ᓄᓇᕗᒻ ᐊᕐᕌᒍᓕᒫᖅᑎᑦ ᑲᑎᒪᔨᖏᑦᑎᒍᑦ ᑐᑭᓯᐊᓂᖅ ᖃᓄᐃᑦᑐᑦ ᖃᐅᔨᓴᖅᓴᖅ #126449

Leaf photosynthesis of shrub species - Response to air temperature and climatic feedback

ᑐᓴᐅᒃᑐᑕᐅᔪᖅ ᖁᓕᓂᖅᓯᒪᔪᖅ:	New
ᐱᓕᕆᐊᒃᑲᐅᔪᓐᓇᖅᓯᒪᔪᖅ ᖁᓕᓂᖅᓯᒪᔪᖅ:	Scientific Research
ᐅᓪᓗᖓ ᑐᓴᐅᒃᑐᑎᓕᐅᓂᐅᔪᓐᓇ:	Thursday, May 7, 2026
Period of operation:	from 2026-07-13 to 2026-07-24
ᐱᓕᕆᐊᖁᕈᒪᔪᖅ:	Maire Vincent Université du Québec à Trois-Rivières 3351 Bd des Forges Trois-Rivières Quebec G8Z 4M3 Canada ᐅᖁᓪᓕᐅᑎᑦ: 8196994514, ᓱᓕᔨᓄᑦ:

ᑐᓴᐅᒪᓗᓴᑦ

ᖃᓄᐃᑦᑐᑎᓂᒃ ᐱᓕᕆᐊᖃᖏᓂᐊᕆᐊᖓᓂᒃ

ᖃᓄᐸᓚᕆᑎᑐᑦ: How Arctic shrubs respond to warming temperaturesThis project is led by the Université du Québec à Trois-Rivières (UQTR), Canada. The research team includes Professor Vincent Maire and a graduate student, Florence Gagné, along with supporting students. The project is part of an academic research program on Arctic ecosystems.This project studies how Arctic shrub plants respond to temperature changes by measuring how their leaves capture carbon dioxide through photosynthesis. Fieldwork will focus on four common shrub species found in the Arctic (Salix arctica, S. reticulata, S. richardsonii, Betula glandulosa). Small branches will be collected from selected plants, and measurements of photosynthesis will be conducted using a portable scientific instrument. Soil samples and environmental conditions (such as temperature and humidity) will also be recorded to better understand how local conditions influence plant functioning. The work is low-impact: only small amounts of plant material will be collected, soil samples are limited in size and restored immediately, and temporary sensors will be installed and removed after use. No permanent structures will be built.The Arctic is warming much faster than the rest of the world, and shrubs are becoming more abundant across the landscape. These changes can affect how much carbon is stored or released by ecosystems, which has important consequences for climate change. However, scientists still do not fully understand how Arctic plants respond to temperature. This project aims to improve this understanding by identifying the temperatures at which shrubs function best and how they adjust to environmental conditions. The results will help improve scientific models used to predict climate change and ecosystem responses in the Arctic.The project will take place in the Qikiqtani Region, Nunavut, primarily within Sylvia Grinnell Territorial Park (Iqaluit Kuunga), near the city of Iqaluit. Study sites will be selected within the park to represent different soil and environmental conditions. All activities will be conducted on foot within the sites, with access to the park by existing routes.Fieldwork will occur during the summer growing season of 2026. The main data collection will take place between mid-July and late July, with a short follow-up visit in early August to remove equipment. The project is seasonal and does not involve long-term installations.

