SOUTH NATION CONSERVATION
DE LA NATION SUD

38 rue Victoria Street, Finch, ON K0C 1K0 Tel: 613-984-2948 Fax: 613-984-2872 Toll Free: 1-877-984-2948 **www.nation.on.ca**

Clean Water Committee

Meeting Agenda

***** PLEASE NOTE DATE AND START TIME***

Date: Monday, June 7th, 2021

Time: 9:00 a.m.

NOTE:

Conference call number, and Conference PIN number will be provided 48 hours in advance

SOUTH NATION CONSERVATION
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Clean Water Committee

Meeting Agenda

Monday, June 7th, 2021 at 9:00 a.m.

Ronda Boutz,
Team Lead, Special Projects.

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CLEAN WATER COMMITTEE MEETING

Thursday, March 4th, 2021, 9:30 a.m. – Meeting 01/2021

By Electronic Participation

Present:	Jacqueline Kelly-Pemberton, Committee Chair Ray Beauregard, Farmer Russell Bennett, Farmer Michel Kearney, City of Ottawa Alan Kruszel, Farmer Marc Lafléche, Farmer Daniel Lafleur, United Counties of Prescott and Russell René Lalonde, Farmer Glenn Mackey, Farmer André Pommainville, Farmer Tara Redpath, City of Ottawa Terrence Sauvé, Ontario Ministry of Agriculture, Food and Rural Affairs Bill Smirle, SNC Past Chair, ex-officio François St. Amour, United Counties of Prescott and Russell Doug Thompson, Public Citizen Adrian Wynands, Farmer
Regrets:	George Darouze, SNC Chair, ex-officio David Lapen, Agriculture and Agri-Food Canada Pierre Leroux, SNC Vice Chair, ex-officio Gib Patterson, Ottawa Rural Clean Water Program
Staff:	Ronda Boutz, Team Lead, Special Projects Lorie Henderson, Administrative Assistant

CHAIR'S REMARKS

Jacqueline Kelly-Pemberton, Committee Chair, convened the Clean Water Committee meeting of Thursday, March 4th, 2021 at 9:30 a.m. and welcomed everyone. Jacqueline welcomed new Committee member Daniel Lafleur who is replacing Norman Riopel.

APPROVAL OF CLEAN WATER COMMITTEE AGENDA

RESOLUTION NO. CWC-001/21	Moved by: Doug Thompson Seconded by: Glenn Mackey
RESOLVED THAT:	The Members approve the Clean Water Committee agenda of March 4th, 2021 as amended: • Agenda item # 6, Approval of Clean Water Committee virtual meeting minutes of November 25th, 2020 be corrected to November 30th, 2020.

CARRIED

DECLARATION OF CONFLICT OF INTEREST

There were no Declarations of Conflict of Interest.

SNC PROJECT UPDATE - POWERPOINT PRESENTATION

Staff presented Clean Water Program and Project updates.

ROUNDTABLE DISCUSSION

COMMUNITY ENGAGEMENT ACTIVITIES

- Tara Redpath advised the members that she sits on the "Rain Ready Ottawa Technical Advisory Committee (TAC)" and that the TAC members are interested in how the Ottawa Rural Clean Water Grant Program functions; she has shared the grant program information with them.
- Glenn Mackey advised the members that there is a request for approximately 230,000 trees to be planted in 2021 through SNC's Tree Planting Program.

Committee Chair, Jacqueline Kelly-Pemberton left the meeting at 9:40 a.m.
Ray Beauregard stepped in as Acting Chair.

APPROVAL OF: CLEAN WATER COMMITTEE VIRTUAL MEETING MINUTES OF NOVEMBER 30th, 2020

RESOLUTION NO. CWC-002/21	Moved by:	Alan Kruszel
	Seconded by:	Russell Bennett
RESOLVED THAT:	The Members approve the Clean Water Committee virtual meeting minutes of November 30th, 2020 as submitted.	

CARRIED

NEW BUSINESS

REQUEST FOR APPROVAL: ELECTION OF COMMITTEE CHAIR

RESOLUTION NO. CWC-003/21	Moved by:	Bill Smirle
	Seconded by:	François St. Amour
RESOLVED THAT:	The Clean Water Committee appoint Ronda Boutz, Team Lead, Special Projects as the Acting Committee Chair; and	
FURTHER THAT:	SNC Administrative By-law 15.3: '*All elections shall be in accordance with the Procedures for Election of Officers'* be adhered to.	

CARRIED

Ronda Boutz, Acting Committee Chair, declared the Clean Water Committee Chair position vacant.

ELECTION OF COMMITTEE CHAIR
Call for nominations three times for election of Chair (no seconder required)

First Call for Nominations:

Moved by: Bill Smirle — Jacqueline Kelly-Pemberton be nominated for Chair, Clean Water Committee.

Second Call for Nominations: None

Jacqueline Kelly-Pemberton rejoined the meeting 9:45 a.m. and agreed to let her name stand for position of Committee Chair.

Third Call for Nominations: None

Hearing none, nominations closed for the position of Chair, Clean Water Committee.

Approval of the following Motion:

RESOLUTION NO. CWC-004/21

Moved by: Ray Beauregard
Seconded by: Doug Thompson

RESOLVED THAT: For the year 2021, and until the Joint Standing Committee meeting of 2022, that Jacqueline Kelly-Pemberton be elected as Chair of the Clean Water Committee.

CARRIED

REQUEST FOR APPROVAL: 2021 COMMITTEE MEMBERSHIP

Ronda Boutz, Team Lead, Special Projects advised the Committee that Jack Hoogenboom and Lawrence Levere have resigned from the Clean Water Committee. The Committee would like thank Jack and Lawrence for their years of service.

RESOLUTION NO. CWC-005/21

Moved by: Andre Pommainville
Seconded by: Glenn Mackey

RESOLVED THAT: The Clean Water Committee recommends to the Board of Directors to add three additional members to the Committee to bring total

membership (not including ex-officio members) to eighteen members for 2021; and

FURHTER THAT:

The Clean Water Committee recommends the following Clean Water Committee membership to the Board of Directors for 2021:

- Jacqueline Kelly-Pemberton, Committee Chair
- Ray Beauregard, Farmer
- Russell Bennett, Farmer
- Michel Kearney, City of Ottawa
- Alan Kruszel, Farmer
- Daniel Lafleur, United Counties of Prescott and Russell
- Marc Laflechè, Farmer
- René Lalonde, Farmer
- David Lapen, Agriculture and Agri-Food Canada
- Glenn Mackey, Farmer
- Gib Patterson, Ottawa Rural Clean Water Program
- André Pommainville, Farmer
- Tara Redpath, City of Ottawa
- Terrance Sauvé, Ontario Ministry of Agriculture, Food and Rural Affairs
- François St. Amour, United Counties of Prescott and Russell
- Doug Thompson, Public Citizen
- Adrian Wynands, Farmer
- Ottawa Rural Clean Water Program – Vacant
- George Darouze, SNC Chair, ex-officio
- Pierre Leroux, SNC Vice Chair, ex-officio
- Bill Smirle, SNC Past Chair, ex-officio

CARRIED

REQUEST FOR APPROVAL: EASTERN ONTARIO WATER RESOURCES PROGRAM 2020 FINANCIAL STATEMENT – AS OF DECEMBER 31st, 2020

RESOLUTION NO. CWC-006/21	Moved by:	Ray Beauregard
	Seconded by:	Marc Lafléche
RESOLVED THAT:	The Clean Water Committee approve the Eastern Ontario Water Resources Program Financial Statement for the period of January 1 – December 31st, 2020.	

CARRIED

REQUEST FOR APPROVAL: 2021 EASTERN ONTARIO WATER RESOURCES PROGRAM

RESOLUTION NO. CWC-007/21	Moved by:	Tara Redpath
	Seconded by:	Doug Thompson
RESOLVED THAT:	The Clean Water Committee approves status quo for 2021 for the Eastern Ontario Water Resources Program (EOWRP) Application Form, Guidelines, and Rating System; and	
FURTHER THAT:	The Clean Water Committee approves issuing a 2021 call for EOWRP grant proposals to be submitted for consideration at the June 7th, 2021 Clean Water Committee meeting; and	
FURTHER THAT:	Staff provide the final 2021 EOWRP budget to the Clean Water Committee at the June 7th, 2021 meeting.	

CARRIED

UPDATE: 2020 CLEAN WATER PROGRAM SUMMARY

RESOLUTION NO. CWC-008/21	Moved by:	René Lalonde

Seconded by: Doug Thompson

RESOLVED THAT: The Clean Water Committee receive and file the Update: 2020 Clean Water Program Summary report.

CARRIED

REQUEST FOR APPROVAL: 2021 CLEAN WATER PROGRAM GUIDELINES AND STRUCTURE

RESOLUTION NO. CWC-009/21

Moved by: Ray Beauregard
Seconded by: François St. Amour

RESOLVED THAT: The Clean Water Committee recommends to the Board of Directors to approve the status quo for 2021 Clean Water Program Guidelines, Grant Structure, application review process and all project Rating Sheets as amended:

- Grass waterways and water and sediment control basins be added to the erosion control category as eligible projects.

CARRIED

UPDATE: 2021 CLEAN WATER COMMITTEE WORK PLAN

RESOLUTION NO. CWC-010/21

Moved by: Doug Thompson
Seconded by: Alan Kruszel

RESOLVED THAT: The Clean Water Committee receives and files the 2021 Clean Water Committee Work Plan update.

CARRIED

CORRESPONDENCE

a. Tessa Winner – February 18, 2021.
b. Nation Valley News – Pemdale Farm of North Dundas wins prestigious environmental award.

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DATE OF NEXT MEETING

June 7th, 2021 at 9:00 a.m. via MS Teams.

ADJOURNMENT

RESOLUTION NO. CWC-011/21 Moved by: Glenn Mackey

RESOLVED THAT: The Clean Water Committee meeting of March 4th, 2021 be adjourned at 10:46 a.m.

CARRIED

Jacqueline Kelly-Pemberton,
Committee Chair.

Ronda Boutz,
Team Lead, Special Projects.

/lh

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To: Clean Water Committee
From: Ronda Boutz, Team Lead, Special Projects
Date: May 31, 2021
Subject: Summary of Clean Water Program Grant Applications

RECOMMENDATION:
No recommendation, this report is for information purposes.

DISCUSSION:

As per the Committees decision at the March 4th, 2021 meeting; projects have been rated under the 2021 rating sheets. A project must achieve a minimum rating score of 21.5 points to be allocated funding at the June 2021 Committee meetings. To be eligible for funding consideration, a project must achieve a minimum rating score of 15 points.

