL WEBSITE DESIGN:	\$5,000,00	\$2,000,00	\$7,000.00
TOTAL WEDSITE DESIGN.	\$5,000.00	\$2,000.00	Φ1,000.00
TOTAL ADVERTISING/PHOTO SUPPLIES			
	\$3,024.15		\$3,024.15
TOTAL REPORT WRITING/LAYOUT	\$2,500.00	\$2,500.00	\$5,000.00
TOTAL PROJECT EXPENDITURES	\$77,765.06	\$18,000.00	\$95,765.08

TOTAL PROJECT REVENUES/EXPENDITURES

TOTAL REVENUES/ IN KIND SERVICES	\$95,600.00
TOTAL EXPENDITURES	\$95,765.08
TOTAL PROJECT COST VARATION	- \$165.08

COST BREAKDOWN OF SDIF GRANT EXPENDITURES

Eligible SDIF Project Expenditures	Total Costs	SDIF Grant Allocation

Personnel Costs	\$28,240.00	\$10,000.00
Materials and Supplies	\$19,175.44	\$10.000.00
Transportation	\$8,600.87	\$3,300.00
TOTALS	\$56,016.31	23,300.00

- F. Appendicies: Resource and Curriculum Material:
- § Printed Material:
- § Canadian Arctic Resources Committee-Environmental Committee of Municipality of Sanikiluac, 1997, Voices from the Bay-Traditional Ecological Knowledge of Inuit and Cree in the Hudson Bay Bioregion, Canadian Arctic Resource Committee, Municipality of Sanikiluac.
- § Global Forest Watch, 2000, Canada's Forests At A Crossroads: An Assessment In The Year 2000, World resource Institute, Washington D.C..
- § May, Elizabeth, 1998, At The Cutting Edge: The Crisis In Canada's Forests, Key Porter Books, Toronto, Ontario.
- § Johnson, Kershaw, Lone Pine Publishing, Edmonton, Alberta
- § Ecotrust Canada, 2000, Chief Kerry's Moose.
- § Benton-Banai, E. 1988. The Mishomis Book: The Voice of the Ojibway. Indian Country Communications, Hayward, WI.
- § Clarkson, L., V. Morrissette and G. Regallet. (Anishinaabe), 1992. Our Responsibility to the Seventh Generation: Indigenous Peoples and Sustainable Development, International Institute for Sustainable Development, Winnipeg, MB.
- § LaDuke, W. (Anishinaabe) 2000. All Our Relations: Native Struggles for Land and Life, South End Press, Cambridge, MA.
- § LaDuke, W. (Anishinaabe) 1997. Voices From White Earth. In: H. Hannum, ed., People, Land and Community: Collected E.F. Schumacher Society Lectures. E.F. Schumacher Society, Barrington, MA. pp. 22-37.
- § LaDuke, W. (Anishinaabe) 1994a. A Society Based on Conquest Cannot Be Sustained. In: A. Gedicks, The New Resource Wars: Native and Environmental Struggles Against Multinational Corporations. South End Press, Boston, MA. pp. ix-xv.
- § LaDuke, W. (Anishinaabe) 1994b. Traditional Ecological Knowledge and Environmental Futures. Colorado Journal of International Environmental Law and Policy 5:127-148.
- § McGregor, D. (Anishinaabe) 1999. Indigenous Knowledge in Canada: Shifting Paradigms and the Influence of First Nation Advocates. Conference Proceedings of Science and Practice: Sustaining the Boreal Forest. Sustainable Forest Management Network, February 14-17, Edmonton, Alberta. pp. 192-198.
- § Minister of Supply and Services 1995. Forest Ecosystem Classification for Manitoba: Field Guide, UBC Press. Vancouver. BC.
- § Marles, Clavelle, Monteleone, Tays, and Burns. 2000. Aboriginal Plant Use in Canada's Northwest Boreal Forest. UBC Press, Vancouver, BC.
- § T.Garvin, S. Nelson, E. Ellehoj, and B. Redmond. 2001. A Guide To Conducting a Traditional Knowledge and Land Use Study. Natural Resources Canada-Canadian Forest Service.
- § Indicators and Assessment Office, Environmental Conservation Service. 2000. Ecological Assessment of the Boreal Shield Ecozone.
- § A. Robinson, 1996. Grassroots Grants: An Activist's Guide To Proposal Writing, Chardon Press, Berkley, California.
- § Sitting Eagle. 1993. A Series on the Clans of the Anishinaabe (Ojibway) Nation. Pub Pen Com Publishers. Morris, MB.
- A Brief History of the Loon and Crane Clan: Mung Do Daim A Si Uk Do Daim.