ᐅᐃᓵᑎᑐᑦ: Comment les arbustes arctiques réagissent au réchauffement des températuresCe projet est mené par l'Université du Québec à Trois-Rivières (UQTR). L'équipe comprend le professeur Vincent Maire, une étudiante à la maîtrise (Florence Gagné) et des étudiantes collaboratrices. Il s'inscrit dans un programme de recherche universitaire sur les écosystèmes arctiques.Le projet vise à étudier comment les arbustes arctiques réagissent aux variations de température en mesurant leur capacité à capter le dioxyde de carbone par photosynthèse. Des mesures seront réalisées sur quatre espèces d'arbustes (Salix arctica, S. reticulata, S. richardsonii, Betula glandulosa). De petites branches seront prélevées, et des mesures de photosynthèse seront effectuées à l'aide d'un appareil scientifique portable. Des échantillons de sol et des données environnementales (température, humidité) seront également collectés. Les impacts sur l'environnement sont très limités : les prélèvements végétaux sont mineurs, les sols sont remis en place après échantillonnage et les capteurs installés sont temporaires et retirés à la fin du projet.L'Arctique se réchauffe rapidement, ce qui entraîne une expansion des arbustes. Ces changements influencent le cycle du carbone et donc le climat. Toutefois, la réponse des plantes arctiques à la température est encore mal comprise.Ce projet vise à mieux comprendre ces mécanismes afin d'améliorer les modèles scientifiques utilisés pour prédire les impacts des changements climatiques sur les écosystèmes arctiques.Le projet se déroulera dans la région de Qikiqtani (Nunavut), principalement dans le parc territorial Sylvia Grinnell, à proximité de la ville d'Iqaluit. Les sites d'étude seront choisis pour représenter différentes conditions environnementales.Les travaux de terrain auront lieu durant l'été 2026, principalement entre la mi-juillet et la fin juillet, avec un retour début août pour retirer les équipements. Le projet est de courte durée et ne comporte aucune installation permanente.

ᐃᓄᒃᑎᑐᑦ: ᖃᓄᖅ ᐅᑭᐅᖅᑕᖅᑐᒥ ᐅᒃᐱᒃᑕ ᑕᐃᒪᐃᓕᓕᒋᓕᕆᔨᖏᑦ ᐅᖃᓗᓇᓕᓕᒋᐊᓂᖏᓄᓕᑦ ᓱᓕᐅᓇ ᐱᓕᕆᐊᖃᓚᖏᓪᓕᑦ ᐊᐅᓚᑕᐅᔪᖅ ᐱᓕᕆᐊᖏᓪᖅ ᐃᓕᓴᓂᐊᕐᓂᖏᖅ ᐃᓕᓴᓂᐊᖃᖅᑎᑦᓴᐅᔪᖅ ᑐᑭᐅᐊ-ᐅᓕᖅᐃᐊ, ᑲᓇᑕ. ᐅᓗᐊ ᖃᐅᔨᓴᖅᑎᑦ ᐱᓕᕆᖃᑎᒋᑦ ᑦᑲᓗᐊᖏᓪᑦ ᐃᓕᓴᓂᐊᕐᓂᖏᖅ ᓇᓱᓕᓕᓪᓚᕐᓇᖅ ᐃᓕᓴᓂᐊᖃᖅᑎ, ᓂᓪᓕᐊᓕᓵᔨᑦ ᓴᓄᓂᐊ, ᐱᖃᑎᖃᖅᑐᑦ ᐃᑲᔪᖅᑎᓂᒃ ᐃᓕᓴᓂᐊᖃᖅᑎᓂᒃ. ᐅᓇ ᐱᓕᕆᐊᖏᓪᖅ ᐃᓕᖃᖅᑐᑦ ᐃᓕᓴᓂᐊᖃᓗᖅᓕᖅ ᖃᐅᔨᓴᕈᑕᐅᔪᓂᒃ ᐃᓕᓴᓂᐊᖃᑎᒌᓂᒃ ᐅᑭᐅᖅᑕᖅᑐᒥ ᐅᓪᓗᓕᒫᓂᒃ. ᐅᓇ ᐱᓕᕆᐊᖏᓪᖅ ᐃᓕᓐᓂᐊᕐᓗᒃᑐᓂᒃ ᐊᐅᓚᑕᐅᔪᖅ ᖃᓄᖅ ᐅᑭᐅᖅᑕᖅᑐᒥ ᐅᒃᐱᒃᑕ ᑭᐅᔨᓴᓂᒃ ᐊᓯᔾᔨᓂᖅᓱᓂ ᐊᑐᖅᓯᓂᒃᓴᓂᒃ ᖃᓄᖅ ᖃᒪᓂᐊᓕᒃᑐᖅ <ᐅᖅᓂᒃ ᑕᒪᐅᓇᓕ ᓯᖅᑭᓂᒪᑦ ᐅᖅᑲᓇᕐᓂᖅᑐᒃ. ᓄᓇᒥ ᐱᓕᕆᐊᓗᓂᐊᖅᑕᓚᐅᑦ ᐊᐅᓪᓚᑎᓂᐊᖅᑐᑦ ᑎᕆᒪᓂᒃ (4) ᐱᑕᖃᑲᓪᓚᓂᒃ ᐅᒃᐱᒃᓂᒃ ᓇᓂᕆᐅᖃᖅᑕᖅᑐᓂᒃ ᐅᑭᐅᖅᑕᖅᑐᒥ (Salix arctica, S. reticulata, S. richardsonii, Betula glandulosa). ᒥᑭᔨᑦ ᓇᐸᖅᑐᕆᕆᑦ ᓄᐊᑕᐅᓂᐊᖅᑐᑦ ᓇᓪᓕᐊᓂᐊᖅᓂᑦ ᓂᕈᐊᖅᑕᐅᔪᓂᑦ ᐱᕈᖅᑐᓂᑦ, ᐊᒪᓚᓗ ᐅᒃᑎᑦᓴᓚᒥᑦ ᖃᓄᖅ

