

GREAT LAKES
ROUND TABLE SUMMARY
WINTER 2017









Produced by the Union of Ontario Indians, Lands & Resources Department. Any duplication of this document without prior written permission of the Union of Ontario Indians is prohibited.

For additional copies of the publication, please contact:

Lands and Resources Department Union of Ontario Indians P.O. Box 711 North Bay, ON P1B 8J8

Tel: (705) 497-9127

Acknowledgements

The Union of Ontario Indians would like to thank the Ministry of the Environment and Climate Change.





TABLE OF CONTENTS

INTRODUCTION					 . 2
Background		•			 . 2
TOPICS OF DISCUSSION					 . 4
Great Lakes Virtual Space					 . 5
Lake Erie Nutrients Update					 9
Introduction to Water Quantity Management					 11
Excess Soil Update	•	•		•	 14
SUMMARY	•	•	•	•	 .17
APPENDICES	•				 18
1. Great Lakes and Related Lands and Water Initiatives .					 18



INTRODUCTION

The Anishinabek Nation has actively been building positive working relationships with our citizens, government, industry, and academia. It is through these positive working relationships that we can come to understand and respect each other's views and perspectives. With the variety of matters, the Anishinabek Nation needs an avenue to bring regional and local concerns,

In December of 2016, a Lands & Resources Forum was held with a very specific set of goals and objectives in mind. The goal is to build positive working relationships where we can come to understand and respect each other's views and perspectives. The objectives are to:

1. Establish a regional framework that will allow Anishinabek leadership and technical expertise to gather and discuss the local and regional priorities, concerns, and opportunities.

issues, action items, recommendations, and opportunities to the table for discussion.

- 2. Enhance decision-making that will act on matters that will protect our jurisdiction, traditional territories and rights.
- 3. Increase communications and to understand each other's needs, priorities and opportunities.

The relationship between the Anishinabek Nation and the Ministry of the Environment and Climate Change has been moving forward. As part of moving forward, a new regional framework has been established to ensure that the Anishinabek Nation communities can meet and discuss Great Lake Basin initiatives as a collective, share information, and build on community partnerships with MOECC at the regional and local level.

The first series of Anishinabek Regional Round Table took place from January to March 2017 to discuss the initiatives that are occurring within the Great Lakes Basin. The discussion ranged from the implementation of the Great Lakes Protection Act the Great Lakes Guardians' Council, concept of a Great Lakes Virtual Space, Lake Erie Nutrients update, Introduction to water quantity management, and an excess soil update.

BACKGROUND

The Anishinabek Northern Superior First Nations gathered on Feb 3, 2017 at the Valhalla Inn, Thunder Bay Ontario. This round table provided an opportunity for the Northern Superior communities to establish and build upon the relationship, seek opportunities and to address concerns and issues with the Ministry of the Environment and Climate Change with focus on the Lake Superior basin located within the Great Lakes basin.

The Lake Superior Basin is the traditional territory of the Anishinabek Nation and is known as the Northern Superior Region that comprises nine communities. The Robinson Superior Treaty and Lake Superior basin are

one in the same if you refer to the height of land in the treaty. Anishinabek Nation communities located within the Lake Superior basin have jurisdiction to the treaty land and rights to resources. Anishinabek have different perspectives when water, lands, and resources are the topic of discussion.



Figure 1. Anishinabe Nation - Northern Superior Region

FACTS:

Lake Nipigon "at continuous water or at waters that extends over the horizon" (Animbiigoo zaagaigan)

Largest Lake within Ontario. It outflows to Nipigon River, makes its way to Nipigon Bay of Lake Superior. Nipigon is often referred as to the "sixth Great Lake of North America."

Nipigon (Red Rock) "at the pipe stone" (Opwaaganasiniing) is the home of Red Rock Indian Band.

Michipicoten "at the Grand Hill" (Mishibikwadinaang) is the home of Michipicton First Nation



TOPICS OF DISCUSSION

To ensure consistent information sharing between the regions, the topics of discussion on the Great Lakes and related lands and water initiatives were the same for each region. This section will provide a snapshot of the presentations that were provided in order of the agenda for the regional round tables. The first Great Lakes topic of discussion was an overview of the relationship between the Anishinabek Nation and the Ministry of the Environment and Climate Change (MOECC) that dates back to 2008. This includes MOECC working with First Nations

and organizations for a number of years. There have been successes to report in initial implementation of the Great Lakes Protection Act, 2015 and Ontario's Great Lakes strategy, 2012.

The Ministry continues to learn a lot from First Nations and is building a greater understanding that community level engagements are important. In addition to supporting these regional sessions, MOECC continues to demonstrate their commitment in various ways, for example by providing funding for five First Nations Traditional Knowledge Pilot Projects and by attending and sharing information on Great Lakes and land and water initiatives of interest at thirteen pow wows within First Nation communities.

The Great Lake Guardians' Council has been established. This is a forum for gathering ideas, sharing information, identify priorities for action, and fostering partnerships, their inaugural meeting was held in March 2016. Other meetings have occurred:

- Great Lakes Gathering, August 2016
- Second Council Meeting, October 2016
- Third Council Meeting, planned for Spring 2017



Figure 1 The Great Lakes Guardians' Council inaugural meeting March 2016.

¹ The round table agenda and presentations are available; please contact the Union of Ontario Indians Lands and Resources Department.

At the Great Lakes Guardians' Council inaugural meeting an idea for the Great Lakes gathering space was raised, where information can be shared and celebrated. During the second Council meeting, the Council supported the idea of further brainstorming and engagement on a Great Lakes Virtual Space and that a Council working Group would be established that would oversee the concept plan development, gather input and build on ideas.

Grand Council Chief of the Anishinabek Nation is the co-chair to the Great Lakes Guardians' Council alongside with the Minister of the Environment and Climate Change. Other Anishinabek Nation members to the Council includes the Anishinabek Nation Regional Grand Chiefs, Chief Water Commissioner, Josephine Mandamin, Chief of M'Chiqeeng and Chief of Chippewa's of the Thames.

GREAT LAKES VIRTUAL SPACE

The Great Lakes Virtual Space is a concept that could bring together Great Lakes information such as:

- Arts, Culture, Recreation and Tourism
- Traditional Ecological Knowledge and Information
- Scientific Information
- Student, Teachers, and Education Administrations

The various uses seem to be aimed at everyone. In creating the virtual space and developing the concept, a focused, intensive and collaborative brainstorming session took place, called a design charrette. This brings people together from different Great Lakes backgrounds to develop a broad range of ideas and innovative solutions around central themes. Anishinabek Grand Council Chief is the co-chair to the working group and the Chief of Chippewas of the Thames has been actively involved in this process. The outcomes from the design charrette are to create a space that evokes a connection to the Great Lakes and action toward Great Lakes protection. This could take place through storytelling, education, multimedia, Traditional Ecological Knowledge, scientific information, networking, and other creative tools that result in changes to support greater protection and enjoyment of the Great Lakes².