- 2. A Brief History of the Anishinaabe Clan System Functions.
- 3. A Brief History of the Ogitchita Society Warrior Society of the Anishinaabe (Ojibway) Nation.
- 4. A Brief History of the Deer Clan: Wa Wask Kesh Shi Do Daim.
- 5. A Brief History of the Marten Clan: Wa Bi Zha Shi Do Daim.
- 6. A Brief History of the Bear Clan: Makwa Do Daim.
- 7. A Brief History of the Bird Clan: Benaise Do Daim.
- 8. Visions of Sitting Eagle.

- § Handout Materials:
- Keys to Successful Proposal Writing http://www.treelink.org/grants/keys.phtml
- Guide for Writing A Funding Proposal http://www.anrecs.msu.edu/dissthes/links.htm Source: S. Joseph Levine,Ph.D..
- Guide To Grant Proposal Writing http://www2.njstatelib.org/njlib/grhdabst.htm
 New Jersey State Library

Elements Of A Grant Proposal

Sponsored by The Paladin Group - Grant mentors

Credits to The Center For Nonprofit Management

- 10 Point Grant Writing Guide http://www.npguides.org/guide/index.html
- Sample Application From Eco-action Ontario Region

http://www.on.ec.gc.ca/ecoaction/home.html

· Sample Application From Manitoba Sustainable Development Innovations Fund http://www.susdev.gov.mb.ca/sdif/sdif.html

- § Appendicies Videos:
- Kanasatake, National Film Board of Canada
- Keepers of the Fire, National Film Board of Canada
- Power, National Film Board of Canada
- The Disappearing Forests of Eeyou Istchee, Grand Council of Crees
- Bones of the Forest, Mongrel Media, Toronto, ON.
- A New Leaf: Real Sustainability for the Boreal Forest, 1993, Western Canada Wilderness Committee.
- Blockade: Algonquins Defend The Forest, National Film Board of Canada.
- The Thinning Ozone.
- Sila Alangatuk: Inuit Observations on Climate Change, 2000, IISD

§ Appendicies Student Comments Extracted From The Participant Evaluation Qusestionaires:

The questionnaire asked the participants to provide an answer to 4 questions. These were the questions:

- What did you enjoy about the course? 1.
- 2. Were there any aspects of the course that you would like to see changed? If so, what are they?
- 3. Would you recommend this course to others?
- Describe how this course has helped you? 4.
- Comments to question 1:
- " I enjoyed the whole course because it was a good and positive learning experience for me throughout the whole course."
- "I enjoyed learning new things, meeting people, and traveling."
- § § " I liked the people that came out. They were interesting."
- Comments to question 2:
- " No. I thought it was a well planned out project so I had no problems with the course."

- § " Not really. It was everything I wanted.
- Comments to question 3:
- "Yes. Everyone should learn about the disasters mankind has made."
- "Yes...it would be good for people to become aware of what is happening around them."
- "The course creates awareness."
- 999999 "Yes, I would definitely recommend this course to grade 9 students and to other aboriginal youth interested in the environment."
- Comments to question 4:
- " I am more aware of our environment and educated on the issues than I was when I came here."
- 8000 " This course opened my eyes about traditional knowledge and teamwork. It also helped me become more aware of the environmental factors around me and around my community."
- " Opened my eyes wider about green house gases, climate change, and traditional teachings."