ᓱᖁᓂᖅᑎᑦ ᐱᑭᖅᑎᑕᐅᑦᑎᐊᖅᓯᓗᒃ ᐊᑐᖅᓱᓂᐊᖅᑐᑐᒍᑦ ᖃᐅᔨᓴᖅᑎᓕᓵᑦ ᖃᐅᔨᓴᖅᓱᓱᐊᕐᓂᑦᑎᒍᑦ. Δᐳᔪᓂᓂᑲ ᖃᐅᔨᓴᕈᑎᑦᓯᓂᖅ ᐊᐸᑎᑦᑎᓂᓂᑦ ᑕᐃᒪᐃᓕᓂᖅᑎᑕᐅᖅᓯᓗᒃ (ᓱᑦᓗ ᓱᓪᓕᐅᑦ ᐅᑦᑯᓂᖅᓯᒃ ᐊᓴᒪᓗ ᒪᓴᐅᓂᖅᓯᒃ) ᐅᑯᐊᑦᑕᐅᖅ ᑎᑎᕋᖅᑕᐅᓂᐊᖅᑐᑦ ᑐᑭᓱᐅᑦᑎᐊᑦᓂᐊᖅᓯᒪᑕ ᖃᓄᖅ ᓄᓇᓕᖅᓂᑦ ᑕᐃᒪᐃᓕᓕᖅᑎᓕᖅᑎᖃᕐᓂᖅᓯᒪᓕᖅᑎᒃᓯᒪᓕᖅᑎᑕ ᐱᑭᖅᑐᑦ ᐊᐅᓪᓚᖅᓯᑦ. ᐅᓇ ᓴᓇᔭᕐᑦ ᒥᑭᔪᒃ ᐊᖅᑐᐃᓂᓂᐊᖅᑐᖅ: ᑭᓱᐊᓂᑐᐊᖅ ᒥᑭᔪᓂᒃ ᐱᖃᑦᑕᖅᑐᐊᖅᑕᑦᑕ ᐱᑭᖅᑐᓂᓄᑦ, ᓄᓇᓕᓗ ᐊᓱᑭᖅᑕᖃᖅᑕᑦᓂᖅᓴᓂᓄᑦ ᖃᐅᔨᓴᖅᑎ ᓇᐟᐸᖅᓗᒍ ᐊᓄᓇᓕᓗ ᐋᖅᓯᒍ ᐊᑐᖅᑕᐅᕆᓂᖅᐸᑦ. ᑭᓱᑐᐃᓄᖅᓇᖅᓂᖅ ᐊᐊᑕᐅᖅᓇᖅᓂᖅᐸᑦ.ᐅᑭᐅᖅᑕᖅᑐᖅ ᐅᖅᑯᓱᓴᓕᐊᖅᓯᒪᑦ ᓂᕆᐅᑭᓴᐅᓴᓕᖅᑐᑦ ᓱᓕᖅᓯᒪᒥ ᓱᐅᒃᓴᖅᓯᒪᓕᖅᑐᑦ, ᐊᓄᓇᓕᓗ ᐊᓱᑭᖅᑕᖃᖅᑕᑦᓂᖅᓴᓂᓄᑦ ᖃᐅᔨᓴᖅᑎ ᓇᐟᐸᖅᓗᒍ ᐋᓄᓇᓕᓗ ᐋᓐᓂᐊᕐᓇᖅᑐᑦ ᐱᓕᕆᔨᒃᑲᓪᓚᕆᐊᖅᑐᑦ. ᐱᓕᕆᔨᒃᑲᓪᓚᕆᐊᖅᑐᑦ ᐊᑐᖅᑐᐃᓂᖅᓴᓂᓄᑦ ᐱᓕᕆᔨᒃᑲᓪᓚᕆᐊᖅᑐ