A list of project applications to date is below for the Committee's information. As per the approved Clean Water Program budget, a total of $60,000 is available for grants.

FINANCIAL IMPLICATIONS/ADHERENCE TO SNC POLICY:
Compliance with Budget: Clean Water Program funding and delivery adheres to the approved Clean Water Program budget. Funding for the Clean Water Program is included in the approved 2021 Budget under Resource Management: Partner Programs: Water on pages 16-17.

SNC Policy Adherence: Allocation of Grants adheres to SNC's Purchasing Policy.

Ronda Boutz,
Team Lead, Special Projects.

Attachments: Summary of 2021 Clean Water Program Applications

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Summary of 2021 Clean Water Program Applications

Project Code	Project Type	Grant %	Grant Request	Rating
2021-APL-CW01	Erosion	50%	$5,000.00	
2021-APL-CW02	Erosion	50%	$5,000.00	
2021-CAS-CW03	Erosion	50%	$4,390.00	
2021-APL-CW04	Erosion	50%	$4,424.78	
2021-APL-CW05	Erosion	50%	$4,424.78	
2021-CAS-CW06	Erosion	50%	$4,391.00	
2021-NAT-CW07	Erosion	50%	$5,000.00	
2021-NAT-CW08	Erosion	50%	$5,000.00	
2021-SDU-CW09	Well Decommissioning	100%	$1,000.00	
2021-SDU-CW10	Well Decommissioning	100%	$1,000.00	
2021-NDU-CW11	Manure Storage	50%	$8,000.00	
2021-NDU-CW12	Well Decommissioning	100%	$1,000.00	
2021-NDU-CW13	Well Decommissioning	100%	$1,000.00	
2021-NGR-CW14	Well Decommissioning	100%	$1,000.00	
2021-RUS-CW15A	Buffer Strip	50%	$2,320.00	
2021-RUS-CW15B	Cover Crop	N/A	$1,000.00	
2021-NAT-CW16	Cover Crop	N/A	$1,000.00	
2021-APL-CW17	Cover Crop	N/A	$1,000.00	
2021-APL-CW18	Cover Crop	N/A	$1,000.00	
2021-APL-CW19	Cover Crop	N/A	$1,000.00	
2021-NAT-CW20	Well Decommissioning	100%	$1,000.00	
2021-APL-CW21	Well Decommissioning	100%	$1,000.00	
2021-NAT-CW22	Well Decommissioning	100%	$1,000.00	
2021-APL-CW23	Well Decommissioning	100%	$1,000.00	
2021-NST-CW24	Well Decommissioning	100%	$1,000.00	
		Total Requested	**$62,950.56**	
		Grant Amount Available	**$60,000.00**	
		Surplus/(Deficit)	**($2,950.26)**	

FOR OFFICE USE:	Project Code: 2021-APL-CW01	Project Type: Erosion Control
	Total Project Cost: $ 12,875.00	Grant Rate: 50 %
	Grant Requested: $ 5,000.00	
	Program Representative: Jason Symington	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? Permanent watercourse draining part of the village of Alfred & surroundings. Severe erosion at several locations due to cave in from downstream slope & damaged tile drain outlets

Name of adjacent watercourse: _____

☑ river or stream ☐ wetland
☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Fixing erosion problem at several locations along watercourse using geotextile & rip rap materials including tile outlets

Total estimated cost (excluding taxes): $ 12,875.00 (An itemized quote must accompany your application)

00014

FOR OFFICE USE:	Project Code: 2021-APL-CW00 Project Type: Erosion
	Total Project Cost: $12,592.25 Grant Rate: 50%
	Grant Requested: $ 5,000.00
	Program Representative: Jason Symington

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☒

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? The water drains in the hill eating away clay Loosing Land an Trees Holding the Hill. It has created a ravine 25 FT deep that is dangerous for kids

Name of adjacent watercourse: Nation River ☒ river or stream ☐ wetland ☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

install a subdrain to divert water to the hill so no erosion happens at the top Fill in the ravine with clay put in a swale compact then put geotextile from top of hill at culvert down to bottom flat area and cover with RIP RAP stone To Reduce the speed of water

Total estimated cost (excluding taxes): $ 12,592.25 (An itemized quote must accompany your application)

00015

FOR OFFICE USE:	Project Code: 2021-APL-CW03	Project Type: Erosion
	Total Project Cost: $ 8,780.00	Grant Rate: 50 %
	Grant Requested: $ 4,390.00	
	Program Representative: Jason Symington	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation?

Please see attached summary of existing situation

Name of adjacent watercourse: _____

☐ river or stream ☐ wetland
☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Please see attached summary of proposed work

- vegitation and trees appox - 780 ft

Total estimated cost (excluding taxes): $ 8,780.00 (An itemized quote must accompany your application)

Existing Situation Summary

The current rate of erosion if much greater then expected, the shoreline has significantly eroded since last summer. The damage that occurred over the summer has proven how this project is very important to complete as soon as possible to preserve the shoreline and the water quality along the South Nation river.

Erosion may lead to the leaking of heavy metal chemicals which are also transported with soil particles causing higher sediment levels which eventually could lead to water eutrophication and disturbance of delicate aquatic eco systems. The sediment cycle starts with the process of erosion where by particles or fragments are weathered from rock material. Rivers often act as conduits for sediment movement. The greater the discharge or rate of flow the higher the capacity there is for sediment transport. Therefore, controlling erosion will allow less sediment into the water so not to disturb the aquatic life and fauna vegetation. This is especially important due to the fact that the natural soil has been overloaded by debris and chemicals from all the construction that has been taking place along the river lots.

Summary of Proposed Work attached

We the owners of a single family dwelling located at 320 Nature Street (Lot 46, Reg Plan # 50M-329), property backing on to the South Nation River, are seeking assistance in the form of a grant to conduct work to stabilize the bank, take measures for erosion control and preserve all the natural vegetation that are currently on the lot.

We plan to excavate only the "lip" of the river bank for the full width of our property line (approximately 50 feet)

Currently the amount of erosion is clearly evident and has left that lip unstable and dangerous for any individual to be standing on top of.

Before any work is initiated a weighted bottom and floating top turbidity curtain made from geo textile fabric will be installed in every section of work being completed.

The small amount of material excavated will be used on other areas of our property not changing any grading or natural vegetation preexisting on the lot.

Secondly, a geotextile base will be added to the shoreline to the top of the bank grade as shown in the cross-section document. The geotextile would extend at the bottom of the shoreline over a minimum of 18 inches to ensure the stone holds it into place.

Thirdly, rip rap stone will be laid down at the base of the shoreline. Then stone that will measure 3 feet (length) by 3 feet (width) by 1 foot (Height) will be laid down on top of the rip rap. The size of the stone particularly the height is being taken into consideration so not to block or impede on the access for the various river fauna (turtles) to make their way onto the shore. The Rocks will be laid down not as a wall, but layered as a gradual slope or step, to provide a smooth transition from the stone to the water. We will be using a maximum of 3 layers/steps and a minimum of 2. No topsoil will be added in order not to change the existing bank grade. Erosion control will be on the basis of 2:1. Every 1 Foot of deep, there

will be a slope of 2 feet. Soil may be slightly moved to ensure a flat and safe surface to walk on along the bank's edge. (please refer to sketch that is attached with the application)

We will be planting trees and bushes which follow the recommendations of forestry and or technical staff to ensure soil stabilization is maximized.

The work is currently planned to start by middle of July and would be completed over the course of 1-2 days depending on the weather. Only when all the work has been completed and all the sediment has settled will the turbidity curtain be removed.

À L'USAGE DU BUREAU	Code du projet : 2021-APL-CW04	Type de projet : Erosion
	Total des coûts du projet : 8,849.56 $	Taux de subvention : 50 %
	Subvention demandée : 4,424.78	
	Représentant(e) du programme : Jason Symington	

4. Autres sources de financement

Avez-vous demandé ou reçu d'autres fonds pour ce projet? ☐ Oui ☒ Non

Si oui, de quelle(s) source(s) : _____ Montant : _____ $

_____ Montant : _____ $

5. Conditions existantes

(Assurez-vous que le texte soit écrit de manière lisible)

Quel sont les effets de la qualité de l'eau dans votre situation actuelle ? THE EROSIAN AND LANDSLIDE MAKES WATER COURSE DIRTY AND MERKY

Nom du cours d'eau : _____

☒ Rivière ou ruisseau ☐ Zone humide

☐ Drain municipal ☐ Drain privé

6. Projet proposé

(Assurez-vous que le texte soit écrit de manière lisible)

Décrivez les travaux que vous prévoyez faire. Veuillez vous reporter aux Lignes directrices de projet pour connaître en détail ce qui est exigé pour votre projet.

HAVE CONTRACTOR MAKE A BED FOR WATER TO PREVENT EROSIAN AND LANDSLIDE

Total des coûts estimés (taxes exclues) : $ 8,849.56 (Une soumission détaillée doit accompagner votre demande.)

FOR OFFICE USE:	Project Code: 2021-APL-CW05	Project Type: Erosion
	Total Project Cost: $ 8,849.56	Grant Rate: 50 %
	Grant Requested: $ 4,424.78	
	Program Representative: Jason Symington	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? The amount of water flowing to a ditch rapidly every spring and causes erosion. The water comes from road side ditch and is very dirty and causes pollution in the water of the ditch flowing further into the woods.

Name of adjacent watercourse: _____

☐ river or stream ☐ wetland
☐ Municipal drain ☑ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Ditch Rehabilitation / erosion control slope.

Total estimated cost (excluding taxes): $ 4,424.78 (An itemized quote must accompany your application)

00020

FOR OFFICE USE:	Project Code: 2021-CAS-CWP6	Project Type: Erosion
	Total Project Cost: $ 8,782.00	Grant Rate: 50%
	Grant Requested: $ 4,391.00	
	Program Representative: Jason Symington	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? The river bank of the South Nation River, for the above mentioned lot, is currently greatly unstable and vulnerable to the high river stream currents of the spring season and to the annual ice shield expansions and retractions of the winter. As seen on the attached photos, large segments of soil are currently separating and displacing from the river bank occasioning loss and further exposure of shoreline. We can also observe in other parts of the shoreline, the water process of erosion that is digging further in the river bank and eventually creating other lumps of soil separations from the main land. In another photo, we can clearly observe the lack of natural vegetation of shrubs and trees to create an adequate root system to slow down the process.

Name of adjacent watercourse: SOUTH NATION RIVER

☑ river or stream ☐ wetland ☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Immediate action to protect the shoreline must be taken and project is planned for July 2021. The contractor ConstructExc is to execute the work as described per the attached quote and permit request sent to SNC October 22, 2020.