From the discussions, it was heard that the first step is the catch which is to create a personal connection, by using local content, and to establish threads to broaden interest. The second step is the hook or the grab, and the potential to use interactive tools that grab attention and keep people coming back; it could include stories and videos. The third step is the love and to make that connection to the lake (Love the Lakes). The final step is the actions that will promote positive behaviours and further protection of the Great Lakes. An example was provided on slide twenty within the presentation.

² Slide 17, from the Great Lakes and Related Lands and Water Initiatives presentation provided by MOECC



WAWA WARM

MOECC is seeking additional thoughts from the Anishinabek Nation such as:

- 1. What in the space will give me knowledge?
- 2. What tools can be created to connect people, especially youth?
- 3. What makes us curious and sparks a desire to learn?
- 4. How can we engage people, and keep them interested?
- 5. How can this site be of use to my community?

The next steps are to have a Traditional Ecological Knowledge (TEK) focused gathering with the Anishinabek Nation, Stakeholders and various Government Ministries on March 9, 2017 in North Bay Ontario. An additional report will be distributed.

DISCUSSION, QUESTIONS & ANSWERS

As the Great Lake Protection Act and Guardian Council Update was presented, much discussion and ideas were brought forward from the community participants at the regional round table. Some of the points of discussion are provided below:

Suggestions have been provided on what the Great Lakes virtual space should contain, such as interactive maps, storytelling collection, scientific data, etc. that will provide a linkage to the Great lakes somehow. Ideas for instance included, looking at Ice cover and how it behaves with the Great Lakes – beautiful scenery.

The space needs a hook and grab – more discussion to find this hook and grab. The Space can be used to motivate people who have the willingness to protect the lake by actions. For instance, pictures or stories of Lake Nipigon may intrigue someone to check out Lake Nipigon. Series of questions were provided on the slide that was significant in gathering ideas and thoughts.

Comment: March 9, 2017 there will be a Great Lakes Traditional Ecological Knowledge (TEK) Anishinabek and Stakeholders Gathering to share ideas, and actions on how the knowledge could and should be shared, kept, etc.

It was expressed that this space should be hosted outside the government, and that a host will have to compete to hold the virtual space; there is a need to figure out and discuss what features and technology could be included in this space. There was much discussion and some great recommendations provided by the round table and include:

- Potential use of stories to identify places to stop and swim or even picnic. In addition, that this information can be accessible by phone. E.g. Travelling from Manitoba looking for places to stop on the way through to Ontario, and found different places by phone.
- The First Nations in the North need connectivity broad band. The people need access
 to the bigger world. The connections are not clear and are very slow. The virtual space should
 not be so complicated that it crashes the connection. Connectivity is key tourism, teachers,
 students, etc.
- Interactive site for youth and ensuring there are learning tools and training. The age group needs to start very young, they are smart, and need to take advantage of that. Transition to high school, it becomes basic knowledge.
- Need to focus on all age groups, Elder, Youth, and Technicians.
- MOECC should engage the youth in this conversation. They would provide more knowledge on what is being sought.
- Cultural Awareness in the virtual space and provide it to the schools. A number of First Nation communities have paddled down the rivers and Great Lakes and can share stories.
- Idea similar to the Earth Rangers, a certification program, where this type of program should be included. Provide certificates for tasks, actions, or specific training that is completed for all ages. For youth if they complete their tasks it could be as simple as designating them as a Great Lake Guardian or Champion.
- Identify hands on experience and maps with photos of what was seen in certain areas for everyone to see.
- Culture awareness and use this space as a place to pass knowledge. Elders need to share stories in written form or video. There is a lot of history and teachings that can be done in an interactive way. Stories could be tied with the local areas. An example, in sharing Elder's stories via Red Rock Indian Band. The website features a family. The family provided permission to use family photos and stories. The videos could be a challenge as stores can be long. However, clips could be used as long as the stories and meaning are not lost. The edits can be provided to the family for approval. Today, some Elders have passed on, so it is very important to hold and collect this knowledge, and to get these stories you need to build a relationship and trust.
- The youth need to go out and interview the Elders. "Certification ideas for a youth program"
- Everyone has a story or gift to give. E.g. home remedies. You can build on the information that is already collected.
- The space itself (land) Provincial parks that were given up by MNRF should go back to the First Nations, where they can partner with municipalities for "work projects"





- Community knowledge and stories years down the road get stronger and stronger as more knowledge is added.
- Make the importance of water a priority.
- Youth need to understand and know their responsibilities to water (TEK sharing to Youth)
- Educate ourselves with the water. Encourage First Nation citizens to go out to the land and water.
- Future Use: Water walkers will be publishing cartoon stories of the water walks. These could be included in the space. These cartoons can teach us about water.
- Highlight the water walkers' website tells stories about the water walks. An education piece that could be included in the future.
- Make the virtual space mandatory in education to use.
- Areas of concern should be highlighted, the status, state, what is being done, etc. learn more and share.
- Include different age groups in the engagement of this conversation.
- Include the traditional names the Anishinabek language is very important. The words are descriptive and tell a story itself. Understand the meaning of the lakes and rivers.
- Interpretative centre to develop places to spread the knowledge of specific areas.
- Lake Nipigon needs to be included in the maps (request last year) seems to be always missing from ON maps when presenting.
- Scales to be provided on the interactive map. How long would it take you to get from place to place, especially on a canoe route, identify falls and portage routes.

LAKE ERIE NUTRIENTS UPDATE

There are many changes occurring on Lake Erie, mussels are changing the chemistry of the lakes, allowing more sunlight, temperatures are also rising due to climate change. Lake Superior is home to a small portion of Ontario's population (a little over 1%), where Lake Erie is more urbanized and hosts a larger portion of Ontario's population (approximately 17%).

This topic of discussion within the presentation provided an overview of the Canada – U.S. Great Lakes Water Quality Agreement and the Canada Ontario Agreement on Great Lakes Water Quality and Ecosystem Health (COA) where the agreements include a commitment to establish phosphorus reduction targets for Lake Erie by February 2016 and a Domestic Action Plan to meet the targets by February 2018 ³.

Canada and Ontario are working together through COA to complete an Action Plan for Lake Erie and engagement will occur within the coming year (2017), building on engagement efforts to date. The Lake Erie Nutrients Working Group includes representation from organizations and individual First Nation communities in the Lake Erie basin.

DISCUSSION, QUESTIONS & ANSWERS

Before the presentation and discussion, unlabeled photos of Lake Erie were passed around and the table was told that those photos represented Lake Superior. Most participants knew this was not Lake Superior. This exercise is to help prompt the question, "What do you think about your lake being like that?" Lake Erie is facing a sad situation that needs attention.

As the Lake Erie Nutrients Update was presented, much discussion and ideas were brought forward from the community participants at the regional round table. Some of the points that were made are provided below.

QUESTION: 2015 worst bloom recorded – Question – was it a result from the farms?

ANSWER: Yes agriculture operations feed algae and runoff is pushing the nutrients into Lake Erie.