ᐱᓕᓐᐊᓐᓴᐅᓂᐊᖅᑐᑦ

ᓇᒥ	ᖁᓄᐃᓪᑐᒥᑦ ᐱᓕᓐᐊᖁᔨᓂᐊᖅᐸ	ᑭᒃᑯᑦ ᓄᓇᖁᔨᑎᑦ	ᑐᐱᕈᒪᓴᒃᓴᑦ ᓄᓇᐅᐸ ᖁᓄᖅ ᐊᑐᒍᐅᓪᓕᐅᖅᑭᓴᓕᓐᐊᖅᓯᓂᒃ	ᐃᑦᓴᔨᓂᑕᖁᔨᕕᐅᓪᓕᐅᖅᐸ ᐃᓄᖅᓂᓄᑦ ᓇᔪᖅᑕᐅᖁᔨᑦᑕᔨᓂᒋᓪ ᑕᐃᑦᓯᒪᓂᑐᖁᐅᓕᖅᑐᖅ	ᖁᓂᓖᓂᖅᐸᖅ ᓄᓇᓕᑭᓴᐅᔪᖅ ᐊᒻᒪᓗ ᓴᓪᒻᑭᑎᐅᕕᒋᓪ ᓯᓇᓄᑦ
Area where three plant sampling sites will be chosen	Sampling sites	Inuit Owned Surface Lands	Sylvia Grinnell National Park	The park also has archaeological sites but we will not visit them. Our plan is to sample 48 shrub individuals (four species) and to measure leaf photosynthesis back to the laboratory in Iqaluit. See attached document for details.	The nearest communities are the ones in Iqaluit.

ᓄᓇᓕᐅᖅᐸ ᐃᓕᐅᖁᑕᐅᓂᖓᓐᓄᑦ ᓄᓇᓖᓪᓗ ᐊᐃᑲᑐᖁᓕᐅᔨᓂᖓᓐᓄᓕᓂᑦ ᐃᑲᔪᑕᐅᔪᓐᓇᖁᑐᑦ

ᓄᓇᓕᑭᔪᖁᑦ	ᐊᑎᑦ	ᑲᑐᔾᔨᐊᖁᑲᑎᑎᑭᔪᖁᑦ	ᖁᓂᒪᓗ ᑐᓴᕐᑎᑕᐅᓕᐅᓇᐊᖅᓂᓂᑲᑦ
ᐃᖁᓗᐃᑦ	Jamal Shirley	Arctic College	2026-01-10

ᓀᐃᓴᓱᒃ ᐱᒍᓐᓇᐅᑎ ᐊᓐᑭᖅᑕᐅᓯᒪᔪᑦ

ᓇᒃᑎᐊᓐᑭᓱᓂᒃ ᐱᓕᕆᐊᕆᓴᐃᐅᓂᐊᖅᑐᑦ ᑎᑎᕋᓗᑕᑦ:

South Baffin

ᓀᐃᓴᓱᒃ ᐱᒍᓐᓇᐅᑎ ᐊᓐᑭᖅᑕᐅᓯᒪᔪᑦ

ᑲᕿᒪᑎᕐᐅᔨᓯᑦ ᐊᐃᖅᑐᖅᓯᓯᒪᓂᓂ ᒪᓕᑲᕋᓂᔪᓂᒃ ᐱᕋᔭᕋᓂᔪᓂᒃ ᖃᓄᖅ ᐱᔪᓐᓇᐅᑎᑕᐅᓂᖅᓯᒪᓂᒃ ᓀᐃᓴᓱᓯᓚᓗᒃ ᖃᐅᔨᖅᑐᑦ	ᖁᓚᐃᑦᑐᓕᕆᐅᕐᓂ ᓀᐃᓴᓱᓯᑕᕐᑕᐅᔨᖅᖁᓪᓗ ᐱᔪᓐᓇᐅᑎᑕᑎᐅᔨᖅᖁᓪᓗ ᐊᐳᖅᑕᐅᔨᓕᓱᓂᑦ	ᐃᓱᓪ ᖁᓚᐃᓕᓴᕐᓗᓂᐊᓂ	ᐅᓪᓗᒥ ᑐᓂᔨᖅ/ ᑐᓯᔨᖅᑐᑕᐅᓪᓚᐅᖅᓯᒪᔪᖅ	ᑭᒡᓕᖁᕐᖃᕐᓗᒃ
ᓄᓇᕗᑦ ᑲᓇᒪᒃ, ᐊᐸᑎᓕᓪᓗᓴᐅᔪᑦ	Department of Environment – Wildlife Management Division, Nunavut Territory. NUNAVUT WILDLIFE RESEARCH PERMIT - Expected decision date : June 5th	Applied, Decision Pending		
ᓄᓇᕗᑦ ᑲᓇᒪᒃ, ᐊᐸᑎᓕᓪᓗᓴᐅᔪᑦ	NUNAVUT TERRITORIAL PARKS USE PERMIT - Application date : March 25th	Applied, Decision Pending		

Project transportation types

Transportation Type	ᓄᓇᒧᑦ ᐊᑐᐅᐅᓂᐊᖅᐸ	Length of Use
Land	Car or ATV + walk	

Project accomodation types

ᓄᓇᓕᕆᔨᖅ

ᐊᑐᓚᐅᓂᐊᖅᑐᖅ

ᐱᖏᑦ ᐊᖓᔪᖅ ᐊᑐᖅᑕᐅᓂᐅᕆᔪᖅ ᐃᓕᖅᓱᐅᑎᓗᔪᑦ ᐃᑯᑕᐃᑦ, ᒥᓪᓗᐊᕿᑎᑦ, ᖃᖏᑕᓱᖅ, ᓄᖓᓱᐅᐅᑦ ᐊᓱᖓᓪᓗ

ᐊᖓᔪᖅ ᐱᖏᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᖅ ᖃᓄᐅᔨᓐᓂᖅ	ᖃᑦᓱᐅᐅᓴᑦ	ᐊᖓᔪᓂᖓᔪᑦ - ᐳᖅᑐᓂᖓᔪᑦ	ᓱᓕᒍᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᐸ
VTT	1	86*48 in	The vehicule may be use to go on-site

ᑎᑎᕋᐅᓱᓕᔪᒍ ᐅᖅᓱᐅᓴᐃᐅᑦ ᐊᑦᑕᓇᖅᑐᖅᑕᓪᓗᓂᒃ ᐊᑐᖅᑕᐅᓂᐊᕐᓂᖓᑦ

ᓱᓕᒍᑦ ᐅᖅᓱᐅᓴᕿᑎᐊᖅ ᐊᑐᖅᑕᐅᓂᐊᖅᐸ	ᖃᓄᐅᐃᑐᓪᓚᑎᐅᓴᐸ ᐅᖅᓱᐅᓴᕿᑎᐊᖅ	ᖃᑦᓱᐅᓴᐸ ᐅᖅᓱᐅᓴᖃᐅᑎᑦ	ᐳᐅᓴᐅᐃᐸ ᐃᒪᖃᖅᑎᑦᑎᓇᓕᕐᓂᖓᓪᓚᒃ	ᑲᑎᓪᓗᒍ	ᐳᐅᓴᐃᑦ ᐊᒥᓱᓂᖓᑦ	ᓱᓕᒍᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᐸ
Information is not available						