SUSTAINABLE DEVELOPMENT INNOVATION FUND **APPLICATION**

DRAFT DOCUMENT

BLACK ISLAND ENVIRONMENTAL INTERPRETIVE PROGRAM INITIATIVE

- Black Island Environmental Interpretive Program Initiative
- Name of your organization: The Soaring Eagle Environmental Association is a First Nations community based group formed to address environment issues within Hollow Water and its surrounding Traditional Territory.
- Two contact names:
- Garry Raven General Delivery

Hollow Water, Manitoba. R0E 2E0 Telephone: (204) 363-7377 e-mail: raven@granite.mb.ca

Don Sullivan, Coordinator **Boreal Forest Network** 2-70 Albert Street. Winnipeg, Manitoba. R3B 1E7 Telephone: (204) 947-3081 e-mail: dsullivan@govideon.net

3. Maurice Williams

Box 2556

Hollow Water, Manitoba. R0E 2E0 Telephone: (204) 363-7962

- Description Of Our Organization:
- The Soaring Eagle Environmental Association is a community-based group comprised of 8 members from Hollow Water First Nation community.
- The organizational mandate is to educate and increase awareness of environmental issue that face the community of Hollow Water. The objective of our organization is to emphasize meaningful environmental change through community capacity building and education initiatives that foster collective community solutions to environmental issues.
- Project Description:

Black Island has been used by the Ojibwe People for hundreds of years as an important traditional seasonal gathering place, and is still used for this purpose to this day by many of the surrounding First Nation communities. Through research and consultation with community elders the Soaring Eagle Environmental Association has identified the need to enhance community ecological awareness and maintain the environmental integraty of the second largest Island ecosystem on Lake Winnipeg. Because Black Island is currently part of the Hecla/Grindstone Provincial Park we will be working closely and seeking approval and advise from Park Branch staff at Manitoba Conservation, we intend to design and create a unique and innovative self-quiding ecological interpretive trial by incorporating both Traditional Ecological Knowledge from the surrounding First Nation communities and Western Environmental Science. Secondly, our project will provide a recycling transfer station to collect recyclable goods during "Black Island Days", an annual cultural gathering that occurs for a week in the month of August. This component of the project will encourage and foster good environmental practices with those attending "Black Island Davs."

The Soaring Eagle Environmental Association will be fostering partnership to assist in the planning, designing and implementation of the project with the follow organizations:

Manitoba Conservation - Parks Branch

Manitoba Model Forest

Manitoba Product Stewardship Council

Resource Conservation Manitoba

Boreal Forest Network

Our Project Qualifies Under The Following SDIF Open Priority Program Areas:

The Soaring Eagle Environmental Association believes that the proposed project meets the qualifications of four of the SDIF open priority program areas.

Regional Waste Management

By placing a recycle transfer station on Black Island to collect all of the recyclables during Black Island Days, the project will divert waste and minimize the environmental risk to the Hollow Water Landfill. In addition, we will be contributing to and promoting recycling within the community and the recycling industry in Manitoba.

Northern Environmental Issues

By creating a self-guided ecological interpretative trail on Black Island and installing a recycling transfer station on Black Island we will be enhancing the environmental awareness and sustainable development practices of the surrounding First Nation communities.

§ Understanding our Environment

The project will help foster environmental awareness and promote sustainable development practices by educating surrounding First Nations communities on ecological important points of interest that will be of cultural relevance to the communities.

§ Eco-Tourism

The project will support ecosystem preservation, enhance environmental awareness through public education and increase local eco-friendly tourism activities.