COMMENT: There are other factors that are different that affected Lake Erie in 1960's. Canada and Ontario are working together to reduce phosphorus by 40%. This target has also been adopted under the Great lakes Protection Act.

QUESTION: How did you arrive at the number 40% reduction?

ANSWER: Reviewed best loading data, source of nutrient, ran 11 different models, and compared them. Provided data on bloom size, frequency, etc.

³ More information on the agreements is included on slide 27 or contact the Union of Ontario Indians.



QUESTION: What is the plan to reduce the phosphorus?

ANSWER: U.S. and Canada agreed on the 40% reduction. 80% of the phosphorus is coming from the U.S. side. The First Nations in the South have been involved in the discussions and are active on committees. There proposed plan is to be released very soon. An example of actions includes - stricter rules on wintertime applications - to avoid runoff of nutrients.

QUESTION: Algae blooms come in, can you develop a mechanism to suck it up and give some reduction?

ANSWER: Something to look at, but algae is also present in the sediments and water column of the lake.

COMMENT & QUESTION: In 2016, Red Rock seen an algae bloom in Black Sturgeon Lake, middle of the bush and no agriculture around. Do you know what caused this?

ANSWER: There is an increase of incidents of algae blooms in smaller inland lakes. This could also be contributed to by climate change, increased water temperature and more light penetrating the water column.

QUESTION: What about water-soluble phosphorus?

ANSWER: Challenge is that this type of phosphorus builds up and contributed to the problem in the 1960's.



Figure 3. Northern Superior Regional Round Table Feb 28 - March 2, 2017.



INTRODUCTION TO WATER QUANTITY MANAGEMENT

This section of the presentation was provided to share information about Ontario's moratorium on new and increased bottled water permits and explore future opportunities for conversations and engagement on water quantity management issues in Ontario.

ONTARIO WATER RESOURCES ACT OVERVIEW

The purpose of this presentation was to introduce the Water Management topic for future conversations and discussions, as well as to provide an update on the small but positive actions taken to protect groundwater in Ontario. This topic began with an overview of Ontario's Water Resources Act which provides for protection of surface and groundwater, including tools that focus on water quantity management. Permits are required for water withdrawal exceeding 50,000 litres on any day. Some prohibitions are in place and proposed for specific water taking activities such as water used for water bottling and water charges for highly consumptive industrial and commercial uses.

MOECC does work with other ministries to manage water quantity in Ontario such as the Ministry of Natural Resources and Forestry. It has been heard that First Nation communities and the public have expressed concerns about the impact that water bottling operations are having on groundwater supplies and the Ministries ability to effectively monitor and regulate these facilities.

It was also heard there is a growing interest among First Nation communities and Ontarians about the priority of uses and users of water. In addition, it was recognized that there are uncertainties of future water availability in light of the climate change and future demand.

MORATORIUM - USE OF GROUNDWATER FOR WATER BOTTLING

Ontario's strategy to address these issues to protect water in the province includes three immediate actions that include:

- 1. Two year moratorium on new or increased groundwater taking for water bottling (effective until January 1, 2019)⁴
- 2. Stricter rules for existing water bottling facilities technical guidance document up for review and comment⁵
- 3. New water charge to recover costs from water bottling facilities on groundwater ⁶

Future activities during the moratorium MOECC will undertake include work related to the use of groundwater for the purpose of water bottling and other water quantity management issues in Ontario and including:

⁴ More information provided on slide 34

⁶ More information provided on slide 36

⁵ More information provided on slide 35



Advancing knowledge and understanding of water systems

Reviewing water taking rules

Examining water pricing and other tools

Engagement and discussion during the two year moratorium

DISCUSSION, QUESTIONS & ANSWERS

As the water quantity management was presented, much discussion and ideas were brought forward from the community participants at the regional round table. Some of the points that were made are provided below:

Groundwater is an important topic and often times it is forgotten because of out of sight, out of mind. Ontario has implemented an 18-month moratorium on bottle water companies for new permits greater than 50000 litres, new test pumps sites, stricter rules on existing permits and no increase in existing permits. Municipal source water does not apply in this case.

The new regulation is to protect groundwater, looks at fair sharing and sustainability under the Water Resources Act. More conversations will occur to discuss the priority of use, specifics around use. We all know there will be pressures on the groundwater source due to climate change and increasing population. There have been over 8000 comments so far on the environmental registry posting on this particular topic.

Water Charges - The proposed regulation will look at a 5-year renewal instead of a 10-year renewal. Encourage early notification, have more science, stricter rules if a drought situation occurs. There will also be a proposed new charge. The current charge is \$ 3.71 and the proposed new charge is \$ 503.71 for bottle water companies and other high intensive water user. The expectation is for this proposed regulation to be passed is August 2017.

QUESTION: Municipality water supplies are not included?

ANSWER: Correct and responding comment is that needs to change.

QUESTION: What would happen if a First Nation wanted to open up a bottled water business?

ANSWER: Ontario rules do not apply on First Nation lands.

COMMENT: Need a rule that states plastics are not allowed or that the company has to use recycled plastic. The bottles are seen all over the land and even in the waterways. Alternatively, have a regulation that the companies have to reuse their water bottles. There is a problem with micro plastics and plastics.

QUESTION: How did Ontario come up with the 500.00 dollar fee?

ANSWER: Jurisdiction scan and Ontario is on the higher end of the scale. The money collected will support the programs such as increased science, enforcement, engagement, etc.

QUESTION: Has Ontario established who owns the water?

ANSWER: No one owns the water, but the fee is to help cover the programs.

COMMENT: Treaties never gave up the right to water. The treaty is a contract that has never been fulfilled. First Nations still own the land, as we occupy as said in the treaty.

COMMENT: Selling, regulations, and fees – Ontario should not do that.

COMMENT & QUESTION: If Ontario is worried about water, there is pipeline that is coming through First Nation territory. What is happening to that water that is pushing the bitumen through the pipes that needs large amounts of water?

ANSWER: More discussion needs to occur on the other uses of water for commercial use. Science needs to be more rigorous and look at how is groundwater behaving, and include Traditional Knowledge. This will only increase the knowledge.

COMMENT: MOECC needs to revise the rules, not just for bottled water companies. But others too, Mining is high user of water, Nuclear power plants high user of water.

COMMENT: Ontario is having meaningful conversations with First Nation and others. There are four stages and currently just in the beginning of stage one.

COMMENT: This is the beginning of the conversation and will be included at the next round table meeting.



Figure 4. Northern Superior Regional Round Table, Feb 28 - March 2, 2017.



EXCESS SOIL UPDATE

This section of the presentation was to provide an update where Ontario is at on the framework on managing excess soil. MOECC has been discussing excess soil management with First Nations since 2014 and many concerns were heard such as protection for cultural significant sites, inappropriate dumping in First Nation communities, consideration of Traditional Ecological Knowledge (TEK), the need for soil testing and standards, management of invasive species and opportunities to engage.

