


A Regime for Environmental Protection, Administration, Monitoring & Enforcement



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Prepared for:

Chippewas of Georgina Island

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Table of Contents

1	1.0 Introduction & Background	1
1	Rationale	1.1
2	Study methodology	1.2
4	Report framework	1.3
4	2.0 Vision Statement	4
4	3.0 Septic systems	4
4	Description of the issue	3.1
5	Applicable laws, regulations and guidelines	3.2
6	Objective of policy	3.3
6	Proposed First Nation strategy	3.4
8	Benefits to the community	3.5
8	4.0 Natural Heritage	8
8	Description of the issue	4.1
9	Applicable laws, regulations and guidelines	4.2
10	Objective of policy	4.3
10	First Nation strategy	4.4
12	Benefits to the community	4.5
12	5.0 Solid Waste	12
12	Description of the issue	5.1
13	Applicable laws, regulations and guidelines	5.2
15	Objective of policy	5.3
15	First Nation strategy	5.4
15	Benefits to the community	5.5
15	6.0 Environmental Emergencies & Protection	15
15	Description of the issue	6.1
16	Applicable laws, regulations and guidelines	6.2
17	Objective of policy	6.3
18	First Nation strategy	6.4
20	Benefits to the community	6.5
20	7.0 Fuel storage tanks	20
20	Description of the issue	7.1
21	Objective of policy	7.2
21	Applicable laws, regulations and guidelines	7.3
21	First Nation strategy	7.4
22	Benefits to the community	7.5
22	8.0 Community Survey	22
22	Surveyed community groups	8.1
23	Preferred method for enforcing the laws	8.2
23	Potential incentive programs	8.3
24	9.0 Implementation Strategy	24
24	Funding	9.1
25	Process for law development and review	9.2
25	Procedures to ensure voluntary compliance with laws	9.3
26	Proposed enforcement program	9.4
26	Potential punishments	9.5
27	Proposed implementation schedule	9.6
28	Potential support agencies	9.7
30	10.0 References	30

1.0 Introduction & Background

1.1 Rationale

The Chippewas of Georgina Island First Nation Reserve #33 are a small and progressive First Nation community, located on Lake Simcoe which is 70 km north of Toronto, Ontario. The on-reserve community consists of 190 residents (Neegan Burnside 2008), all of whom reside on Georgina Island which is the largest of the islands (3,200 acres) that make up the Reserve. The Island's population tends to increase in the summer to up to 600 people, many of which are seasonal cottagers who lease land, as well as campers and visitors (Golder Associates 2005). The other First Nation lands include Snake Island (329 acres), Fox Island (47 acres), Sand and Gravel Islands (1 acre), and two parcels on the main land in the Town of Georgina: one located in Virginia that is occupied by the Virginia Beach Marina and ferry dock, and the second located in Island Grove which is occupied by the administrative office for Snake and Fox Islands.

The community has a long history of undertaking initiatives that protect the Reserve's environmental resources, educate the community on stewardship and develop "green" economic projects. Some examples include development planning for Pukwis Energy Co-op (a wind farm), Nanabush Trails (an ecotourism attraction), a septic inspection and replacement program on Snake and Fox Islands and a waste recycling and hazardous waste collection program among others.

One of the most significant environmental achievements was made in 1996 with the community's involvement with a coalition of other First Nations communities in Canada to develop the First Nations Land Management Framework Agreement. This led to the passing of the First Nations Land Management Act (FNLMA) in 1999. This Act enables signatory communities with the power to enact and enforce their own laws related to environmental protection of their lands. Without the Act, First Nation communities lack the laws and associated funding to protect their Reserve's environment from potential negative impacts such as spills, waste, fires, and land development and the resulting effects on the quality of life (Edgar and Graham 2008). Provincial laws related to the environment do not apply on First Nation Reserves and therefore nor do the benefits to the community. Additionally, Federal laws have not been developed to specifically address many of the environmental issues on the Reserve with some exceptions, and their monitoring and enforcement is limited. It is the community's intent to develop laws that focus on specific environmental issues.