- Stabilize the whole shoreline by placement of geotextile and riprap, covered with armour stone as steps down the slope of the bank, resulting in a maximum footprint of 45 square meters below the high water mark and above 57.15 m.a.s.l.
- Establish riparian vegetation with native plant species as recommended by South Nation Conservation to maximize soil stabilization.
- The following permits have already been obtained: DFO 20-HCAA-02246; SNC 2020-CAS-R126; MNRF Work Permit (March 30th, 2021)

Total estimated cost (excluding taxes): $ 8,782.00 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-NAT-CW07	Project Type: Erosion
	Total Project Cost: $ 16,000.00	Grant Rate: 50 %
	Grant Requested: $ 5,000.00	
	Program Representative: Jason Symington	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? our land is eroding into the river and contributing to more sludge like material into the Castor River

Name of adjacent watercourse: Castor river near the Nation River

☑ river or stream ☐ wetland
☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

protect 100 feet of shoreline with a stone wall. See estimate for details from company ConstructExc

Total estimated cost (excluding taxes): $ $16,000 (An itemized quote must accompany your application)

ConstructExc

may 18th 2021

Erosion control - Quote ConstructExc # 200197

To whom it concerns,

We are pleased to present our **price** to supply all labour and equipment for the job in subject:

Item	Description	Unit	Est. qty.	Unit rate	Total est. price
1	install silt fence, geo textile, gabion stone, 3'x3'x1' stones for wall for 100'		1	16000.00$	16000.00$
				Total (HST)	18080.00$

The noted Price is based on and will include the following:

- Mobilization & De-Mobilization
- Dig 4 inch of water, install silt fence, geo textile, gabion stone, 3'x3'x1' stones for wall for 50'
- Work is to be performed during regular working hours
- Locates for all excavation work

The noted pricing will not include the following:

- Unexpected waiting time beyond our control will be charged at hourly rate
- All work not included in above mentioned the quote will be on a time and material basis
- Rock excavation and removal
- Asphalt, sidewalk, curbs
- Granular under footings and slab
- Sub-excavation under slab elevation
- Engineering testing (compaction, soil, ...)
- Permits and deposits fees
- Contaminations and asbestos removal

PO Box 54
Hawkesbury, ON
K6A 2R8

Tel: 450-566-2449

ConstructExc

FOR OFFICE USE:	Project Code: 2021-NAT-CW08	Project Type: Erosion
	Total Project Cost: $ 16,000.00	Grant Rate: 50 %
	Grant Requested: $ 5,000.00	
	Program Representative: Jason Symington	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☒

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? My river bank is eroding into the River (Castor)

Name of adjacent watercourse: Castor

☒ river or stream ☐ wetland ☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Please see attached documentation

Total estimated cost (excluding taxes): $ 16000 (An itemized quote must accompany your application)

Description of Work: Construct a retaining wall, erosion control

- Excavate the top of the river bank from the top of the bank grade to the shoreline grade. This work will be done over the entire width of the above noted address (approximately 100 feet). The work will be performed with the use of a small excavator. Work will be performed to minimize shoreline disruption. Excavated soil will be moved to other areas of the property in order to not disrupt the grading as well as other native features of the property.

- Install Geotextile from the top of the bank extending up to 18 inches onto the shoreline

- Lay down rocks that will measure 3 feet (length) by 3 feet (width) by 1 foot (Height). The size of the stone particularly the height is being taken into consideration so not to block or impede on the access for the various river fauna (turtles) to make their way onto the shore. The Rocks will be laid down not as a wall, but layered as a gradual slope or step, to provide a smooth transition from the stone to the water. We will be using a maximum of 3 layers/steps and a minimum of 2. Erosion control will be on the basis of 2:1. Every 1 Foot of deep, there will be a slope of 2 feet.

Construction Details:

- Estimated start date: July 2021, pending approval of permit

- Estimated completion date: The project from beginning to end is expected to take approximately 1-2 days, but can take up to 2 weeks depending on weather conditions.

- Prior to the work being initiated, a weighted bottom and floating top turbidity curtain made with geotextile fabric will be installed in the section of the work being completed. Work will begin only once all sediment has settled, once the work is completed removal of the curtain will be done once sediment has settled.

FOR OFFICE USE:	Project Code: 2021-SDU-CW09 Project Type: Well Decommission
	Total Project Cost: $ 1,300.00 Grant Rate: 100 %
	Grant Requested: $ 1,000.00
	Program Representative: Jackie Pemberton

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? The well is now in a cultivated field since the house was demolished. The casing is bent. It is in a cultivated field and at risk to more damage from farming operations.

Name of adjacent watercourse: Marcellus Mun. Drain ☐ river or stream ☑ Municipal drain ☐ wetland ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Close up and seal a drilled well with a damaged casing that is no longer in use.

Total estimated cost (excluding taxes): $ 1,300.00 (An itemized quote must accompany your application)

00026

FOR OFFICE USE:	Project Code: 2021-SDU-CW10 Project Type: Well Decommission
	Total Project Cost: $ 1,400.00 Grant Rate: 100%
	Grant Requested: $ 1,000.00
	Program Representative: Jackie Pemberton

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☒

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? Abandoned well found on property

Name of adjacent watercourse: _____

☐ river or stream ☐ wetland
☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

planning to decommission well as per regulations

Total estimated cost (excluding taxes): $ 1,400 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-NDU-CWJ	Project Type: Manure Storage
	Total Project Cost: $ 148,000.00	Grant Rate: 50 %
	Grant Requested: $ 8,000.00	
	Program Representative: Jackie Pemberton	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? Our dairy barn was destroyed by fire October 4, 2020. Prior to the fire, the existing manure storage consisted of a concrete with clay base pad and earthen walls surrounding. It did not have 240 days holding capacity. This sometimes required spreading manure in wintertime to avoid overflow of the pit. In the event of an overflow, water quality (well) had the potential to be compromised. At the time of the fire, our entire herd count was 100, with 50-55 cows in the milking herd. Moving forward with the new construction, cattle numbers will remain the same

Name of adjacent watercourse: _____

☐ river or stream ☐ wetland
☑ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

We are planning to construct a new concrete manure tank. With the construction of a new barn, we have decided to upgrade and improve manure storage on the farm. This will ensure additional holding capacity and a significant improvement to the potential of contamination. A Nutrient Management Strategy 50214 has been applied for and approved for this initiative under regulation 276/03 (Nutrient Management Act, 2002). The new tank will measure 120' X 14'. A Bentofix NWL geosynthetic clay liner will cover the entire floor. Cronin Poured Concrete Ltd. (Mitchell, ON.) has been contracted to carry out construction of this project late summer 2021 (estimated). Please see quote attached for specific details. We have completed the Environmental Farm Plan, (Dec-2020), Crops and Biosecurity and and Generic Livestock workshop (21)

Total estimated cost (excluding taxes): $ 148 000.00 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-NDU-CW12	Project Type: Well Decommission
	Total Project Cost: $ 1,450.00	Grant Rate: 100 %
	Grant Requested: $ 1,000.00	
	Program Representative: Jackie Pemberton	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☒

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? WATER QUALITY NOW IS GOOD

Name of adjacent watercourse: _____

☐ river or stream ☒ Municipal drain ☐ wetland ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

DECOMMISSION WELL AS PER REGULATIONS

Total estimated cost (excluding taxes): $ 1450 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-NDU-CWB Project Type: Well Decommission
	Total Project Cost: $1,346.00 Grant Rate: 100%
	Grant Requested: $ 1,000.00
	Program Representative: Jackie Pemberton

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? No quality impact. Problem was a quantity impact. Well was 47' deep and constantly ran dry.

Name of adjacent watercourse: UNKNOWN

☐ river or stream ☐ wetland
☑ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Properly decommission well as per regulations.
(Excludes Taxes)

Total estimated cost (excluding taxes): $ 1,346.00 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-RUS-CW15A	Project Type: Buffer Strip
	Total Project Cost: $ 4,640.00	Grant Rate: 50 %
	Grant Requested: $ 2,320.00	
	Program Representative: Andre Pommainville	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☑ No ☐

If yes, indicate source: **ALUS (applied)** Amount: $**300$/yr**

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? In the Springtime and during heavy rain events, some surface water runs off from the field into the roadside ditch and Eight Concession Municipal Drain. Bsil soil drains slowly and could benefit from a buffer strip to keep nutrients ~~and topsoil on site. Two row of trees (red maple, European larch and hybrid poplar) were~~ planted by SNC staff in the spring of 2020. Considering last year's early drought, very little of the ground cover was able to establish itself, leaving mostly lambs quarter and burdock to ~~grow instead.~~

Name of adjacent watercourse: Eighth Concession Municipal Drain

☐ river or stream ☐ wetland
☑ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

The goal is to plant trees on the highest edges of the field to increase rainwater catchment on site. We are planning to re-seed the area that was planted in 2020 with a mix of cover crops, perennial wildflowers and native grasses. A new buffer strip on the North side of the field will be added. ~~Planted in bio360, a biodegradable mulch, a 4' wide windbreak containing a diversity of mostly~~ native shrub will be established. The species were selected to grow no more than 15', considering the proximity of hydro lines. Ditch bank seeding with mélange deux-rives seed mix will take place ~~and a 2' wide strip of native and perennial wildflowers will be added in-field.~~

Shrubs: $3,480.00 +Bio 360 Mulch: $500.00 + Ditch Seed Mix: $60.00 + Wildflower Seeds: $500.00 + Organic Transplant Fertilizer $40.00 + Clover Mix Cover Crops: $60.00 = $4,640.00

Total estimated cost (excluding taxes): $4,640.00 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-RUS-CW 15 B	Project Type: Cover Crop
	Total Project Cost: $ 1,120.00	Grant Rate: N/A %
	Grant Requested: $ 1,000.00	
	Program Representative: Andre Pommainville	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation?

As of Spring 2021, bare agricultural soil was found along the Herbert Municipal Drain & Noel Branch of Herbert Municipal Drain. The location's soil types, NGcl & Bsil, offer poor drainage. Therefore, it could benefit from cover crops to enhance water infiltration and limit surface runoff. The location's topography is mostly flat with less than 5% incline.

Name of adjacent watercourse: **Herbert Municipal Drain**

☐ river or stream ☐ wetland
☑ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

A mix of organic white clover and organic double-cut red clover were planted on April 13th, 2021 (one week after the wheat crop was sown.) A rate of 7lbs/ac was broadcasted (65% red clover and 35% white clover.) Used exclusively for cover, no harvesting and no grazing is planned for these cover crops.