- Our project will demonstrate measurable progress towards achieving one or more of the Fund's objectives:
- § Project will promote and support the recycling industry in the region.
- § Our project will encourage educated decisions and action regarding sound environmental practices.
- § Our project will improve the quality of life and strengthen community identity, especially with First Nations communities on the East side of Lake Winnipeg.
- § Our project will demonstrate environmentally sustainable approaches to waste minimization and the conservation of resources.
- Project Objectives:
- § During the winter months (October 2002 to March 2003) we will meet with our partners to start the preparation work needed for the planning and designing of an ecological interpretive trail. Secondly, we will review various options and assess the best location for the installation of a recycling transfer station on Black Island. Finally, we will meet elders to identify culturally and ecologically relevant point of interest both on the Island and the proposed route of the ecological interpretive trail.
- § April to June 2003 we will survey proposed trail route and clear right of way. Also, we will begin on the ground identification of the various point of ecological interest identified by the elders during the research and development phase. In addition, we will begin site preparation for the recycling transfer station. Finally, we want to prepare and erect the various points of interest signs along the ecological interpretive trial and finalize a trial guide map.
- § July 2003 we want hold a Trail naming ceremony with the elders from the surrounding communities. In late July and early August of 2002 we want to officially open the ecological interpretive trail and unveil the recycling transfer station during the annual "Black Island Days" celebration.
- § During August and early September of 2003 we want to conduct V.I.P. Tours of the ecological interpretive trail.
- Work Plan: Start date: October/2002 End date: Septemeber/2003

KEY WORK PLAN DATES	KEY WORK PLAN DESCRIPTIONS
October / November / 02	Meet partners and begin design and pre-planning activities. Obtain approval for project from Band Council and from the Parks Branch at Manitoba Conservation. Have a rough outline of trail location and recycling transfer station. Set-up an elders advisory committee.
	Research and conduct interview with elders to identify key
December/02 /January /03	points of interest on Black Island and on the proposed route of the interpretive trail.
	Meet with experts to identify key ecological points of interests on Black Island and begin developing a draft map with key
	points interests.
	Begin planning a equipment needs list and work plan for trail

February / March /03	clearing and trail design work.		
	Assess cost for key points of interest signs.		
	Interview youth for trail work program.		
	Prepare a interim report for funders and partners.		
	Begin trail clearing and ground verification of key points of		
	interest.		
April / May /03	Site preparation for recycling transfer station.		
	Prepare a final draft of the self-guided interpretive map, including		
	text and photographs.		
	Erect point of interest signs.		
	Trail naming ceremony with elders.		
June / July /03	Print and distribute self-guided interpretive trail maps to		
	surrounding communities.		
	Trail opening ceremony on "Black Island Day".		
	Media and V.I.P. Tours.		
August / September /03	Final Report for Funders.		

Project Budget:

Expense Category	In-Kind Contribution	Partner Funding	SDIF Requested Funds	Budget Totals
Personal Costs (wages)		\$23,700.00	\$7,500.00	\$31,200.00
Management/Professional fees	\$4,000.00	\$3,000.00	\$7,000.00	\$14,000.00
Materials/Supplies	\$1000.00		\$2000.00	\$3000.00
Equipment Rental	\$1000.00		\$2000.00	\$3000.00
Office Costs	\$2,500.00			\$2,500.00
Transportation Costs			\$4,000.00	\$4,000.00
Food			\$2,500.00	\$2,500.00
TOTAL EXPENDITIURES	\$8,500.00	\$26,700.00	\$25,000.00	\$60,200.00

1) PROJECT TITLE

Hollow Water Youth and Climate Change: The Full Effect!

2) ORGANIZATIONAL INFORMATION

Organization

Soaring Eagle Environmental Association

Craig Moneas, Sherry Moneyas, Cassidy Raven, Joseph Smith, and Stephane McLachlan,

Contact Information

Joseph Smith General Delivery, Wanipigow, MB R0E 2E0 POB 2472

Tel:(204) 363-7509 or (204) 363-7497

Dr Stéphane McLachlan Environmental Science 231 Machray Hall University of Manitoba Winnipeg, MB R3T-2N2

tel: (204) 474-9316 fax: (204) 275-3147

email: mclachla@cc.umanitoba.ca

Description of Organization

We are a group of Aboriginal youth in Hollow Water First Nation that are greatly concerned about the environment around our community. We are especially concerned about the effects of climate change on wildlife, medicines, water and soils, and our culture. Our main objective is to promote increased awareness of and respect for Mother Nature, and for traditional values within our community and the surrounding region. We have been in existence for one year and are associated with Boreal Forest Network and University of Manitoba.