The transition process of enacting and enforcing laws related to lands involves a series of steps including: 1) development of a Land Code, and 2) development of an Environmental Management Agreement (EMA). The purpose of the Land Code is to set out the principles, guidelines and processes by which the Georgina Island First Nation will exercise control and management over reserve lands and resources consistent with the Framework Agreement. An EMA is a plan on how the First Nation will enact environmental protection legislation to include timing, resources, inspection and enforcement requirements and to identify areas "essential" for each First Nation.

Applicable Provincial and Federal laws, standards and guidelines that address each of the five issues were reviewed and documented. Part of this work involved interviews with local supporting government authorities to flesh out applicable components of the laws and to identify potential strategies to address the issues. A summary of the agencies interviewed is provided in Table 2.

1.2 Study methodology

The following report is milestone #1 of Step 2, and outlines the environmental protection laws that the Chipewas of Georgina Island intend to develop, the applicable Provincial and Federal laws, standards and sanctions, the proposed strategy to address the issues and the identified regime for the administration, monitoring and enforcement of those laws.

1. Septic systems
2. Natural heritage
3. Solid waste
4. Environmental emergencies (e.g., spills, emergency response), and
5. Fuel storage

The first step in this process was undertaken in 2008 and involved identifying the environmental issues that should be addressed in an EMA. Silv-Econ Ltd was retained by the Band to conduct research on environmental issues and carry out consultation with the Band membership to validate and prioritize the issues for the present and into the future. This validation exercise led to development of a list of priority issues that may require law development and enforcement or development of other mechanisms to ensure environmental protection is achieved (Silv-Econ 2008). The second step in the EMA process refers to the development of the main components of the environmental laws, based on the following priority areas as identified in Step 1:

Step 1	Identification of environmental issues
Step 2	Developing a plan for enacting laws / Negotiate EMAs
Step 3	Develop, adopt and enforce environmental protection/assessment laws
Step 4	Monitor laws and EMA

Table 1 Four step process to develop an Environmental Management Agreement.

The Chipewas of Georgina Island developed their land code in 1999 which was approved by Council in 2000. Within one year of its ratification, an EMA was to be negotiated between the First Nation and the Government of Canada. On February 6 and 7th, 2008, eight years following adoption of the Land Code, the Department of Indian and Northern Affairs Canada (INAC) held a workshop in Toronto for First Nations that are part of the Framework Agreement (INAC) to initiate steps to develop their EMA. The Chipewas of Georgina Island attended this workshop. A four step process to develop an EMA was identified by the department of Indian and Northern Affairs Canada (INAC) (Table 1).

Table 2 Summary of agencies interviewed.

Agency	Issues discussed
Lake Simcoe Region Conservation Authority	<ul style="list-style-type: none"> • Development within natural areas and along shorelines • Construction work in and around fish habitat
Town of Georgina	<ul style="list-style-type: none"> • Septic systems • Development / fill permits
Regional Municipality of York	<ul style="list-style-type: none"> • Tree cutting • Beach water quality, outdoor air quality, small drinking water systems
Ministry of Natural Resources Aurora District Office	<ul style="list-style-type: none"> • Protection of rare species • Conservation of forest cover • Protection of shorelines, wetlands and watercourses • Land use planning • Environmental emergencies
Ministry of Environment	<ul style="list-style-type: none"> • Landfill and solid waste management • Management and operations of drinking water systems • Spills management, environmental emergencies • Management of contaminated sites (e.g., inherited lead and barium contamination on Fox Island) • Safe handling and storage of fuels
Indian and Northern Affairs Canada	<ul style="list-style-type: none"> • Environmental Site Assessments
Technical Standards & Safety Authority	<ul style="list-style-type: none"> • Proper storage and operation of propane tanks • Gas station operations • Waste oil at the marina restaurant
Environment Canada	<ul style="list-style-type: none"> • Environmental Emergencies related to spills

Proposed strategies that address the issues, such as law development, were crafted with input from the Band's Environmental Coordinator. Potential monitoring and enforcement strategies were proposed to the community through a survey (Schedule A). The results of this survey led to the development of an implementation program that strategizes how the laws will be developed, reviewed, and enforced.