For 20 acres: 90lbs organic Red clover 400$ + 50lbs organic white clover 720$

Total estimated cost (excluding taxes): $ **$1,120.00** (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-NAT-CW16 Project Type: Cover Crop
	Total Project Cost: $ 10,000 Grant Rate: N/A %
	Grant Requested: $ 1,000.00
	Program Representative: Andre Pommainville

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☐

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation?_____

Name of adjacent watercourse: Romeo Sauve Drain ☐ river or stream ☐ wetland ☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Plant adlkfjs;flksjas

100 acres of soft winter wheat as cover crop.
Custom Work $24.00/acres
140 lbs of wheat - $39.50/acre
96 lbs fertilizer - $36.00/acre
Total Per acre - $100.00/acre x 100 acres = $10,000.00

Total estimated cost (excluding taxes): $ 10,000.00 (An itemized quote must accompany your application)

À L'USAGE DU BUREAU	Code du projet 2021-APL-CW17	Type de projet : Cover Crop
	Total des coûts du projet : $2,500.00 $	Taux de subvention : N/A %
	Subvention demandée : 1,000 00 $	
	Représentant(e) du programme : Andre Pommainville	

4. Autres sources de financement

Avez-vous demandé ou reçu d'autres fonds pour ce projet? ☐ Oui ☑ Non

Si oui, de quelle(s) source(s) : _____ Montant : _____ $

_____ Montant _____ $

5. Conditions existantes

(Assurez-vous que le texte soit écrit de manière lisible)

Quel sont les effets de la qualité de l'eau dans votre situation actuelle ? _____

LA FERME FAIT DES EFFORTS POUR GARDER DES BANDES TAMPONS, UTILISENT DIFFERENTE DE COUVERTURE. Organic producer-no till producer, using different crop crops in rotation to control weed and increase organic matter

Nom du cours d'eau : _____

☑ Rivière ou ruisseau ☐ Zone humide
☐ Drain municipal ☐ Drain privé

6. Projet proposé

(Assurez-vous que le texte soit écrit de manière lisible)

Décrivez les travaux que vous prévoyez faire. Veuillez vous reporter aux Lignes directrices de projet pour connaître en détail ce qui est exigé pour votre projet

SEMIS SEIGLE D'AUTOMNE EN SEMIS A LA VOLÉE DANS LA CULTURE SOYA, SANS TRAVAIL DE SOL. Cover (either winter wheat or rye) is broadcasted into soyabean crop. 50 Acres

Total des coûts estimés (taxes exclues) $2,500.00 Une soumission détaillée doit accompagner votre demande.)

FOR OFFICE USE:	Project Code: 2021-APL-CW18	Project Type: Cover Crop
	Total Project Cost: $ 1,600.00	Grant Rate: % NA
	Grant Requested: $ 1,000.00	
	Program Representative: Andre Pommainville	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? We are no-tilling 1300 ac since 12 years. Soil structure is improving every year. Cover crop is a big part of our farming system. Soil erosion dramatic reduced. Tile drain running clear water.

Name of adjacent watercourse: _____

☐ river or stream ☐ wetland

☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

50 acres planted at 60" twin. Every third row missing. Herbicide was applied only over 2 rows, gap of 60" cultivated to prevent weed pressure. Cover crop planted on 60" gap.

Cover crop mix: 5% Japanese Millet, 9.7% Tillage Radish, 9.7% purple top turnip, 19.3% Brown Mustard, 38.7% Tillage Root Max, Annual Rye Grass, 17.6% Balance Clover.

Total estimated cost (excluding taxes): $ 1,600.00 (An itemized quote must accompany your application)

À L'USAGE DU BUREAU	Code du projet : 2021-APL-CW19	Type de projet : Cover Crop
	Total des coûts du projet : $4,500.00	Taux de subvention : N/A %
	Subvention demandée : $1,000.00	
	Représentant(e) du programme : Andre Pommainville	

4. Autres sources de financement

Avez-vous demandé ou reçu d'autres fonds pour ce projet? ☐ Oui X Non

Si oui, de quelle(s) source(s) :_____ Montant : _____$

_____ Montant : _____$

5. Conditions existantes

(Assurez-vous que le texte soit écrit de manière lisible)

Quel sont les effets de la qualité de l'eau dans votre situation actuelle ?

Assurer la continuité de notre certification biologique avec Ecocert Canda. _____

_____

_____

Nom du cours d'eau : ___Voir #7 croquis_____ X Rivière ou ruisseau ☐ Zone humide

☐ Drain municipal ☐ Drain privé

6. Projet proposé

(Assurez-vous que le texte soit écrit de manière lisible)

Décrivez les travaux que vous prévoyez faire. Veuillez vous reporter aux Lignes directrices de projet pour connaître en détail ce qui est exigé pour votre projet.

Semer des grains (seigle, blé et...) pour proteger les plants pour qu'ils passent l'hiver et pour que certaines cultures tel que le seigle et blé soit récolté ou enfouit. - **Seed grains (rye, wheat) to protect plants so that rye and wheat will survive winter.**

TAUX DE SEMIS: 340 lbs par acres de seigle d'automne, blé d'automne et orge de printemps – **Seeding rate 340 lbs per acre for winter rye, winter wheat and spring barley.**

Semer le 6 aout 2020 -- **Seeding date Aug 6th, 2020**

Acreage - 3 fields at 30 acres/field.

Culture précédente: grains mélangés --- **Previous crop mixed grains**

Type de sol: glaise – **Soil type clay**

_____

_____ $4,500.00 for 3 fields

Total des coûts estimés (taxes exclues) $4,500.00 $ **(Une soumission détaillée doit accompagner votre demande.)**

À L'USAGE DU BUREAU	Code du projet : 2021-NAT-CW.20	Type de projet : Well Decommission
	Total des coûts du projet : 2,200.00 $	Taux de subvention : 100 %
	Subvention demandée : 1,000.00 $	
	Représentant(e) du programme : Andre Pommainville	

4. Autres sources de financement

Avez-vous demandé ou reçu d'autres fonds pour ce projet? ☐ Oui ☑ Non

Si oui, de quelle(s) source(s) : _____ Montant : _____ $

_____ Montant : _____ $

5. Conditions existantes

(Assurez-vous que le texte soit écrit de manière lisible)

Quel sont les effets de la qualité de l'eau dans votre situation actuelle ? Water no Good

et out of Water

Nom du cours d'eau : _____

☐ Rivière ou ruisseau ☐ Zone humide

☐ Drain municipal ☐ Drain privé

6. Projet proposé

(Assurez-vous que le texte soit écrit de manière lisible)

Décrivez les travaux que vous prévoyez faire. Veuillez vous reporter aux Lignes directrices de projet pour connaître en détail ce qui est exigé pour votre projet.

Condamner Puit

Total des coûts estimés (taxes exclues) : $2,200.00 **$ (Une soumission détaillée doit accompagner votre demande.)**

FOR OFFICE USE:	Project Code: 2021-APL-CW21	Project Type: Well Decommission
	Total Project Cost: $2,100.00	Grant Rate: 100%
	Grant Requested: $ 1,000.00	
	Program Representative: Andre Pommainville	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☒

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? We run out of water most years. The water has also not been testing good in the last 4 years. Ecoli + Coliform present

Name of adjacent watercourse: _____

☐ river or stream ☐ wetland
☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

decommission the current well and put in a new well.

Total estimated cost (excluding taxes): $ 2100.00 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-NAT-CW22	Project Type: Well Decommission
	Total Project Cost: $ 2,100.00	Grant Rate: 100 %
	Grant Requested: $ 1,000.00	
	Program Representative: Andre Pommainville	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? No more water

Name of adjacent watercourse: _____

☐ river or stream ☐ wetland
☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Install New Well and abandoned old well

Total estimated cost (excluding taxes): $ 2,100.00 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-APL-CW23	Project Type: Well Decommission
	Total Project Cost: $2,500.00	Grant Rate: 100%
	Grant Requested: $ 1,000.00	
	Program Representative: Andre Rommainville	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? Pas d'eau ; pas Sécuritaire

Name of adjacent watercourse: _____

☐ river or stream ☐ wetland
☐ Municipal drain ☐ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Refaire un puis neuf

Total estimated cost (excluding taxes): $ 2,500.00 (An itemized quote must accompany your application)

FOR OFFICE USE:	Project Code: 2021-NST-CW24	Project Type: Well Decommission
	Total Project Cost: $ 1,200.00	Grant Rate: 100%
	Grant Requested: $ 1,000.00	
	Program Representative: Rene Lalonde	

4. Other Sources of Funding

Have you applied for or received other funds for this project? Yes ☐ No ☑

If yes, indicate source: _____ Amount: $_____

source: _____ Amount: $_____

5. Existing Situation

(Please ensure writing is legible)

What is the water quality impact from your current situation? during a well cleaning in Nov, 2020, it was discovered that ground water was entering our well and it was no longer safe for consumption. We had a new well drilled, contacted South Nation, and proceeded with decomissioning due to safety concerns.

Name of adjacent watercourse: N/A

☐ river or stream ☐ wetland
☐ Municipal drain ☑ private ditch

6. Proposed Project

(Please ensure writing is legible)

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

our old well was decomissioned as disussed with Laurie Henderson in Nov 2020. We had to act quickly as we had an 8 ft hole in the ground. As instructed, we took pictures, had the well decommissioned and filled the hole in. A new well was installed.

Total estimated cost (excluding taxes): $ 1200 (An itemized quote must accompany your application)

SOUTH NATION
CONSERVATION
DE LA NATION SUD

38 rue Victoria Street, Finch, ON K0C 1K0 Tel: 613-984-2948 Fax: 613-984-2872 Toll Free: 1-877-984-2948 www.nation.on.ca

To: Clean Water Committee
From: Lorie Henderson, Administrative Assistant
Date: May 6th, 2021
Subject: Request for Approval: Extension to Project Approval Deadline

RECOMMENDATION:
The Clean Water Committee approve extending project deadline for the following project below:

2020-NGR-CW08 Well Decommissioning, grant approved at a grant rate of 100% to a maximum grant of $1,000.00; Project deadline extension to November 15th, 2021.

DISCUSSION:

2020-NGR-CW08 Well Decommissioning
Well Decommissioning Project was approved at the June 8th, 2020 Clean Water Committee meeting with a completion deadline of June 30th, 2021. Program Representative, Jackie Pemberton followed up with the landowner and due to the water table being high, he would like to wait until a dry spell to complete the project.

The landowner is requesting approval for an extension to allow for project completion.