ᐃᒪᖅ ᐊᑐᖅᑕᐅᔨᒪᖅᑐᖅ

ᐅᓪᓗ ᑕᒪᖅ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᖅ	ᖃᓄᖅ ᐃᒥᖅᑕᖃᖅᑕᕐᓂᐊᖅᐸᑦ	ᓇᑭᑦ ᐃᒥᖅᑕᖃᖅᑕᕐᓂᐊᖅᐸᑦ
0		

ᐊᑲᑕᑯᑦ

ᐊᑲᑕᑯᓕᓂᐊᕐᓂᖅ

ᐱᓕᓐᐊᓐᔨᐅᕐᒪᕐᒧᑦ ᐱᓕᓐᐊᓐᔨᐅᓂᐊᖅᑐᖅ	ᖃᓄᐃᑦᑐᖅ ᐊᑲᑕᑯᖅ	ᖃᓄᐅᑎᒋ ᐊᑲᑕᑯᑦ ᓴᖅᑭᐊᓂᐊᖅᑐᓐᔨᐅᐳᑦ	ᖃᓄᐅᖅ ᐊᑲᑕᖅᑕᐅᓂᐊᖅᐸ	ᓴᓗᒪᖅᓴᐅᑎᑲᓴᖅᓂᐅᓂᐊᖅᑐᑦ
Sampling sites	Other, plants	100 grams	Compost if available, otherwise regular trash	Not required

ᐊᐸᑎᒥᐅᑕᓂᖅᑐᑦ ᐊᑲᑐᖅᑕᐅᓯᒪᔪᑦ

The project is designed to have minimal environmental impact. Vegetation sampling is non-destructive and limited in scope. Soil sampling is small in scale and all sites are restored immediately after sampling. Temporary sensors will be removed after use, and no permanent infrastructure will be installed.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

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Three study sites will be selected within Sylvia Grinnell Territorial Park to represent environmental variability across the landscape. At three sites, two contrasting soil fertility conditions will be identified:•Mineral soils associated with silty deposits, generally well-drained and relatively low in organic matter;•Organic soils characterized by high water saturation and accumulation of organic matter.Soil sampling will be conducted to characterize edaphic conditions. Three soil cores per fertility condition will be collected (10 cm depth, 6 cm diameter). This represents a small and localized disturbance. All sampling locations will be restored immediately after collection by refilling holes with surrounding substrate, thereby maintaining surface integrity.

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Four shrub species will be targeted: Salix arctica (prostrated shrub), Salix reticulata (prostrated shrub), Salix richardsonii (erect shrub), Betula glandulosa (erect shrub). These species does not belong to endangered species list.

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We will propose to arctic college to hire one person of the community to show us the sampling sites and explain the environment.

Miscellaneous Project Information

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The project is designed to have minimal environmental impact. Vegetation sampling is non-destructive and limited in scope. Soil sampling is small in scale and all sites are restored immediately after sampling. Temporary sensors will be removed after use, and no permanent infrastructure will be installed.Access to the park will be conducted by ATV, while all activities within study sites will be performed on foot to minimize disturbance. No hazardous substances will be introduced into the environment.

Cumulative Effects

Impacts

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	PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
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(P = ᐊᑲᐅᔨᑭᑎᐊᓕᓇᖅᑐᑦ, N = ᐊᑲᐅᓕᖅᑭᐊᑕᐅᐊᓕᓇᖅᑐᑦ ᐸᓪᐅᒥᐊᔪᖅᑐᖅᑕᐅᐊᓕᓇᓕᖅᑐᑦ ᐸᓪᐅᒥᐊᔪᖅᑐᖅᑕᐅᐊᓕᓇᖅᑐᑦᓗ, M = ᐊᑲᐅᓕᖅᑭᐊᑕᐅᐊᓕᓇᖅᑐᑦ ᐸᓪᐅᒥᐊᔪᖅᑐᖅᑕᐅᐊᓕᓇᖅᑐᑦᓗ, U = ᖃᐅᔨᒪᓕᓇᖅᑭᑦᑐᖅ)