3) PROJECT DESCRIPTION

Climate change is having a great effect on all people, plants, and wildlife. Recent increases in greenhouse gases have resulted in substantial negative effects on the environment. The long-term effects are yet to be documented but modeling indicates that these changes on climate will have huge impacts on all life on earth. It is clear that many of these effects will be greatest in northern climates. However, they are little known - especially for remote Aboriginal communities. Most remote Aboriginal communities are highly dependent upon natural resources and traditional ways of life. This makes community members highly vulnerable to changes in the environment associated with climate change. Adaptation within these communities to these changes may be difficult, especially for elderly people. At the same time, many of the traditions are not being passed on to the younger generations. These difficulties may be aggravated by climate change as they force community members to adapt daily in ways are often new and unanticipated. Little is known about these phenomena as few culturally appropriate research projects have been conducted. Very recent studies are beginning to show that the effects of climate change include unpredictable weather patterns, overall warming, changes in the length of season, changes in wildlife population, changes in species composition, melting of the permafrost and glaciers in the Far North, and increases in sea levels etc.

This project will focus primarily on the impacts of climate change in northern Manitoba and community responses or adaptations to these changes. In addition, younger generations will be educated about the threat that these changes represent to the livelihoods of these communities and the surrounding environment.

The objectives regarding impacts of climate change of this project are to: 1) Document Traditional Knowledge (TK) regarding climate change. 2) Document impacts of climate change on our Land.

3) Examine how people and wildlife are adapting to climate change. 4) Relate changes to the environment to corresponding changes in climate. 5) Identify community concerns regarding climate change and 6) collect baseline data against which future impacts of climate change can be

assessed. The objectives regarding education are to: 1) assess what youth within the community know about climate change and 2) create awareness with youth and community about impacts of climate change using TK and environmental sciences.

Traditional knowledge will be documented by interviewing Elders as well as hunters, fishermen, and trappers both in Hollow Water FN and the neighboring Manigotogan. Both communities are 240km northeast of Winnipeg. Knowledge regarding changes in wildlife and medicines as well as changes in water temperature and quality, ice thickness and times of onset and breakup will be assessed. In addition, changes in timing of harvesting and concerns about the well-being of wildlife will be identified. These perceptions of change will be tape recorded and transcribed and, where possible, photographed, along with participants. Adaptations that Elders made in difficult times in the past will be documented. In addition, current adaptations and responses to changes in climate, as well as the willingness to adapt further, will be recorded. Youth within the community will be interviewed in small groups and insights into climate change will be identified. These results also will be tape recorded and transcribed, and participants photographed. Once these results have been summarized, they will be presented to Chief and Council, Elders, youth, and other community members.

While the results will be collected and presented by the youth in the Soaring Eagle Environmental Association, the direction and evaluation of this project also will be facilitated by the BFN and UofM partners.

4) PROGRAM CRITERIA

Education and Outreach

This project will increase the awareness of climate change by community members in Hollow Water, especially youth and Elders. HWFN is a remote area and little is known about the impacts of climate change here. These impacts will be documented by local youth concerned about the environment and will be communicated in a culturally appropriate way that is easily understood by community members. In addition, these results will also be presented to two neighbouring FNs, Fort Alexander and Bloodvein. The communicated information will be both traditional and science-based in approach. As a result, public understanding regarding climate change and its impacts will increase substantially. This innovative approach to documentation and communication is long overdue and essential if remote communities are to adapt successfully to these changes in the future.

Impacts and adaptation

Both physical and social impacts of climate change will be documented in this region for the first time, and will allow for preliminary impact analysis. The impacts will likely span centuries and will allow us to anticipate future changes as well. Culturally appropriate adaptation strategies of both Elders and youth will be identified. Because youth are directing this documentation and communication, the results will be taken more seriously by their peers and the community as a whole. Important baseline data will be documented against which future changes will be assessed. Northern communities are located in regions that will likely see substantial climate-related changes to the environment, but are highly understudied. This project should facilitate the development of similar projects in other communities.