The Excess Soil management Policy Framework was finalized in December 2016 and includes 21 key actions and some include:

- Development of a new source site regulation (including supporting amendments to the waste, brownfields and building code regulations)
- New standards and sampling guidance
- Online registry for soil movements
- Establishment of various soil working groups to provide advice on framework implementation. There are First Nation seats available on all of these soil working groups.

There is an upcoming regulatory proposal for excess soil that will leave a property or project area. This proposed regulation is to shift more responsibility to the source site owner to ensure excess soil is properly managed and relocated. This proposed regulation would require an Excess Soil Management Plan for certain sites that focuses on larger and smaller riskier excess soil movements such as condominiums, subdivisions, industrial sites, etc. The goal is to have a final regulation in effect sometime in 2018. More information on this regulatory proposal will be provided at the next round table.

DISCUSSION, QUESTIONS & ANSWERS

As the excess soil update was presented, much discussion and ideas were brought forward from the community participants at the regional round table. Some of the questions and comments are provided below:

QUESTION: Little roads and large companies accumulate soils. What are the impacts and what is happening to the soils out there?

ANSWER: Needs to be answered. The regulation will have a certain amount of reasonableness e.g. project area (subdivision), and MOECC's role is the standards and supporting regulation and tools.

COMMENT: Excess soil, highways are being built from Red Rock to Thunder Bay and it is still in progress. What is the control on the access of soils taking out of those areas? First Nation grave sites have been found and the communities did not even know about it.

QUESTION: Is MOECC considering Hwy projects?

ANSWER: MTO has their own process to manage excess materials, MOECC is actively working with MTO to align new requirements with MTO's existing management.

COMMENT: First Nations need to capture these considerations in the contracts and need to push MTO to the vision that was all share.

COMMENT: Anishinabek communities here are concerned about soils. This is a treaty area of thirteen First Nations and they have a protocol on what happens in the area. Boreal forest soils are very significant to First Nation people our ancestors are buried in some places.

QUESTION: Soil tests that take place when making roads in provincial regulations - if something of cultural significance is found are the findings reported by law?

ANSWER: Yes, they are reported through the process laid out in the Ontario Heritage Act immediately, and they have to stop work and report.

QUESTION: When they found something back in 1960, what were the laws then, have they been updated since that time?

ANSWER: To provide the answer next meeting, noted that it is important because there have been no updates from the White Lake Provincial Park, this was raised as a concern. This links to the questionnaire under the Ontario Heritage Act to help identify culturally significant areas.

COMMENT: Excavations of soils by anyone - the local First Nations should be notified as soon as possible in the process, and if there are findings the First Nations should be aware right away. With respect to the Soil Best Management Practices the First Nations will need more conversation next meeting to elaborate more on this topic and have a discussion.

COMMENT: Private companies need to able to have respect to First Nation heritage, rights and history.

COMMENT: The transportation of soils triggers issues when transporting from A to B.

QUESTION: MTO is moving thousands of tons of sand from place to place, mixed with salt and its impacting the environment, land and water. Abandon mine sites, tailings, and mountains of soil and waste. Monitoring is needed, Does MOECC know what is happening there?

ANSWER: Look into the answer



COMMENT: MTO spills tar to keep the soils from eroding and this tar is leaking into the soils and water in the territory. There are also railroad ties piled up in spots all over the territory and the creosote is contaminating the surrounding soils and water.

COMMENT: Excess soil should be reused close to site.

QUESTION: Is the onus of the individual First Nations to ensure that excess soil is or is not being taken from or dumped on their traditional lands?

ANSWER: Need to come back with answer.

QUESTION: What about revenue sharing on this?

ANSWER: Need to come back with answer?

SUMMARY

Each region and community is unique and has different needs and interests. The themes highlighted from the Northern Superior round table include:

- 1. Lack of Capacity (Expertise & Financial)
- 2. Proper consultation is needed with the communities

The next round table will be held in the spring of 2017, where the follow up item and answered questions will be discussed. We thank all the communities for participating, sharing their stories, and providing recommendations.

ACTION ITEMS FOR NEXT DISCUSSION

- 1. Report to MIRR that the Grants Ontario process is treating First Nation communities like a stakeholder.
- 2. MOECC to report on the Anishinabek Nation uptake on the Great Lakes Guardian Fund
- 3. Soil working group committee more details
- 4. Research on First Nation lands in relation to the Ontario Heritage act and the Legislation of 1960
- 5. Monitoring gravel and materials report back the process (MTO inquiry)
- 6. Rational for the 40% reduction target on phosphorus
- 7. Research the Nutrients and Lake Erie Incentive for farmers to have setbacks and buffers.
- 8. Update Great Lakes maps to include Lake Nipigon
- 9. Update the bubble chart within the presentation to reflect the First Nations
- 10. Follow up and provide update on Nuclear waste matters





Great Lakes and Related Land and Water Initiatives

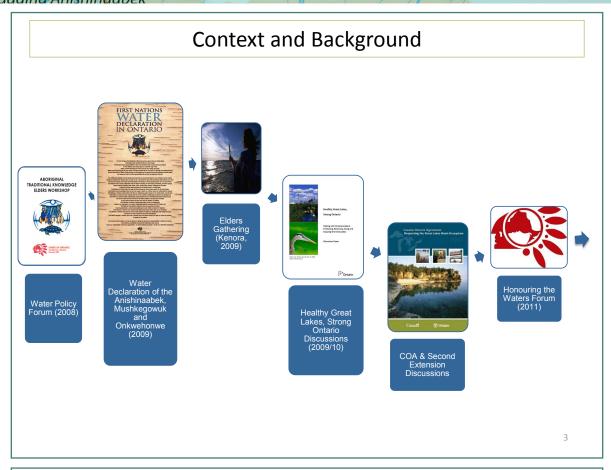
Ministry of the Environment and Climate Change Land and Water Policy Branch

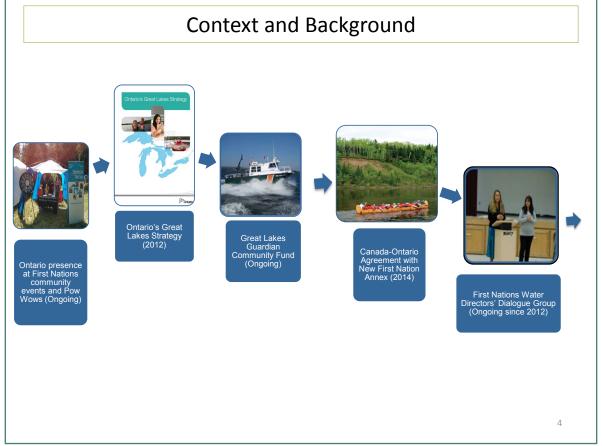
February 2, 2017

Overview

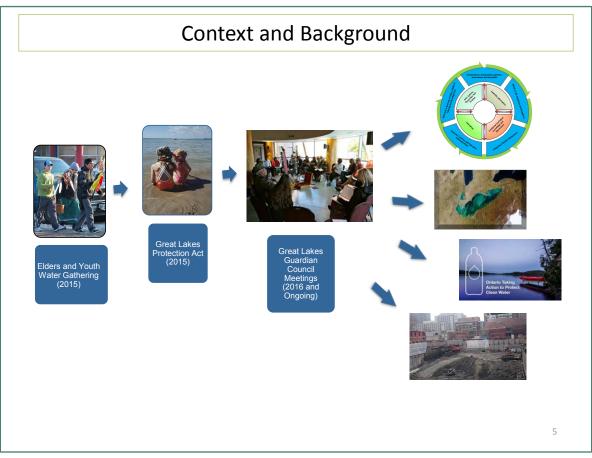
- · Context and Background
- Great Lakes Guardian s' Council Update
- Great Lakes Virtual Space Design Charrette
- Lake Erie Nutrients Update
- Water Quantity Management
 - Permit to Take Water Introduction to the Program
 - Water Bottler Moratorium and Next Steps
- Excess Soil Update