FINANCIAL IMPLICATIONS/ADHERENCE TO SNC POLICY:
Compliance with Budget: Clean Water Program and Ottawa Rural Clean Water Program funding and delivery adheres to the approved Clean Water Program and Ottawa Rural Clean Water Program budgets. Funding for both Programs is included in the approved 2020 Budget under Resource Management: Partner Programs: Water on pages 18-19.

SNC Policy Adherence: Allocation of Grants adheres to SNC's Purchasing Policy.

Lorie Henderson,
Administrative Assistant.

05-2021-2312 YDA

Grant Request
$487.50

5. Where did you hear about the Ottawa Rural Clean Water Program?

South Nation Conservation.

6. Number of Livestock ☑ Not Applicable

Please indicate type (e.g. beef, dairy, poultry, hogs, etc.) and number of all livestock (e.g. # cows, # heifers, # calves, # hens, # pullets, # sows, etc.) that pertain to the proposed project

7. Additional Information

Please refer to the Project Guidelines for your proposed project and the Program Guide for additional information on project eligibility, Program requirements, and the application review process. Copies of these documents will be provided to you by Program staff.

8. Existing Situation

What is the water quality impact of your current situation? Please be as specific as possible

New managed forest abuts property owned by SNC. Drain is near boundary

Name of watercourse: Armstrong Drain. Distance from the watercourse: 200 ft.

☐ River, stream or creek ☑ Municipal drain ☐ N/A - Groundwater

9. Proposed Project

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

Creation of managed forest.

Total estimated cost (excluding taxes): $ 650.00 **(An itemized quote must accompany your application)**

Have you applied for or received other funds for this project? ○ Yes ◉ No

If yes, indicate source(s): _____ Amount:$ _____

other source: _____ Amount:$ _____

05-2021-2313DDA Grant Request $750.00

5. Where did you hear about the Ottawa Rural Clean Water Program?

Mario Bourdon Tree Top Services

6. Number of Livestock ☒ Not Applicable

Please indicate type (e.g. beef, dairy, poultry, hogs, etc.) and number of all livestock (e.g. # cows, # heifers, # calves, # hens, # pullets, # sows, etc.) that pertain to the proposed project

7. Additional Information

Please refer to the Project Guidelines for your proposed project and the Program Guide for additional information on project eligibility, Program requirements, and the application review process. Copies of these documents will be provided to you by Program staff.

8. Existing Situation

What is the water quality impact of your current situation? Please be as specific as possible

Name of watercourse: _____ Distance from the watercourse: _____

☐ River, stream or creek ☐ Municipal drain ☐ N/A - Groundwater

9. Proposed Project

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.
Forest Management Plan for the a MFTIP (Managed Forest Tax Incetive Program)

Total estimated cost (excluding taxes): $ 1425 **(An itemized quote must accompany your applicatior**

Have you applied for or received other funds for this project? ○ Yes ◉ No

If yes, indicate source(s): _____ Amount:$ _____

other source: _____ Amount:$ _____

05-2021-2314 DDA

Grant Request
$1,000.00

5. Where did you hear about the Ottawa Rural Clean Water Program?

Facebook

6. Number of Livestock ☒ Not Applicable

Please indicate type (e.g. beef, dairy, poultry, hogs, etc.) and number of all livestock (e.g. # cows, # heifers, # calves, # hens, # pullets, # sows, etc.) that pertain to the proposed project

7. Additional Information

Please refer to the Project Guidelines for your proposed project and the Program Guide for additional information on project eligibility, Program requirements, and the application review process. Copies of these documents will be provided to you by Program staff.

8. Existing Situation

What is the water quality impact of your current situation? Please be as specific as possible

Name of watercourse: Ottawa river and creek going to river Distance from the watercourse: less than 52 meters

☒ River, stream or creek ☐ Municipal drain ☐ N/A - Groundwater

9. Proposed Project

Describe the work you are planning to do. Please refer to the project guidelines for details on what is required for your project.

System is 40 years old.

Total estimated cost (excluding taxes): $ 41,125.00 **(An itemized quote must accompany your application)**

Have you applied for or received other funds for this project? ○ Yes ◉ No

If yes, indicate source(s): Amount:$

other source: Amount:$

SOUTH NATION CONSERVATION
DE LA NATION SUD

38 rue Victoria Street, Finch, ON K0C 1K0 Tel: 613-984-2948 Fax: 613-984-2872 Toll Free: 1-877-984-2948 www.nation.on.ca

To: Clean Water Committee
From: Ronda Boutz, Team Lead, Special Projects
Date: May 31, 2021
Subject: Request for Approval: 2021 Eastern Ontario Water Resources Program Budget

RECOMMENDATION:
The Clean Water Committee approve the 2021 Eastern Ontario Water Resources Program Budget, as presented.

DISCUSSION:

Staff presented a draft 2021 Eastern Ontario Water Resources Program Budget to Committee at the March 4, 2021, meeting. At that time, confirmation of City of Ottawa funding was still pending.

The City of Ottawa approved the Eastern Ontario Water Resources Program 2021 special levy, in the amount of $50,000, on May 12, 2021.

Attached is a copy of the final 2021 Eastern Ontario Water Resources Program budget for approval. There have been no revisions to the draft budget presented in March 2021.

FINANCIAL IMPLICATIONS/ADHERENCE TO SNC POLICY:

Compliance with Budget: Funding for the Eastern Ontario Water Resources Program is included in the 2020 Budget under Resource Management: Partner Programs: Water on pages 18-19.

SNC Policy Adherence: All expenditures for the Eastern Ontario Water Resources Program (EOWRP) adhere to the SNC Purchasing Policy and the approved EOWRP Budget.

Ronda Boutz,
Team Lead, Special Projects

Attachment: 2021 Eastern Ontario Water Resources Program Budget

SOUTH NATION CONSERVATION
DE LA NATION SUD

2021 Eastern Ontario Water Resources Program Budget

		2021 Budget
Revenue:		
a.	United Counties of Prescott-Russell	$25,000
b.	City of Ottawa	$50,000
c.	Carry-over of 2020 encumbered funds	$22,151
	TOTAL REVENUE	**$97,151**
d.	EOWRP Project Management and Outreach	$4,500
e.	EOWRP – Committee Representative Expenses	$1,252
f.	EOWRP Grants	
	i. 2020: Eastern Ontario Children's Water Festival	$2,031
	ii. 2020: Lagoon Effluent Tree Irrigation and Evapo-transpiration Study	$3,000
	iii. 2020: The Use of Radionuclides to Identify Vulnerable Fractured Karst Bedrock Aquifers in Eastern Ontario	$3,000
	iv. 2020: Phase 1: South Nation River Watershed Water Budget Update Plan	$9,500
	v. 2020 Project Grants	$23,800
g.	EOWRP Special Projects	
	i. 2021: UCPR Floodplain Mapping	$25,000
	ii. 2021: South Bear Brook Catchment Study	$25,068
	TOTAL EXPENSES	**$97,151**

Budget Notes

a. United Counties of Prescott-Russell (P&R)
P&R approved a 2021 EOWRP contribution of $25,000 to a Floodplain Mapping Special Project.

b. The City of Ottawa
The City of Ottawa has budgeted $50,000 to EOWRP for 2021. A total of $20,448 has been earmarked for a Special Project (South Bear Brook Catchment Study, see budget note g), the remaining funds will be allocated as EOWRP grants ($23,800), Committee expenses ($1,252), and project management including costs associated with the call for grant proposals ($4,500).

c. Carry-over of 2020 encumbered funds
A total of $22,151 is encumbered to one EOWRP Special Project and four EOWRP grants for projects approved in 2019 for 2020 completion; funding carried to 2021 budget for payment upon project completion.

d. Project Management
South Nation Conservation is retained as the project manager for EOWRP to provide the following services: facilitation of the EOWRP reports to the Clean Water Committee; coordination of project proposals and payments for approved projects, reporting to

EOWRP funders, and preparation of financial statements (as banker for EOWRP). This line item also includes expenses related to issuing a call for project proposals.

e. EOWRP – Committee Representative Expenses

This item includes payment of volunteer EOWRP Clean Water Committee representatives (per diem and mileage) to attend meeting and presentations related to EOWRP business.

f. EOWRP Grants

A total of $23,800 is available in 2021 for allocation to project proposals approved by the Clean Water Committee as per the EOWRP guidelines and rating system. Encumbered 2020 funds ($17,531) for four EOWRP projects is also included in this line item.

g. EOWRP Special Projects

EOWRP funding partners have earmarked funding to EOWRP Special Projects as follows:

2020 Special Projects – 2021 completion	**2020 Funds**
City of Ottawa: Bear Brook Catchment Study (Year 1)	$4,620
TOTAL	**$4,620**
2021 Special Projects	**2021 Funds**
UCPR: Floodplain Mapping	$25,000
City of Ottawa: South Bear Brook Catchment Study (Year 2)	$20,448
TOTAL	**$45,448**

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Recommendation to the Committee:

The Clean Water Committee approve the final report and expenditures of $3,000 for the Use of Radionuclides to Identify Vulnerable Fractured Karst Bedrock Aquifers in Eastern Ontario project in 2021.

Item	Description
1	**Project Objective:** Groundwater in karst and fractured bedrock aquifers is an important resource that is particularly vulnerable to contamination. In these environments, there may be high permeability connections between the surface and the sub-surface that can facilitate rapid recharge and infiltration. The fractures, channels, and conduits that characterize these systems can quickly transport surface-sourced contaminants into the aquifer. While tracer and modeling techniques have been developed to delineate these terrains, techniques are needed to aid in determining the vulnerability of a specific well or aquifer. The objective of this research is to develop a novel methodology that evaluates radionuclides ^{137}Cs and ^{210}Pb as potential indicators of groundwater vulnerability. Both radionuclides are transported in the atmosphere and fall to the surface with rainfall, where they tend to adsorb to surface soil particles. In locations with thick soil cover, this tendency prevents infiltration through the soil and into underlying aquifers, but where soil cover is thin, erosion and direct transport of soil particles presents a pathway for these radionuclides to enter an aquifer. Sediment samples were collected from domestic water wells in Eastern Ontario in order to test for the presence of the aforementioned radionuclides.

2	**Project Location(s):** Figure 1 (attached) shows the locations of field work in two regions of Eastern Ontario: western rural Ottawa and the Township of Alfred and Plantagenet. Nine samples were collected from wells that were identified as potentially vulnerable and ten samples were collected from wells that were classified as non-vulnerable. Nine additional samples were collected from undisturbed surface soil. Sampling sites were selected using geochemical and physical data, following an approach developed at the Ontario Geological Survey.