The Georgina Island First Nation has 80 residential houses and 225 cottages on Georgina Island, 227 cottages on Snake Island and 52 cottages on Fox Island. These dwellings are mostly located near the shoreline of Lake Simcoe and equipped with septic systems for containment of sewage and grey-water disposal. A thorough inventory and assessment of septic systems on Georgina Island and Fox Island has never been completed and it is believed that some are leaking or malfunctioning, and others do not conform to standards of the Ontario Building Code. Such observations were reported by Burnside Environmental (1998) in their evaluation of septic systems on Snake Island. An overhaul of all septic systems (over 280) on Snake Island has since taken place. The potential environmental impact of failing septic systems on Georgina and Fox Islands and Lake Simcoe can be profound and can include impairment of drinking water quality and beach water quality resulting from high bacteria levels, reduced sport fishery resulting from nutrient enrichment (eutrophication) of the water, contamination of the soil through release of heavy metals and impairment of air quality in residential areas by release of foul odors. A system to monitor septic systems is currently not in place, and is desired to ensure they are properly functioning and to identify where re-active maintenance is required.

3.1 Description of the issue

3.0 Septic systems

This vision statement can serve as a useful tool to screen and critically analyze human activities carried out on the Reserve. For instance, plans for development, use of natural resources, and management of infrastructure can all be evaluated against this vision statement. Such tests will serve to modify activities so that their impacts on the environment are minimized.

To promote a healthy environment which provides clean water, clean air, and a safe place for our children while protecting the beauty of the Island, its wildlife habitat and respecting mother earth.

To support the development and implementation of the laws, the following vision statement is offered and is based on community survey in 2008,

2.0 Vision Statement

The following report is divided into a series of chapters. Chapter 2 presents a vision statement to help guide development and implementation of the laws. Chapters 3 to 7 provide a summary of the environmental issues, the relevant Provincial and Federal laws, and the First Nation strategy to address the issues. Chapter 8 presents the results of the community survey, summarizing the surveyed community groups, followed by their prioritized ways they envision the laws being enforced and potential compliance incentives. Chapter 9 presents a proposed implementation strategy that identifies potential funding sources, the level of required staffing, the process for law development, the strategy for monitoring, enforcement, and responding to emergencies, and an implementation schedule.

1.3 Report framework

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Chippewas of Georgina Island*

The Georgina Island Building By-law #6-05 presently addresses construction, and repair of septic systems. Band Administration has traditionally involved a trained Federal Health Inspector from Health Canada to inspect new septic installations and diagnose failing systems. Sometimes systems are installed or maintained without prior knowledge of Band Administration and consequently not checked against Building Code standards. A lack of funding for education of residents on proper septic care, funding for maintenance and challenges in enforcing the GIFN Building Code has led to the development of these issues.

3.2 Applicable laws, regulations and guidelines

Laws & Regulations

- Ontario Building Code
 - Regulation 350 of the Ontario Building Code Act – Part 8 – Septic Systems
 - Proposed amendments to Part 8 to include technical details on Area Beds
 - Proposed amendments to the Building Code (O. Reg. 350/06) respecting on-site sewage maintenance inspection programs
- GIFN Building By-law
- Fisheries Act
 - Draft Wastewater systems effluent regulations
- Ontario Environmental Protection Act
 - Reg. 222/07 - ENVIRONMENTAL PENALTIES
 - Reg. 419/05 - AIR POLLUTION - LOCAL AIR QUALITY
 - Reg. 360 - SPILLS
 - Reg. 347 - GENERAL - WASTE MANAGEMENT (leachate quality criteria)
 - Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act
- Ontario Health Protection and Promotion Act (Part 3 – Community Health Protection)
- Policies Guidelines Provincial Water Quality Objectives of the Ministry of Environment & Energy
- Guidelines for the protection and management of aquatic sediment in Ontario
- Lake Simcoe Protection Act and Plan
- Ontario Water Resources Act
 - Reg. 60/08 LAKE SIMCOE PROTECTION (Acceptable levels of phosphorus release)
- Ontario Clean Water Act

