

CLIMATE CHANGE ADAPTATION PLANNING WITHIN THE CHIPPEWAS OF GEORGINA ISLAND FIRST NATION RESERVE



With funding from Aboriginal Affairs and Northern Development Canada, OCCAR is partnering with the Georgina Island First Nation on a 3-year project to develop climate change adaptation, and implementation plans for their community. Combining aspects of Traditional Ecological and Community Knowledge, and a vulnerability and risk assessment approach, this project will help the Georgina Island First Nation deal with the current and future impacts of climate change in their community

Some of the objectives of the project include:

- ✓ Community Engagement
- ✓ Collecting Traditional Ecological Knowledge (TEK)
- ✓ Developing an adaptation planning framework
- ✓ Conducting a vulnerability and risk assessment
- ✓ Collecting and translating regional climate data for the Lake Simcoe watershed
- ✓ Incorporating climate change into Georgina Island subwatershed planning
- ✓ Developing adaptation recommendations and plan, and implementation plan
- ✓ Conducting review of band policies to find opportunities to mainstream climate change
- ✓ Workshops



Community Engagement

Community engagement has been and continues to be a critical component of this project. It has provided the project team meaningful opportunities to interact with community members to ensure the community is supportive of this effort and the project incorporates the Georgina Island First Nation values and experience. A project Advisory Committee, comprised of community members, was established to provide advice and help guide the process, and community workshops and meetings were held to inform, update, and seek feedback from all community members. In addition, the Community Adaptation Liaison (CAL) has actively engaged community through the collection of Traditional Ecological Knowledge (TEK) and coping strategies, as well as answering day-to-day questions, participating in information sessions, and providing project updates.



Traditional Ecological Knowledge (TEK) Gathering

Traditional Ecological Knowledge was collected through interviews with community members, Elders, and Councillors. A total of nineteen interviews were conducted. Results from the interviews were documented, summarized, and presented back to the Community at the final Year One workshop. Results were also used to identify existing vulnerabilities within the community.

Adaptation Planning Framework

The project team developed an adaptation planning framework and workbook which outlined how western science and the TEK would be used to inform climate risks. The framework, a 7 step process, incorporates the assessment of vulnerabilities, estimation of risk, and identification of existing adaptive capacity to prioritize the threats felt by the community as well as bring forward any opportunities. The framework was used in Year Two and now in Year Three of the project.

Vulnerability and Risk Assessment

Drawing on results of TEK Survey a visual image of impacts of climate change, in the form of impact trees, were developed for the community. Seen as existing vulnerabilities, the Advisory Committee was asked to identify which vulnerabilities were of most concern to the community. Vulnerabilities of the most concern were used to estimate and prioritize future risks associated with climate change. Building knowledge on existing vulnerabilities and risk to a changing climate was valuable to see how the community faced challenges of current climate, and what was done in the past to cope.

Regional Climate Data for Lake Simcoe Watershed

Historical temperature and precipitation data for Shanty Bay was collected, treated and plotted to determine trends. Climate projections were also used to help understand how the climate may change in the future.





The **Chippewas of Georgina Island First Nation** is located both on and off the east shore of Lake Simcoe and is approximately 100 km north of the GTA, within the Township of Georgina. The First Nation Reserve No.33 consists of three separate Islands (Georgina 1,416 ha., Snake 135 ha., and Fox 20 ha.) and two mainland access points (Virginia Beach Marina and Island Grove Marina). The main population of the reserve resides on Georgina Island with approximately 80 households whom are member residents and 225 cottages, some of which are accessed year round.

www.georginaisland.com

The **Ontario Centre for Climate Impacts and**



Adaptation Resources (OCCIAR) is a university-based resource hub for researchers and stakeholders that provides information on climate change impacts and adaptation. The Centre communicates the latest research on climate change impacts and adaptation, liaises with partners across Canada to encourage adaptation to climate change and aids in the development and application of tools to assist with municipal adaptation. The Centre is also a hub for climate change impacts and adaptation activities, events and resources.

<http://www.climateontario.ca>

Climate Change Adaptation Planning Within the Chippewas of Georgina Island First Nation Reserve is a three year project made possible by the support of Aboriginal Affairs and Northern Development Canada.

For more information about this project, please contact:

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