3	**Deliverables:** ***(1)*** *Summary of Field Program* Please see Appendix A for a summary of the summer field program and lab analysis. ***(2)*** *Review of Expenses* Please see item 4 for a comparison of budgeted amounts with actuals. ***(3)*** *Template of well volunteer letter (DRAFT)* Please see Appendix B for a template of the letter to be sent to homeowners who volunteered to participate in this study. Please note that this content still needs to be reviewed by City of Ottawa communications staff prior to being finalized. A French translation will be generated and provided to those homeowners who requested it. ***(4)*** *Overview of preliminary results* Please see Appendix C for an overview of the preliminary results pertaining to the radionuclide analysis. A more detailed review of the radionuclide technique and vulnerability assessment will be provided in the digital thesis.

4 **Updated Detailed Budget**

Expense (provide detailed breakdown)	**Estimated Program Funding** (EOWRP)	**Actual Program Funding** (EOWRP)	**Lead/Partner Funding** (University of Ottawa and City of Ottawa)	**Total**
Staffing				
Field Assistant – Ottawa Staff (10 days x $280/day)			$2,800	$2,800
Analysis and Reporting - Student (3 months x $2000/month)			$6,000	$6,000
Sr. Geochemist Data Review			$7,500	$7,500
Field Equipment				
Field Lead Vehicle Mileage (10 days x $0.53/km)	$730	$834.75		$834.75
Field Assistant Vehicle Rental (3 weeks x $250/week)			$750	$750
Sampling Device Construction Materials	$750	$487.10		$487.10
Contingency Plan - Well Driller Fee	$500	$407.93		$407.93
Miscellaneous Equipment Expenses	$100	$21.60		$21.60
Lab Analysis				
Gamma Analysis ($20/sample)	$500	$660		$660
Lab Consumables	$200	$376.20		$376.20
Total	$2,780.00	$2,756.08	$17,050	$19,806.08

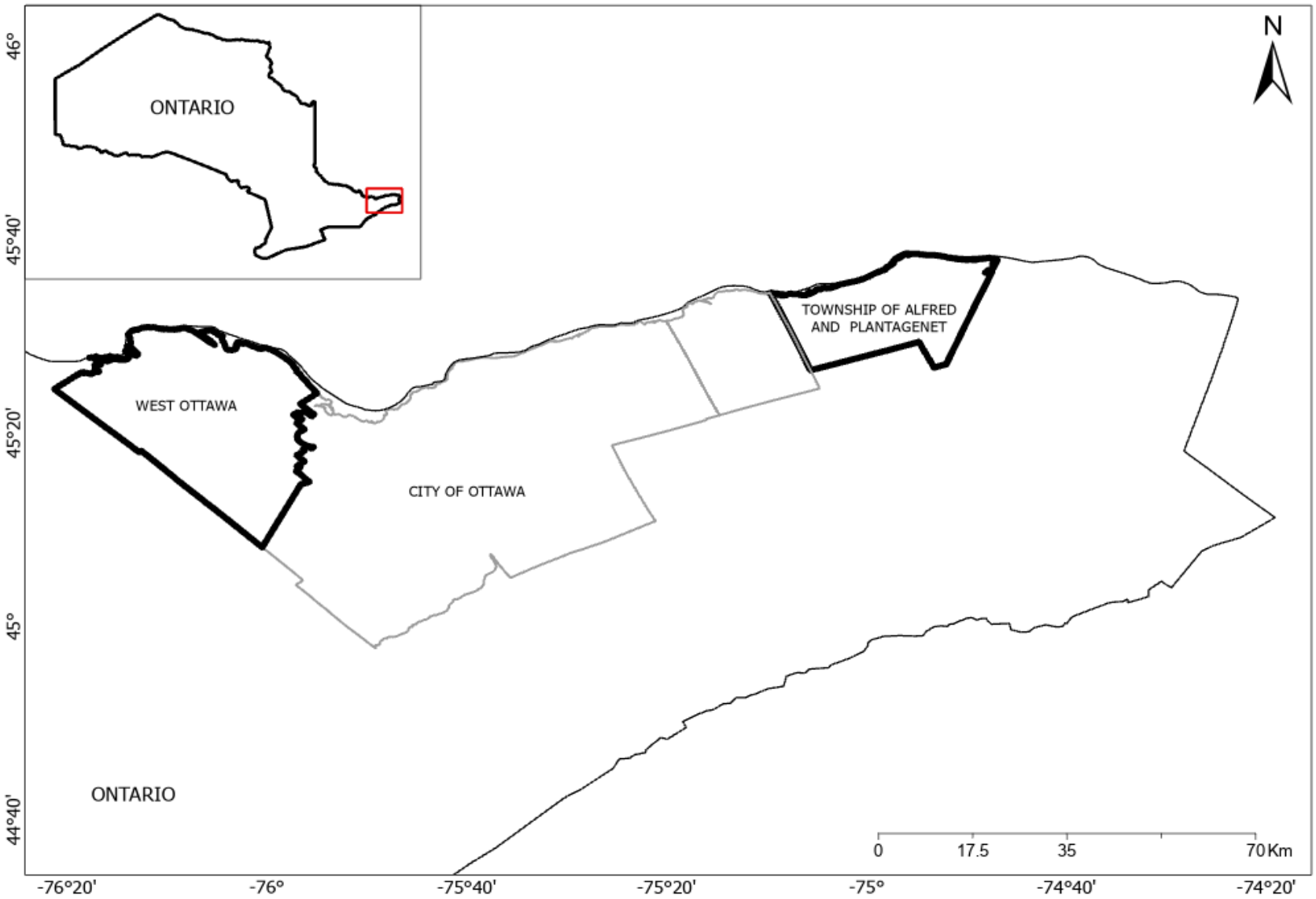


Figure 1: Locations of the study areas where sediment samples were collected from surface soils and wells classified as potentially vulnerable and non-vulnerable.

APPENDIX A

Summary of Field Program and Lab Analysis

Following an approach develop at the Ontario Geological Survey (Hamilton et al., 2017), geochemical and physical data were used to identify potentially vulnerable domestic water wells located to the west and east of the City of Ottawa, Ontario, Canada. The field program required the development of a new technique to collect sediment from the bottom of in-use private water wells. The challenge was to design a sampling device narrow enough to lower down the well past the existing submersible pump. Several iterations of this technique were tested in the field and ruled out. The successful design used a bailer-style probe fitted with a Waterra foot valve (Fig. 1). The probe was lowered to the bottom of the well and moved up and down to pump sediment laden water at the bottom of the well into the tube. Once the probe was pulled up and out of the well, the tube was emptied and the contents rinsed into a sample container using deionized water. Nine sediment samples were collected from potentially vulnerable wells and an additional ten samples were collected from wells that were classified as non-vulnerable. Another nine samples were collected from undisturbed surface soil in the same regions. Each sample was dried in a GENEQing drying oven at 100 degrees Celsius for a minimum of 12 hours and then sieved using 105µm mesh to isolate the clay sized fraction. Next, each sample was mixed with 2wt% activated carbon and sealed with a septum and epoxy to contain ^{222}Rn ingrowth over a twenty-eight day incubation period (Manolopoulou et al., 2003). The ^{137}Cs and ^{210}Pb were counted for 24 hours on an Ortec High Purity Germanium Gamma Spectrometer.

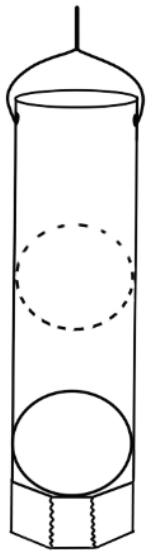


Figure 2. Sketch of the probe used to collect sediment from domestic water wells. Diagram not to scale.

References

Hamilton, S. M., Brunton, F. R., & Priebe, E. H. (2017.). *Regional-scale mapping of buried, surface-connected, karstic groundwater systems using dissolved CO2-O2 in groundwater*. 8.

Manolopoulou, M., Stoulos, St., Mironaki, D., & Papastefanou, C. (2003). A new technique for the accurate measurement of 226Ra by gamma spectroscopy in voluminous samples. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, *508*(3), 362–366. https://doi.org/10.1016/S0168-9002(03)01701-7

APPENDIX B

Name
Address line 1
Address line 2
Address line 3

July XX, 2021

Re: Follow-up Sampling from 2019 Groundwater Study

Dear Name,

Thank you for participating in the 2019 Groundwater Study follow-up research. This work was a part of a master's thesis project at the University of Ottawa, which is looking to develop a novel method to identify fractured and karst bedrock aquifers in Eastern Ontario. Groundwater in these aquifers is an important resource that can be vulnerable to contamination where strong connections exist between the surface and the sub-surface. The objective of this research was to explore where those connections may exist, and if natural isotopic tracers can act as potential indicators of groundwater vulnerability.

Using the geochemical and physical data collected from the 2019 Groundwater Study, we were able to identify wells that could be classified as potentially vulnerable and non-vulnerable. We were particularly interested in the presence of the isotopes ^{137}Cs and ^{210}Pb. Both isotopes move from the atmosphere to the ground surface with rainfall in extremely small, but still measurable amounts, where they tend to attach to soil particles. In areas with thick soils, the isotopes are held in place and are unable to move into the aquifer or wells below. However, in areas where the soil cover is thinner, the isotopes can move with more ease into the aquifer below. The additional sampling that you agreed to, enabled us to test different methods to collect a sediment sample from within the wells and to test for the isotopes of interest.

Attached is a summary table of the parameters measured from your well. If you are interested in learning more about this project, please contact me through me email below and I would be pleased to share a digital copy of my thesis with you upon completion. This analysis acts as a foundational piece of my thesis project and furthers our understanding of identifying aquifer vulnerability. I greatly appreciate your willingness to volunteer your well to support the research.

Yours sincerely,

Alex Harrison
M.Sc. Candidate
University of Ottawa
aharr014@uottawa.ca

APPENDIX C

Overview of Preliminary Results

The radionuclides used in this investigation are ^{137}Cs and ^{210}Pb, with half lives or 30.17 and 22.3 years, respectively. ^{137}Cs is widely distributed as a result of above-ground nuclear weapons testing in the 1960s and ^{210}Pb is continually produced from the decay of ^{222}Rn, which escapes from the earth's crust. As shown in Figure 3, both of these radionuclides are transported in the atmosphere and fall to the surface with rainfall, where they tend to adsorb to surface soil particles. In locations with thick soil cover, this tendency prevents infiltration through the soil and into underlying aquifers, but where soil cover is thin, erosion and direct transport of soil particles presents a pathway for these radionuclides to enter an aquifer.