Increased awareness of impacts of climate change and association with individual and community-level activity will, themselves, lead to reductions in emissions of greenhouse gases. In addition, the project will identify culturally appropriate adaptations and changes in behavior that already have been adopted in response to climatic impacts such as changes in ranges and breeding in wildlife populations, reductions in ice thickness etc.

This pilot project has been designed so that it might be adopted by other remote Aboriginal communities in Manitoba. In part, this will be tested by making presentations of our results to two other communities in the region.

This project has many ecological and environmental benefits. It is accepted that human activities and resulting emissions in greenhouse gases are associated with climate change. As community members become educated about this association, they will ideally change their behavior to reduce these emissions. This project focuses on youth teaching youth about these impacts as they represent the possible prevention of greenhouse gases for the next generation. As this project will also identify long-term environmental impacts of climate change by documenting TK, this will allow community members to better monitor the effects of climate change today and into the future. This is especially important as TK is undervalued in the community and is in danger of being lost. Finally, as this project has been developed by the youth for their community and the changes that impact on them, it is more likely to be ecologically appropriate and sound. Not all impacts of climatic change will necessarily be negative. This project will allow us to identify the positive changes that might economically benefit the community. In addition, it will allow us to identify any possible adaptations that might be promoted throughout the community. As it promotes the cultural traditions of remote communities, their local knowledge and their capacity to provide for themselves, the project will increase the their resiliency and ability to adapt to change. As this project has environmental, social, and economic values, it is fundamentally sustainable in its approach to documenting and educating regarding climate change.

5) PROJECT WORK PLAN.

Time frame

The project will begin January 2003 and end January, 2004.

Activities

January - March 2003: contact and interview Elders, hunters, trappers, and fishermen

February 2003: document changes with photographs

April – May 2003: analyze and interpret data from interviews

June 2003: conduct focus group interviews with high school (Gr 8-12) students

July 2003: analyze and interpret data from high school students and photodocument changes

July - August 2003: develop pamphlets and awareness-workshops

September 2003: present findings to community members

October 2003: attain feedback on presentations

November 2003: present to other communities, evaluate project

December 2003: write final report

Resources

Materials/ Supplies: office space, meeting space for workshops and retreat

Equipment: computer and printer, tape recorder and tapes; camera and film.

Community involvement

This project has been designed by and for local community members. Soaring Eagle Environmental Association is made up of youth from Hollow Water FN. We will be interviewing community members and identifying impacts and adaptation using this knowledge. Chief and Council have written a letter of support for this project. Support from BFN and UofM also will help us achieve these goals.

Project Management and Personnel.

Members of Soaring Eagle Environmental Association (contact Joseph Smith) will be responsible for the on-site completion of the project. Contacts with BFN (Don Sullivan) and U of M (Stef McLachlan) will help manage this project and funds, and ensure that it is completed in a timely fashion. As such, bookkeeping and dispersing of funds will be conducted through BFN.

Target Group.

This project will target all community members of Hollow Water FN, especially youth and Elders. Secondarily, it will target members from two neighboring communities.

Evaluation.

A number of criteria are suggested that would indicate whether the proposed project is successful. These include:

short-term criteria

percentage of approached Elders, hunters, trappers and fishermen that participate in interviews percentage of approached youth that participate in focus group interviews number of participants in workshops success of evaluations at end of workshops retention of long-term knowledgeable participants throughout project amount of media coverage in local newsletters, local and regional newspapers, and TV number of hits on webpage

successful evaluation of project at end of first year long-term criteria

long-term promotion and acceptance of adaptation strategies reduction in greenhouse gas emissions maintained communication among participants continued monitoring of environment continued identification of impacts associated with climate change increased awareness of climate change among community members incorporation of project in other remote Aboriginal communities

Communication, education and awareness.