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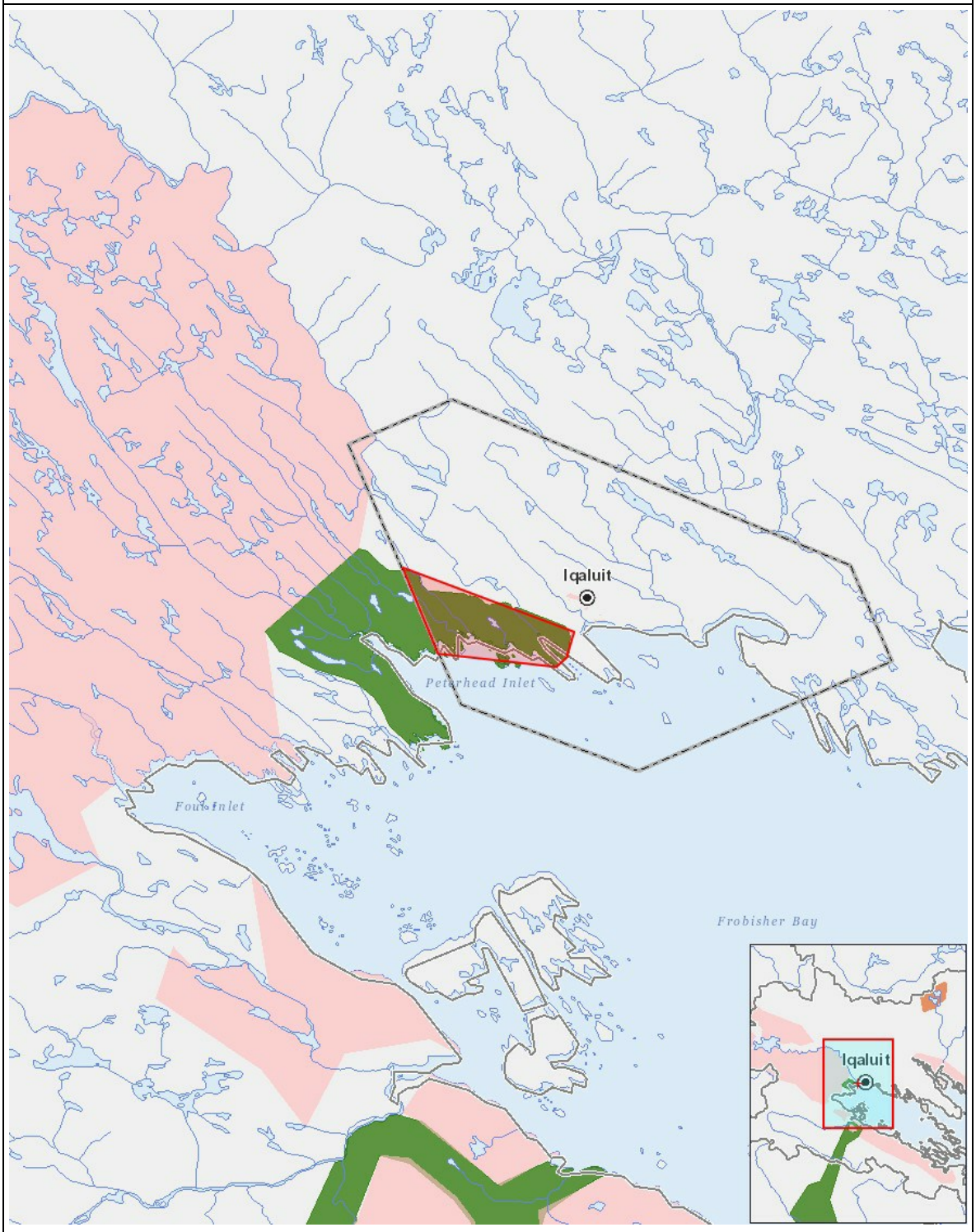

List of Project Geometries

1	polygon	Area where three plant sampling sites will be chosen