The data (Figure 4) indicate no significant difference (p=0.05) in the mean activity of excess ^{210}Pb between the surface soil, the potentially vulnerable wells, and the wells classified as non-vulnerable. The data suggest that excess ^{210}Pb is not a good indicator of aquifer vulnerability. This is likely due to its geogenic origin and the mobility of the parent ^{222}Rn gas in the aquifer system. As is shown in Figure 5, radon gas that does not escape to the atmosphere can migrate through the aquifer. It can dissolve into flowing groundwater (as in A) or partition into an available gas phase, such as in fractures (as in B), void space, or the well bore. This migration creates a 'short circuit' of decay making it impossible to distinguish between the excess ^{210}Pb generated in this manner and that which has been transported into the aquifer from the surface.

In contrast to ^{210}Pb, the anthropogenic origin of ^{137}Cs provides a less complicated source function. As expected, the highest activities were detected in surface soil samples. The data indicated a significant difference (p=0.05) in the mean activity of ^{137}Cs between the surface soil and the potentially vulnerable wells. However, counter to the original hypothesis, it was in the potentially vulnerable wells that the lowest activities were measured. In the wells classified as non-vulnerable, the activity of ^{137}Cs was measurable and was not significantly different (p=0.05) from the mean activity of the surface soil. These results are somewhat surprising given the relatively short half-life of ^{137}Cs and they demonstrate inconsistency with the method used to classify wells as potentially vulnerable. Additional analysis is planned to identify possible controls (geological, hydrological, mineralogical, etc.) on ^{137}Cs.

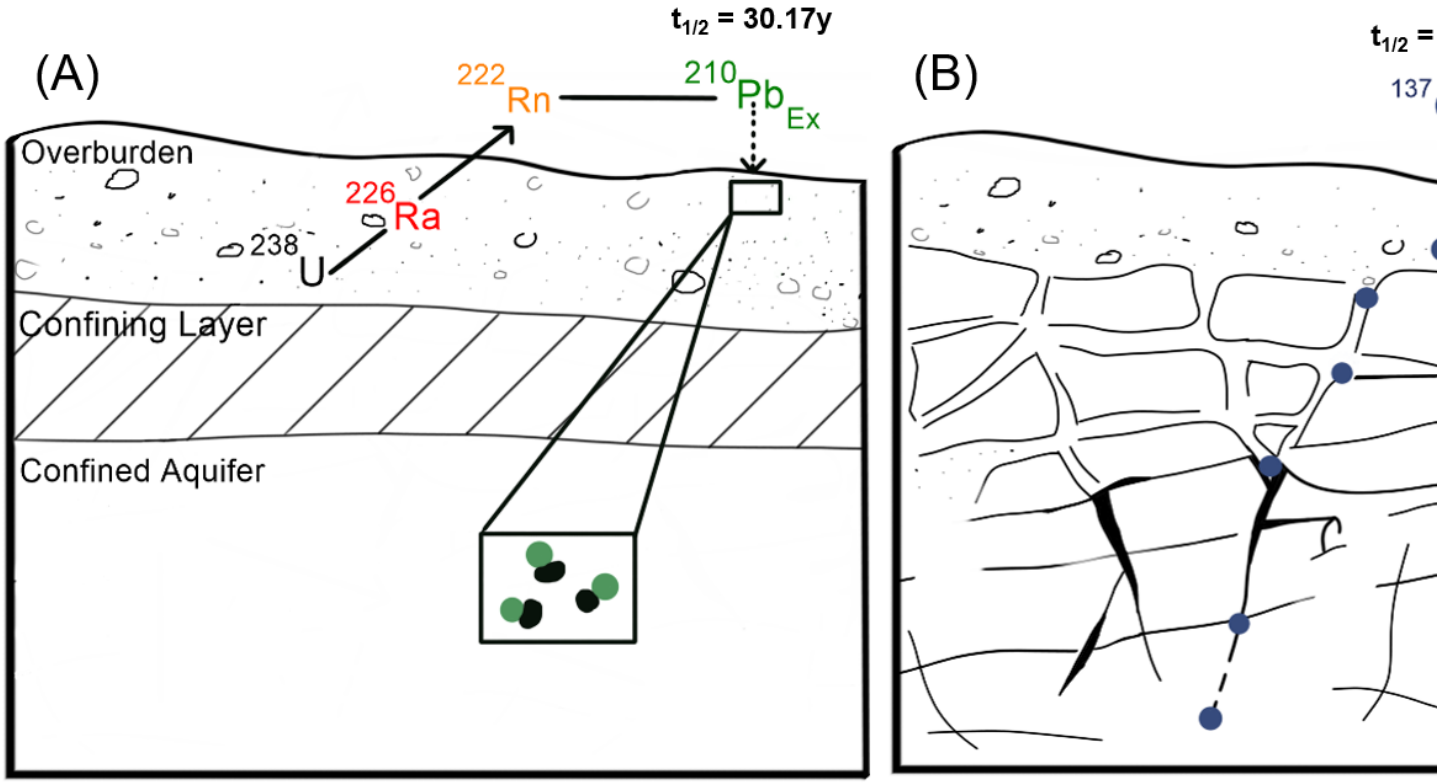


Figure 3: Origin and movement of (A) ^{210}Pb in a non-vulnerable confined aquifer and (B) ^{137}Cs in a vulnerable fractured bedrock aquifer. Diagram not to scale.

(A) **(B)**

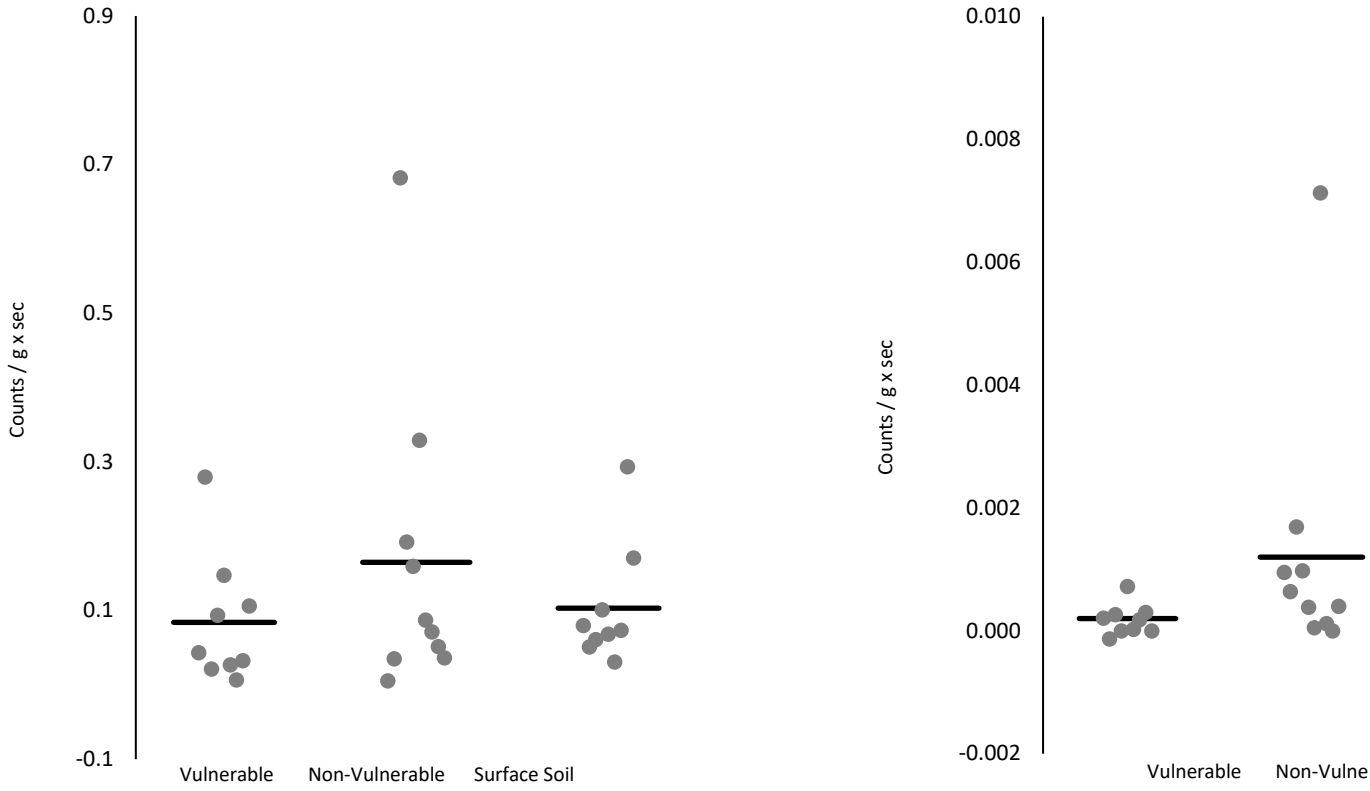
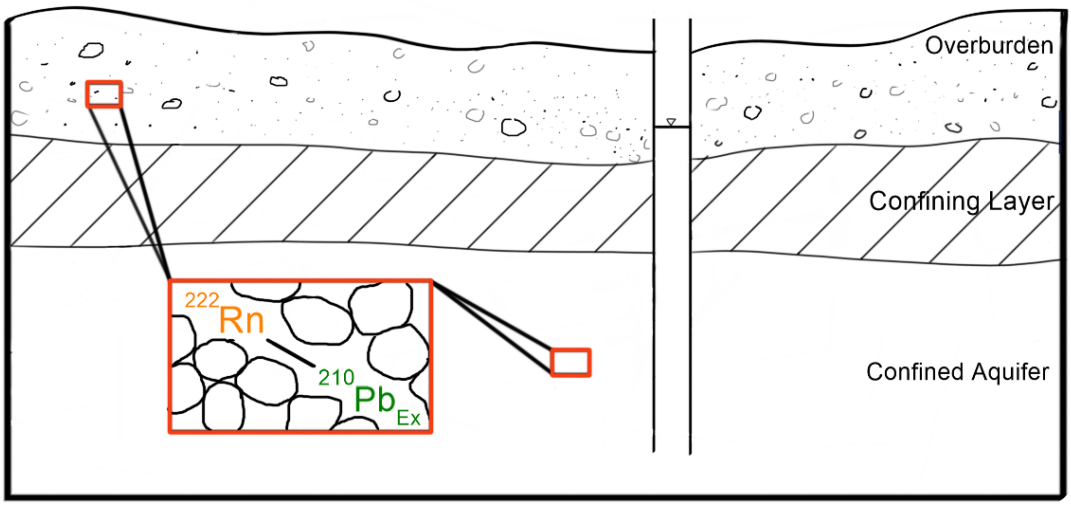


Figure 4: Counts of (A) excess ^{210}Pb and (B) ^{137}Cs in sediment samples from wells classified as potentially vulnerable and non-vulnerable, and from surface soils. Each symbol represents a single measurement. The horizontal line represents the sample mean.