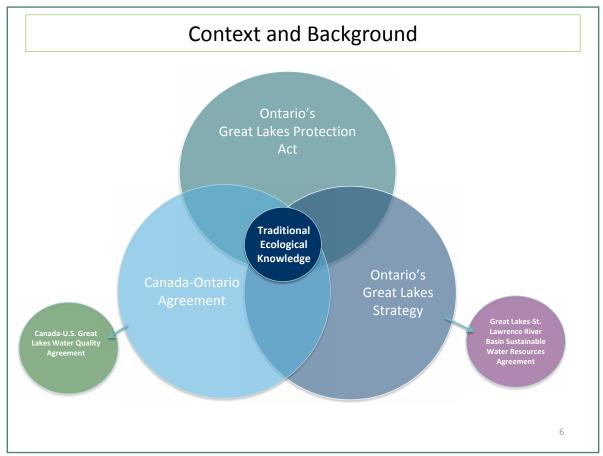














Great Lakes Guardians' Council - Update on Actions

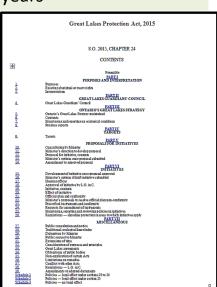


Great Lakes Guardians' Council - Great Lakes Protection Act

The Ministry of the Environment and Climate Change has been working with First Nations communities and organizations on Great Lakes protection for a number of years

The Great Lakes Protection Act:

- Recognizes that First Nations have important connections to the Basin, maintaining a spiritual and cultural relationship with water
- Recognizes that First Nations have a historic relationship with the Great Lakes
- Sets a purpose to improve our understanding and management of the Great Lakes by promoting the consideration of traditional ecological knowledge, if offered



https://www.ontario.ca/laws/statute/15g24

Great Lakes Guardians' Council - Overview



A forum for:

- Gathering ideas
- **Sharing information**
- Identifying priorities for action
- Fostering partnerships

Events to date:

- Inaugural meeting, March 2016
- Great Lakes gathering, August 2016
- Second meeting, October 2016
- Third meeting, Spring 2017

The Guardians' Council is different than other Great Lakes groups, committees and councils as it focuses on Ontario

Great Lakes Guardians' Council - Leadership and Participants

The council is co-chaired by MOECC Minister Glen Murray and Grand Council Chief Patrick Madahbee





































Ontario Great Lakes Ministries

- $\cdot \ \text{Natural Resources and Forestry;} \cdot \text{Agriculture, Food \& Rural Affairs;}$
- · Municipal Affairs; · Indigenous Relations and Reconciliation;
- · Tourism, Culture and Sport; · Research, Innovation and Science;
- · Economic Development and Growth; Infrastructure; · Transportation;
- · Health and Long-Term Care; Intergovernmental Affairs;
- · Education; · Energy; · Finance; · Northern Development and Mines
- · Environment and Climate Change





Great Lakes Guardians' Council - Key Themes

- Great Lakes outreach and education
- Council as a vehicle for working together
- Connecting to and enjoying the Lakes
- Youth and education
- Role of women and water
- Identifying priorities for action
- Information, data and TEK for better decision making
- Great Lakes Virtual Space





Gathering on Manitoulin Island, August 2016

1

Great Lakes Virtual Space







Great Lakes Guardians' Council - Virtual Space Development Status

1 March 2016

Inaugural Council meeting. An idea for a Great Lakes 'gathering space' is raised, where information can be shared and celebrated

2 April 2016 Online research shows that there are many Great Lakes web sites, but none focus on different ways of knowing and appreciating and learning about the Great Lakes

3 Oct 2016 Second Council meeting is held; council supports the idea of a creative brainstorming session and further engagement on a Great Lakes Virtual Space

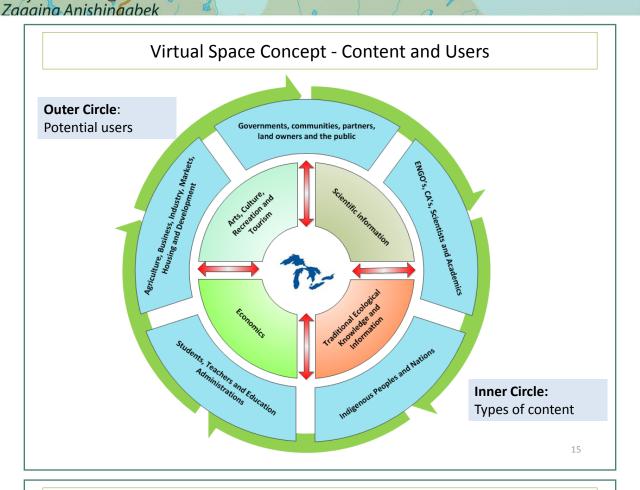
4 Nov 2016 A Design Charrette is held with experts from many Great Lakes perspectives to collaborate and share ideas for a Great Lakes Virtual Space concept

5 2017**→**

A Council Working Group helps oversee the concept plan development; gather input and build on ideas; Gathering to share perspectives on how TEK can be incorporated in the virtual space

13

Existing Great Lakes Sites Great Lakes information resources on the internet: **Governance: Tracking Protection Efforts** IJC website (9) Binational.net (8) Great Lakes Commission (i.e., Great Lakes Blue Ontario Gov. Great Accounting Process) (15) Lakes website (1) ECCC Great Lakes Dontario Great website (5) Lakes Strategy GLIN (7) webpage (2) USEPA (13) NY's Great Lake website (19) Anishinabek environmental network Ontario Open Data (3) GL Climate Change Science Wikipedia (22) 🗘 Knowledge Database (6) Great Lakes Cities Initiative (12) Great Lakes Now (20) ■ IAGLR (10) Conservation Ontario (4) Great Lakes Today (21) GLOS (11) GLEAM (16) GLERL (14) Great Lakes Inform (17) General Facts, STORET (18) **Information & News** Science, Data & Mapping O - Portal