The cornerstone of this project is an increased awareness of impacts associated with climate change. Youth will be the focus of much of this activity. Youth will be educated using TK from local Elders and science-based information regarding these impacts. Community members as a whole will also be made aware through presentations and a bi-monthly newsletter. Workshops will be conducted to get feedback about progress and to share results of the project. Sustainability

The effects of increased awareness and education regarding climate change that result from this project will persist after the completion date, in large part because the project explicitly targets youth. As the project has been designed by local youth and targeted their peers it is more likely to be adopted. As it promotes the importance of Elders and traditional knowledge, it is more likely to be culturally appropriate and accepted

6) PROJECT BUDGET

	UofM	BFN	MCCAF	Budget Total
Expense category				
	Cash	In-kind	Cash	In-kind
Personnel Costs				
project management		2,000		2,000 4,000
community research assistants				15,40015,400
interviewee stipends				1,1001,100
evaluation and final report				1,0001,000
web page				400 400
Materials/ Supplies				
workshop space		1,000		1,000 5002,500
retreat				500 500
data (maps, books)				2,000 2,000
food for workshops				500 500
computer, software, camera, film		1,500		2,0003,500
Equipment rental				
rental vehicle				1,0001,000
Office costs				
office space		1000		2,0001,0004,00 0
phone calls, long distance		500		600 1100
Transportation				
mileage				1,0001,000
Sub-Total		6,000		7,00025,00038, 000

Total	6,000	7,000	25,000	38,000

7) INNOVATION

This project will generate long-term knowledge regarding the impacts of climate change in the Manitoban boreal forest, data that currently do not exist for this region. It will also promote the importance of climate change for remote Aboriginal communities and identify ways of adapting to these changes. This has yet to be conducted for any Aboriginal community in Manitoba. Moreover, this project has been initiated, designed and will be conducted by a youth organization (Soaring Eagle Environmental Association) in Hollow Water FN, this increasing the likelihood that the results will be acceptable to the community, especially the other youth. This kind of capacity building, and the support that the other partner organizations will provide, is an important precedent-setting approach to community-based project design.

8) CAPABILITIES AND ACCOMPLISHMENTS

Soaring Eagle Environmental Association represents an important vehicle for environmental activity in Hollow Water. All the members are youth and long-term community members that have taken a number of courses and workshops with the Soaring Eagle Project. This, in turn, is a community-based educational organization that promotes the importance of both TK and science in valuing and managing the environment. Both the Association and the Project are supported by the project management and fund writing expertise of UofM and BFN.

9) PROJECT GOAL AND OBJECTIVES

The short-term goal of this project is to document the impacts of and increase the awareness regarding climate change in this remote Aboriginal community. The specific impact-assessment objectives are to: 1) Document Traditional Knowledge (TK) regarding climate change. 2) How people and wildlife are adapting to climate change. 3) Document impacts of climate change on our Land. 4) Relate changes to the environment to corresponding changes in climate. 5) Identify community concerns regarding climate change and 6) collect baseline data against which to assess future impacts of climate change. The education-associated objectives are: to 1) assess what other youth within the community know about climate change and 2) create awareness with youth and community about impacts of climate change using TK and environmental sciences.

Ultimately, this project will increase the ability of this community to identify and adapt to changes in environment associated with climate change.

10) PROJECT RESULTS

The results of this project are very important and of a personal nature to Hollow Water First Nation, and therefore will only be available to anyone outside of the community or project upon request to R/D. Summaries of the project will be accessible through the final report, project web page and releases to the media.

11) METHODOLOGICAL APPROACH

The traditional knowledge that is central to this project will be documented by household interviews with Elders and other knowledgeable community members. The background awareness of youth regarding climate change will be documented using focus group interviews. Interviews will be tape recorded, transcribed, and summarized for presentation to community members and two neighbouring communities.

12) REGULATORY REQUIREMENTS None

13) ORGANIZATIONS PREVIOUS FUNDING

Environmental Conservation Lab (U of M) has had three projects funded by SDIF, Manitoba Conservation, two of which have been completed successfully. BFN has had one project receive funding from SDIF, Manitoba Conservation, and it was completed successfully.