Enforcement Tools

- Compliance Policy - Applying Abatement and Enforcement Tools

Septic System Management Guides

- MOE 6369e - Protecting your investment and the environments - septic systems
- Your septic system
- A guide to operating and maintaining your septic system
- Septic system re-inspection guide

Georgina Island By-laws

- Building by-law

3.3 Objective of policy

To ensure septic systems are installed according to the Ontario Building Code and maintained according to Provincial Guidelines to function properly and to prevent or mitigate related pollution of the land and water.

3.4 Proposed First Nation strategy

1. Develop a new Septic Systems Law. The following are policies that may be reflected in the law:

Law Development

- 1) Repeal section within building bylaw regarding septic systems to develop the new septic law
- 2) Ensure the new law meets current Ontario Building Code standards and Provincial Guidelines for septic systems. This could simply be achieved by referring to the Building Code Part 8 – Septic Systems in the law.
- 3) Incorporate sections of the above noted laws and regulations to achieve objectives
- 4) Incorporate the Lake Simcoe Protection Plan's recommendation for a Septic System Re-inspection Program
- 5) Maintenance activities or modifications to the Georgina Island sewage lagoon or other potential sewage systems on the Reserve including septic systems and storm water ponds shall consider the policies of the Lake Simcoe Protection Plan. This will ensure consistency with adjacent municipalities and help to achieve Provincial standards for phosphorus emissions.

Education & Community Outreach

- 1) Initiate a communication campaign that notifies all residents and local contractors of the First Nation laws (e.g., building bylaw) and the consequences of non-compliance. This can include signage at key access points, radio station advertisements, letter mailings, newsletters, and meetings. Other information to be made available includes landowner guides for "how to maintain septic systems", as well as list of contractors, building code standards, and a list of approved septic systems.
- 2) Provide landowners with incentives to mitigate sub-standard septic systems and to install new efficient systems. This may be done by promoting potential funding sources and providing assistance to acquire funding where feasible.
- 3) Facilitate workshops and information sessions for members and cottagers alike and encourage them to take part in the Lake Simcoe Protection Plan Phosphorus Reduction Strategy
- 4) Work with the MNR and other ministries, in collaboration with the local municipalities, the LSRCA, and other stewardship partners, to support a broad-based, watershed-wide stewardship network/alliance. The network/alliance will strengthen the strategic focus of stewardship programs and activities and enhance collaboration among landowners, agencies, industry, and citizen/community organizations to support implementation of the Lake Simcoe Protection Plan.

- 5) Provide courses for members to be certified licensed septic installers through the Ministry of Municipal Affairs and Housing. Course is offered through support by Health Canada.

Monitoring

- 1) Develop an inventory and monitoring system for existing septic systems as proposed by the Lake Simcoe Protection Plan and new Building Code Regulations. The program is to include mapping of all septic systems including grey-water disposal outlets, and outdoor toilets where observed.
- 2) Ensure mandatory inspections of septic systems, grey water disposal and outdoor toilets. Inspections may be done on a 5 year cycle
- 3) Failing systems and substandard systems will be identified. Potential funding sources for installation and maintenance of septic systems will be identified. Maintenance will be mandatory.