Creating a Great Lakes Virtual Space - Developing the Concept



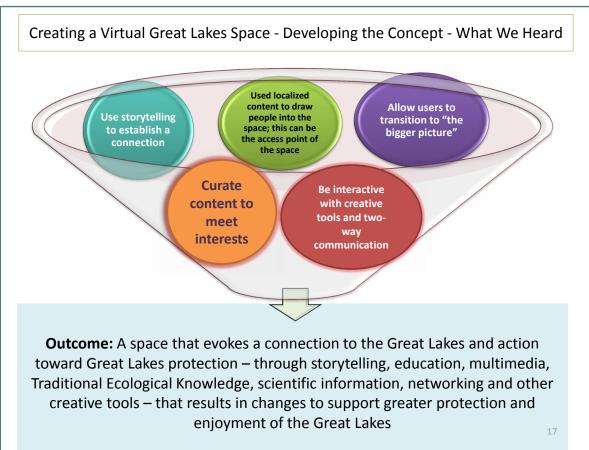


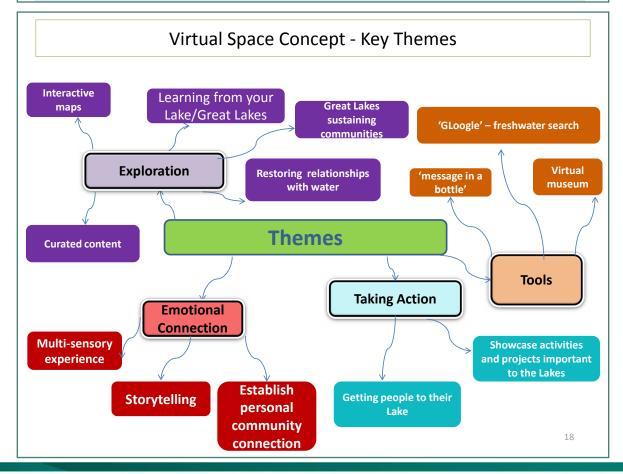
Design Charrette, November 17, 2016

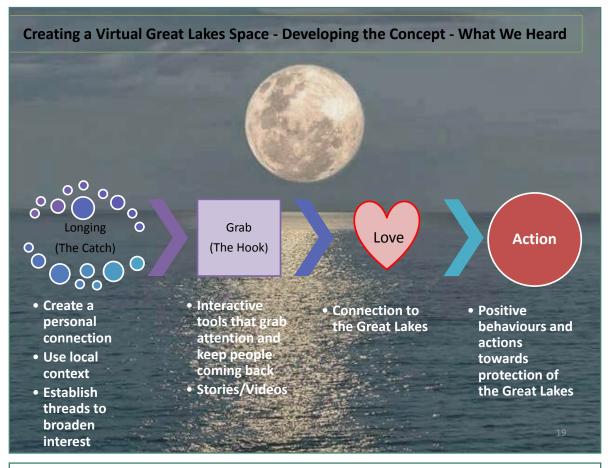
A <u>design charrette</u> is a focused, intensive and collaborative brainstorming session. It brings together people from different Great Lakes backgrounds to develop a broad range of ideas and innovative solutions around a central theme.

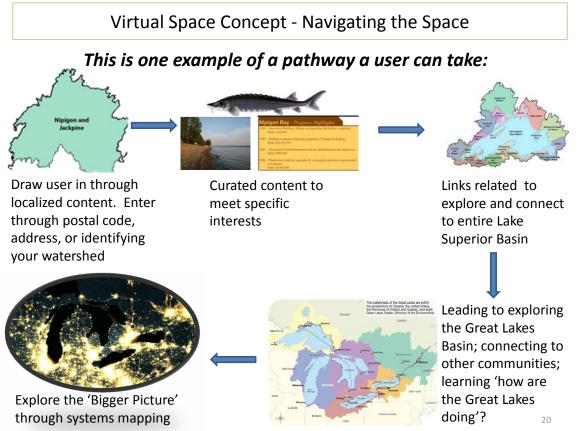
The design charrette is the starting point for engagement and brainstorming. We are reaching out to many partners and stakeholders.

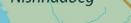














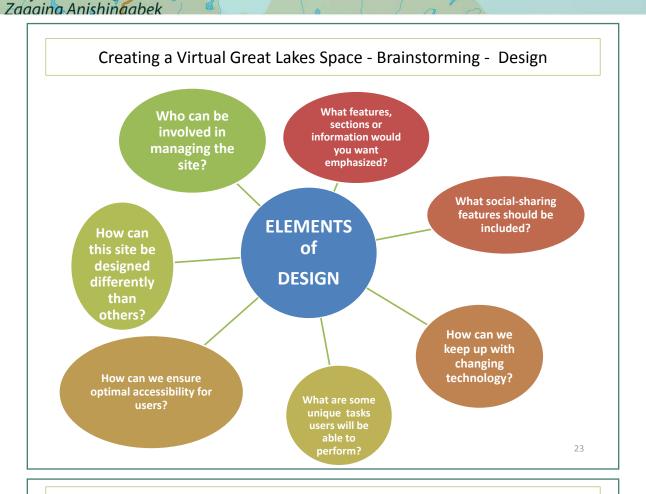
Brainstorming: Great Lakes Virtual Space



21

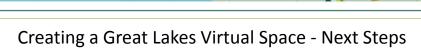
Creating a Virtual Great Lakes Space – Brainstorming – What are the users needs? Who is our How can the space be used to inspire action? How can this target user site meet your for the needs? space? How can we provide ways for users to **USER NEEDS** How will this site be What do we want different from users to know, feel or existing sites? do to make a connection with their lake/Great Lakes What tools will users seek? 22

Northern Superior Region Superior Region Superior Region



Creating a Great Lakes Virtual Space - Your Thoughts

- What in the space will give me knowledge?
- What tools can be created to connect people, especially youth?
- What makes us curious, and sparks a desire to learn?
- How can we engage people, and keep them interested?
- How can this site be of use to my community?



Milestone	Date
TEK focused workshop on Great	Early March 8-9
Lakes virtual space	2017 (TBC)
Draft Great Lakes Virtual Space	End of March
Concept Plan	2017
Great Lakes Guardians' Council – third meeting	April 2017(TBC)

Lake Erie Nutrients Update

Lake Erie Nutrients Update

- The Canada-U.S. Great Lakes Water Quality Agreement (GLWQA) and Canada-Ontario Agreement on Water Quality and Ecosystem Health (COA) include a commitment to establish phosphorus reduction targets for Lake Erie by February 2016, and a Domestic Action Plan to meet the targets by February 2018.
- Canada and the U.S. formally adopted a science-based binational target of 40 percent reduction in phosphorus loads (from 2008 levels) for the western and central basins of Lake Erie, based on an adaptive management framework.
 - This includes reducing phosphorus loadings by 40 percent from key watersheds on both sides of the lake where localized algae is a problem, including two watersheds in Ontario: Thames River and Leamington tributaries.
 - Similar targets were adopted by Ontario under the Great Lakes Protection Act, and were also included in the Western Basin Collaborative Agreement that was signed by the Premier in 2015.