(A)



(B)

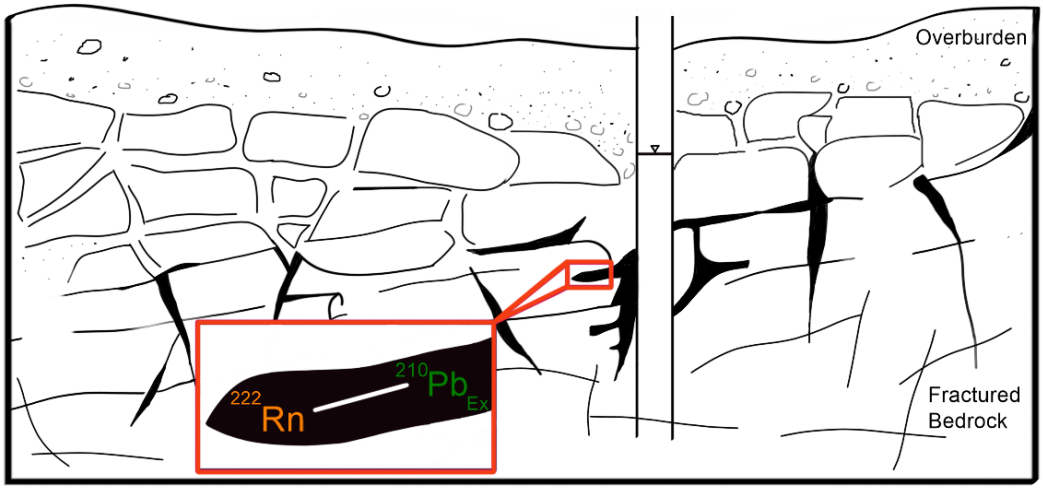


Figure 5: Radon gas that does not escape to the atmosphere can (A) dissolve into flowing groundwater or (B) partition into available gas phases. Diagrams not to scale.

Eastern Ontario Water Resources Program /
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Proposal Submission Form

Item	Description	
1	**Applicant:**	
	Name of Lead Applicant:	South Nation Conservation
	Name(s) of Partners:	
2	**Contact Information:**	
	Administrative Contact: Name and Contact Info	Michael Melaney, Hydrogeologist South Nation Conservation 38 Victoria Street, Finch ON K0C 1K0
	Signing Authority name(s) and position(s)	Angela Coleman, General Manager/Secretary-Treasurer Linda Hutchinson, Director Organization Effectiveness
	Legal Name of Lead Applicant	South Nation River Conservation Authority
3	**Name of Proposed Project:**	Assessing future flood vulnerability in the South Nation River Watershed
4	**Program Funding Request:**	$10,000
5	**Project Description:** The South Nation River watershed is approximately 3,800 km^2. In 2020, SNC utilized an updated version of the South Nation River Watershed's hydrologic model, a fully integrated groundwater-surface water model, to identify catchments that will be sensitive to climate impacts and land use change in 2050 and 2080. Analysis identified percentage increase in flows as a result of increased precipitation and land conversion from forest cover to other land uses. The next step is to identify how these flows impact recently modeled flood hazard mapping, and to determine best ways to mitigate increased flood extents.	
6	**Program Recommendations Addressed:** (Reference ID# from Program Recommendations Summary Table in Appendix A of the Project Proposal Guidelines) **#1 Regional Water Budget:** Establish and implement program for collecting complete data on surface groundwater quantity and quality. **#5 Groundwater Constraints Mapping**: develop a map and documentation identifying limitations on resource development based upon groundwater availability/quality. **#7 Localized Model Development and Application:** collect data and develop model(s).	

Item	Description
	#21 Ground Water Management Plans: Develop plans for specific areas that provide policies regarding water supply, water quality, and source vulnerability and protection. **#25 Groundwater Model:** Update model developed for the EOWRMS to include aquifer depth and flow parameters. **#28 Regional Water Supply Plan:** Identify water sources, quality and quantity; contributes to long-term extraction and protection of water supplies.
7	**Potential for Regional impact on protecting water resources, including applicability and transferability to Program Study Area:** In 2020 EOWRP contributed to phase 1 of the project which included an update to the South Nation River hydrologic model. Model inputs were then changed to reflect future increases in precipitation and future land use (forecasted through an Agriculture and Agri-Food project). This model can now be used to identify impacts to existing flood hazard maps across the City of Ottawa and United Counties of Prescott and Russell. Modelling efforts can also evaluate possible mitigation actions. The methodology undertaken in this project would be widely shared with other Conservation Authorities and water resources managers.

8	**Project Location(s):** South Nation River Watershed				
9	**Deliverables Schedule:**				
	Description of Deliverables *Note: Written deliverables for public distribution must be Bilingual – English and French*	**Bilingual**			**Delivery Date**
		Yes	**No**	**N/A**	
	Delineate Flood Hazard Maps using 2050 and 2080 flow regime data: Use existing flood hazard models in City of Ottawa and United Counties of Prescott and Russell. Update HecGeoRas with 2050 and 2080 flow forecasts for 1% Annual Exceedance Probability Storms. Map flood extents.			X	September 2021
	Assess Impacts Scenarios: Determine impacts scenarios (increases in forest cover, wetland cover, riparian cover) and change raster datasets to reflect these scenarios.			X	October 2021
	Flood Vulnerability Analysis: Update flow models using vulnerability rasters and compare flows for different scenarios and different catchments.			X	Decemebr 2021
	Identify case study watersheds: demonstrate how mitigation factors improve flood resiliency			X	February 2021
	Reporting and Knowledge Sharing: Final Report to Clean Water Committee. Presentation to stakeholder.		X		June 2022

10	**Detailed Budget**			
	Expenditure (provide detailed breakdown)	**Program Funding**	**Lead/Partner Funding**	**Total**
	Delineate Flood Hazard Maps using 2050 and 2080 flow regime data	$5,000	$5,000	$10,000
	Assess impact scenarios	$1,000	$1,000	$2,000
	Flood Vulnerability Analysis	$2,000	$2,000	$4,000
	Generate case study using catchments that demonstrate effective mitigation of flooding	$1,500	$1,500	$3,000
	Reporting and Knowledge Sharing	$2,500	$2,500	$5,000
	Sub-total	**$ 12,000**	**$ 12,000**	**$ 24,000**

Eastern Ontario Water Resources Program / Programme des ressources en eau de l'Est de l'Ontario

Proposal Submission Form

Item	Description	
1	**Applicant:**	
	Name of Lead Applicant:	South Nation Conservation
	Name(s) of Partners:	MECP, MNRF
2	**Contact Information:**	
	Administrative Contact: Name and Contact Info	Sandra Mancini, Team Lead Engineering South Nation Conservation 38 Victoria Street, Finch ON K0C 1K0
	Signing Authority name(s) and position(s)	Angela Coleman, General Manager/Secretary-Treasurer Linda Hutchinson, Director Organization Effectiveness
	Legal Name of Lead Applicant	South Nation River Conservation Authority
3	**Name of Proposed Project:**	South Nation Conservation Climate Station
4	**Program Funding Request:**	$12,000
5	**Project Description:** In recent years, the frequency and severity of floods have increased across Canada. These flood events are often associated with spring snowmelt, rain-on-snow, long-duration heavy precipitation events or short-duration intense storms. Climate change makes these events more likely; land use change associated with urbanization worsens the consequences. Locally, flood events within the Ottawa River and St. Lawrence River basin in 2017 and 2019 have caused substantial damage, including financial losses, damage to infrastructure and reduced crop productivity. **Having accurate, timely, and reliable climate information, including the occurrence and severity of extreme events and their duration is essential information.** This data enhances SNC's ability to predict floods and their associated impacts, and provides municipalities with the ability to prepare and respond quickly and efficiently to save lives, prevent or limit property damage, and relieve local financial burdens. To improve the ability to predict and manage flood risk, SNC proposes to fill in a known gap within the Flood Forecasting and Warning (FF&W) Program by establishing a data collection platform either along the St. Lawrence River in Maynard, or along the Ottawa River in Clarence Rockland. This station will provide real-time precipitation and climate information. Data will transmit hourly and be captured in SNC's WISKI platform, allowing for more timely and precise forecasts.	

Item	Description
6	**Program Recommendations Addressed:** (Reference ID# from Program Recommendations Summary Table in Appendix A of the Project Proposal Guidelines) **#1 Regional Water Budget:** Establish and implement program for collecting complete data on surface groundwater quantity and quality. **#7 Localized Model Development and Application:** collect data and develop model(s). **#24 Public Education:** Multi-faceted plan to increase public understanding and action around surface & groundwater management and protection. **#28 Regional Water Supply Plan:** Identify water sources, quality and quantity; contributes to long-term extraction and protection of water supplies.
7	**Potential for Regional impact on protecting water resources, including applicability and transferability to Program Study Area:** Data collected from the platform will provide essential information for SNC's FF&W Program. Data is applicable to municipal Emergency Response Programs. Climate information will be shared so that it can be used in other Programs (i.e., MNRF, MECP, AAFC etc.)

8	**Project Location(s):** The proposed location for the climate station is either on a property along the St. Lawrence River in Maynard, or a property along the Ottawa River in Clarence Rockland.

9 Deliverables Schedule:

Description of Deliverables *Note: Written deliverables for public distribution must be Bilingual – English and French*	**Bilingual**			**Delivery Date**
	Yes	**No**	**N/A**	
Determine station location: Clarence Rockland or Maynard			X	July 2021
Order equipment, work with MECP/MNRF to secure a GOES NESID for station transmissions to NOAA and WISKI			X	July 2021
Station Installation – SNC staff has experience with equipment and station installation.			X	September 2021
Inclusion in WISKI, Hydro-Geosphere Model, SNC Website			X	September 2021
Education via social media/press release focusing on climate information collection and FF&W Program	X			October 2021
Final Report to Clean Water Committee			X	December 2021

10 Detailed Budget

Expenditure (provide detailed breakdown)	**Program Funding**	**Lead/Partner Funding**	**Total**

	Equipment	$ 12,000	$ 9,000	$ 21,000
	Installation (3 staff, 2 days)		$ 3,000	$ 3,000
	Sub-total	$ 12,000	$ 12,000	**$ 24,000**