27

Lake Erie Nutrients Update

- Ontario and Canada are working together through COA to complete an Action Plan for Lake Erie, which will identify actions aimed at reducing nutrient loads to meet the binational targets that apply to the Ontario portion of Lake Erie.
- Ontario and Canada held engagement sessions in Summer 2016 with key stakeholders and partners including municipalities, CAs and Indigenous communities.
- Ontario posted on October 6, 2016 for public comment a Policy Proposal Notice on the Environmental Registry for 45 days, which sought public input on a preliminary list of Ontario's proposed actions to be considered for incorporation in the draft Canada-Ontario Action Plan for Lake Erie. The input received is being considered in the development of a draft Action Plan which will be released by Canada and Ontario soon for public comment.
- Ontario and Canada will engage with the Great Lakes community during the coming year on a draft Action Plan, including the Lake Erie Nutrients Working Group (which has First Nations representation), as well as with First Nations organizations and individual First Nations communities in the Lake Erie basin.



Water Quantity Management

29

Protecting Water Quantity in Ontario

Purpose:

 Share information about Ontario's moratorium on new and increased bottled water permits and explore future opportunities for engagement on water quantity management issues in Ontario.

Outline:

- 1. Water Quantity Management in Ontario
- 2. Moratorium Use of Groundwater for Water Bottling
- 3. Activities During the Moratorium
- 4. Contact Information

Northern Superior Region Superior REGION

1. Water Quantity Management in Ontario

The ministry's policy for water quantity management is to ensure the fair sharing, conservation and sustainable use of the surface and ground waters in the province.

- Ontario Water Resources Act (OWRA) provides for the protection of surface and groundwater, including tools that focus on water quantity management:
 - Permit requirement for water withdrawal exceeding 50,000 litres on any day
 - Prohibitions on water diversions and water used for water bottling
 - Water charges for industrial and commercial uses
- MOECC works cooperatively with other ministries and agencies to manage water quantity in Ontario





31



2. Moratorium – Use of Groundwater for Water Bottling

<u>Issues</u>

Biinjitiwaabik

Zaggina Anishinaabek

- First Nations communities and the public have expressed concerns about the impact that water bottling operations are having on groundwater supplies (water quantity) and the Ministry's ability to effectively monitor and regulate these facilities.
- There is also a growing interest among First Nations communities and Ontarians about the priority of uses and users of water in the province and about the province's current water quantity management framework.
- Recognized uncertainties about future water availability in light of impacts of climate change and future demand.







2. Moratorium - Use of Groundwater for Water Bottling

Actions

- Ontario's strategy to address these issues to protect water in the province includes 3 immediate actions.
 - 1) 2-yr moratorium in place on new or increased groundwater taken for water bottling (in effective until January 1, 2019) *slide* 35
 - 2) Stricter rules for existing water bottling facilities (i.e. Bottled Water Technical Guidance Document currently posted on the Environmental Registry for public review until January 31, 2017) *slides 36*
 - 3) A new \$500 regulatory charge to recover costs from water bottling facilities on groundwater currently posted on the Environmental Registry for public review until March 20, 2017 *slide 37*
- These steps will give us a window of time to better understand groundwater in Ontario, while undertaking a review of provincial water taking rules, and examining a range of tools to better protect water.

33



2. Moratorium – Use of Groundwater for Water Bottling: What does it do?

What?

- Prohibits new or increased water takings (> 50,000 litres on any day) from groundwater for water bottling.
- Prohibits the issuance of permits for pumping tests, where the test is to support a future new or expanding water bottling operation.



Who?

- Moratorium applies to every water bottling facility taking groundwater and that is required to have a permit to take water (PTTW).
- Allows for renewals of existing water bottling permits (if no changes).
- Does not affect water bottling facilities that obtain their water from a municipal drinking water system.

When?

The moratorium is in effect from December 16, 2016 until January 1, 2019.



Biinjitiwaabik Northern Superior Region Superior Region

2. Use of Groundwater for Water Bottling: Proposed Technical Guidance

Ontario is proposing stricter rules that would apply to all renewals of existing water takings from groundwater for water bottling.

Procedural Requirements to increase public reporting and transparency, such as:

- Pre-submission notification and consultation to First Nations and Métis.
- Pre-submission notification to CA's, municipalities, source protection authorities.
- Reduce the duration of permits to a *maximum of five years*.
- Mandatory reductions in water takings in times of drought.
- \$3000 application fee for renewals due to added technical requirements
- · Additional monitoring, recording and reporting requirements.

Technical requirements to increase the scientific rigour of applications, such as:

- Enhanced detailed hydrogeological study to justify water taking
- Study would include a *cumulative effects* assessment

Indigenous communities, conservation authorities, and municipalities to be notified of any bottled water applications and provided 60-days to comment



Ontario

35

2. Use of Groundwater for Bottling: Proposed Regulatory Charge

Ontario is proposing a new charge for groundwater taken for water bottling.

What?

- A new regulatory charge **\$500 per million litres** of groundwater taken
- Would apply on top of the existing water charge of \$3.71 per million litres*

Who?

- Any permit holder who takes groundwater to produce bottled water
- Would not apply to water bottling facilities on municipal drinking water systems

Why?

 To recover provincial costs to manage groundwater takings by water bottlers



When?

- MOECC is currently consulting on the proposed charge until March 20, 2017.
- If approved, the charge would apply starting August 1, 2017
 - * See **Appendix 3** for details of existing charges for industrial and commercial water use under the Ontario Water Resources Act



WAWA WAWA

3. Future Activities During the Moratorium

While the proposed moratorium is in place, the Ministry will undertake work related to the use of groundwater for the purpose of water bottling and other priority water quantity management issues in Ontario. This will include:

· Advancing knowledge and understanding of water systems



- Examine existing and undertake additional research to improve understanding of groundwater in Ontario, including consideration of how future climate change and population growth may impact groundwater supplies, and integration of traditional ecological knowledge.
- Learn from, and share, the knowledge of other experts, e.g. academics, conservation authorities, etc..

· Reviewing water taking rules

- Review the existing rules governing water takings in Ontario, including:
 - Rules in areas designated in the Water Taking and Transfer regulation as "high use watersheds".
 - · The need to prioritize water uses to guide future water quantity management
 - · Implementation of water taking policies.

37

3. Activities During the Moratorium

· Examining water pricing and other tools



Examine a range of pricing mechanisms and other tools to help respond to concerns related to broader environmental, economic, and social impacts of water bottling operations in Ontario

Engagement and discussion during the 2-year moratorium

 Engage Indigenous organizations and First Nations communities on the use of groundwater for water bottling and priority water quantity management issues.

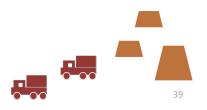


- Stage 1 Early listening sessions to inform and shape discussion in future stages, including engaging with First Nations and experts
- Stage 2 Engagement and discussion with First Nations, stakeholders and the public on priority issues identified in Stage 1
- Stage 3 Identify and engage on proposed actions
- Stage 4 Begin implementing new actions and on-going review of effectiveness and understanding of water systems

Ontario

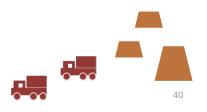
Ontario

Excess Soil Update



Excess Soil Update

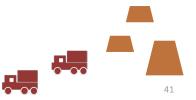
- 1. Context and What We Heard
- 2. Excess Soil Management Policy Framework
- 3. Upcoming Regulatory Proposal
- 4. Next Steps





Context and What We Heard

- Ontario's Great Lakes Strategy, 2012 includes a commitment to develop a policy framework to encourage sustainable soil management practices throughout Ontario, including the Great Lakes Basin.
- What we heard from First Nations since 2014 on excess soil management:
 - Need protections for **culturally significant** sites, burial sites
 - Inappropriate dumping of excess soil e.g., on reserve, near water
 - Consideration of Traditional Ecological Knowledge, if offered
 - Need for excess soil testing and standards
 - Transparency of excess soil movements
 - Management of invasive species
 - Continued opportunities to engage



Excess Soil Management Policy Framework

The Excess Soil Management Policy Framework was finalized in December 2016. The framework has 2 overarching goals:

- 1. Protect human health and the environment from inappropriate relocation of excess soil
- 2. Enhance opportunities for the beneficial reuse of excess soil and reduce greenhouse gas emissions associated with the movement of excess soil

In addition, it sets out the roles and responsibilities of source sites

MOECC's Excess Soil Management Policy Framework includes **21 key actions**. Some of the early actions anticipated for delivery under the new framework include the following:

- A new source site regulation, supported by complementary amendments to existing regulations e.g., Waste, Brownfields and Building Code
- New standards and sampling guidance for excess soil

Other actions to support delivery including an **online registry for soil movements** and the establishment of various **working groups** to advise on framework implementation.



Upcoming Regulatory Proposal

- Excess soil is soil that will leave or has left a property or project area.
- The new Excess Soil Management Policy Framework is intended to shift more of the responsibility of excess soil management to the source site owner to ensure excess soil is properly managed and relocated.
- To achieve this outcome, the proposed regulatory package would require an **Excess Soil Management Plan** for certain source sites with requirements including:
 - · Standards for reuse and requirements for sampling
 - Requirements for tracking and registration of excess soil movements
 - Certification of plans by a Qualified Person
- Focus on larger and smaller riskier excess soil movements e.g., condominiums, subdivisions, transit corridors, water infrastructure, industrial sites.



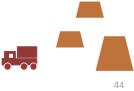


Next Steps

- Continue to engage First Nation communities through:
 - Meetings UOI meetings (April/May 2017), TBC workshops with First Nations and other partners
 - Teleconferences First Nations water dialogue regular calls
 - Invitations visit or calls with First Nation communities
 - Excess Soil Working Group and Sub Working Groups participation welcomed
- Development of Regulatory Proposal Underway
- Regulatory Proposal Engagement- Winter/Spring, 2017
- Potential Final Regulation Posted, If Approved Summer, 2017
- Potential Final Regulation In Effect 2018



(MOECC, January 2016)





Miigwetch

Key Land and Water Policy Branch Contacts:

- 1. Great Lakes
 - Manager, Great Lakes Office Carolyn O'Neill @ 416-314-7833
 - Senior Policy Advisor, Great Lakes Office Jamie Boles @ 416-212-1145
 - External & Stakeholder Relations, Great Lakes Office Emily Santoro @ 416-314-7047
- 2. Lake Erie Nutrients
 - Manager, Strategic Analysis Section Madhu Malhotra @ 416-314-1702
 - Policy Analyst, Strategic Analysis Section HyeRin Choi @ 416-212-6566
- 3. Water Quantity Management
 - Supervisor, Southwest Region Office, Operations Patrick Spezowka @ 519-873-5027
 - Manager, Water Policy Section Leo Luong @ 416-212-4703
- 4. Excess Soil
 - Manager, Land Use Policy Section Chris Lompart @ 416-314-7051
 - Senior Policy Advisor, Land Use Policy Section Laura Blease @ 416-325-8275
 - Senior Policy Analyst, Land Use Policy Section Sanjay Coelho @ 416-326-5107

45

Water Quantity Management - Appendices

Appendix 1: Water Taking - Ontario Water Resources Act & Water Taking and Transfer Regulation

Appendix 2: Purpose of the PTTW Program

Appendix 3: Water Charges

Ontario

Nipigon
Northern Superior Regien Superior Region
Zagaina Anishinaabek

Appendix 1: Ontario Water Resources Act – Water Taking

- In Ontario, water takings are managed by the Ontario Water Resources Act.
- Section 34.1 of the Act requires anyone taking more than 50,000 litres of water in a day to obtain a Permit to Take Water, except for:
 - domestic (ordinary household) use
 - watering livestock and poultry (but not irrigation of crops for sale)
 - firefighting purposes.



47

Appendix 1: Water Taking and Transfer Regulation (O. Reg. 387/04)

- The Water Taking and Transfer Regulation under the Act sets out rules the Ministry must follow when considering applications for water taking permits
 - Requires consideration of ecosystem natural functions, water availability for existing uses, measures related to water conservation and efficient use, and any public or private interest in the water
- · Requires notification to those potentially affected
- Establishes high use watersheds: new or expanded takings by highly consumptive water takers are not permitted in high use watersheds
- Requires all permit holders to annually report their daily taking amounts to Ministry





Appendix 2: Purpose of the PTTW Program

- Implement the Ministry's water quantity management policy to ensure the fair sharing, conservation and sustainable use of the surface and ground waters in the province.
- Emphasis is on conservation and fair sharing of water in province.
- Key focus is to safeguard water through wise and sustainable use, and the recognition of other needs, including ecosystem health and other water users by preventing unacceptable interference caused by water takings.
- Permitting enables monitoring and tracking of actual water use to inform provincial water management initiatives.
- PTTW is <u>not</u> a mechanism to allocate or assign rights to water or explicitly establish water use priorities.

49



Appendix 3: Water Charges under the Ontario Water Resources Act

- Subsection 75 (1.5) of the Ontario Water Resources Act provides authority to:
 - "make regulations establishing and governing charges to promote the conservation, protection and management of Ontario's waters and their efficient and sustainable use, or to recover costs the Government of Ontario incurs for that purpose in the administration of this or any other Act".
- Under Ontario Regulation 450/07 "Charges for Industrial and Commercial Water Users", highly consumptive water users (e.g., water bottlers, beverage manufacturers, ready-mix producers) pay \$3.71 per million litres of water taken from surface, ground, or municipal sources.
 - The charge recovers a portion of the province's water quantity management program costs.
- Ontario has no authority to charge a royalty for water takings, as the Province does not own the water.

Ontario





P.O. Box 711, 1 Migizii Miikan Road, North Bay, ON P1B 8J8

Ph: (705) 497-9127 Toll Free: 1-877-702-5200

Website: www.anishinabek.ca