Compliance and Enforcement

- 1) Enforce the GIFN Building by-law, including inspections, to ensure designs for installation, alteration, extension or repair of septic systems conform to the Ontario Building Code standards. Assist applicants in completing building applications, and acquiring funding.
- 1) The GIFN will be responsible for the administration and enforcement of this law
- 2) Law enforcement will involve trained individuals with Provincial Officer designation
- 3) Issue control orders for work observed without a permit, work that does not comply with the proposed law, or where pollution is observed. Orders may be similar to those listed in Part XI of the Ontario Environmental Protection Act. Examples of orders include among others to,
 - a. Install, replace or alter any equipment or thing designed to control or eliminate the discharge of the contaminant into the natural environment
 - b. Limit or control the rate of discharge of the contaminant into the natural environment in accordance with the direction set out in the order
 - c. Stop the discharge permanently, for a specified period or in the circumstances set out in the order
 - d. Comply with any directions set out in the order relating to the manner in which the contaminant may be discharged
- 4) The GIFN may utilize environmental experts to collect evidence as necessary. Such experts may include consultants, Provincial or Federal staff from the Ministries of Environment, Natural Resources, and Environment Canada, Department of Fisheries and Oceans, and Lake Simcoe Region Conservation Authority as examples.
- 5) Enforcement shall adhere to the process identified in Ontario's Compliance Policy - Applying Abatement and Enforcement Tools. This system provides guidance in the selection of abatement and enforcement tools to address violations. It also provides direction on how to respond to environmental incidents that have the potential to adversely affect human health or the natural environment.

- a) degradation to the quality and quantity of water, sensitive surface water features and sensitive ground water features, and their related hydrologic functions, due to single, multiple or successive development or site alteration activities;
- b) in regard to fish habitat, the harmful alteration, disruption or destruction of fish habitat, except where, in conjunction with the appropriate authorities, it has been authorized under the Fisheries Act, using the guiding principle of no net loss of productive capacity; and
- c) in regard to other natural heritage features and areas, degradation that threatens the health and integrity of the natural features or ecological functions for which an area is identified due to single, multiple or successive development or site alteration activities. (Source: Provincial Policy Statement)

The community's interests in conservation of their natural heritage has recently led to the development of a draft Land Use Plan which identifies land zoning areas, the location of significant habitat, and sets policies for the protection of the natural heritage including a requirement for environmental impact assessment. A law is desired by the community to ensure the plan is followed and to promote protection of natural heritage, provide structure for development approval procedures, and to protect natural heritage from negative impacts. The term "Negative Impact" means,

Natural heritage is defined as all living organisms, natural areas and ecological communities which we inherit and leave to future generations (Definition from the MNR Natural Heritage Information Database accessed March 25, 2010). The Chippewas of Georgina Island have a strong cultural and ethical desire to protect natural heritage features from human activities, and they consider them a vital integral component in land use planning on the reserve. The community has specifically voiced concerns over a need to protect the future quality and quantity of forest cover, the maintenance of forested shorelines, conserve species at risk and their significant habitat, and protect fish habitat including wetlands, watercourses and spawning shoals. By implementing a system to protect the natural heritage features and areas, the uniqueness, tranquility and beauty offered by the Reserve's eco-systems will be enjoyed by future generations.

4.1 Description of the issue

4.0 Natural Heritage

- Properly functioning septic systems as a result of installation and maintenance according to Building Code standards
- Reduced operating costs of septic systems resulting from pro-active maintenance
- Increased life expectancy of septic system
- Healthy beaches, fishery and un-impaired drinking water quality
- Prevention of soil contamination and foul smelling air
- Saved money through prevention of contamination of soil and water and associated clean-up costs
- Sustainability of the land and water resources
- Maintenance of property value

3.5 Benefits to the community

The term “Development” means the creation of a new lot, a change in land use, or activities, such as tree cutting, filling, grading and excavation, that would change the landform and natural vegetative characteristics of a site, erection, repair, alteration, enlargement, addition, demolition or removal of or to any lands.

4.2 Applicable laws, regulations and guidelines

In the Province of Ontario, the Natural Heritage Reference Manual defines natural heritage features and areas, and provides guiding principles to which protection measures are applied. The responsibility for identifying significant areas lies with the Ontario Ministry of Natural Resources (OMNR). With regards to development approvals in the Town of Georgina, the Lake Simcoe Region Conservation Authority (LSRCA) is contracted by Municipalities to review environmental assessments to ensure compliance with the Provincial legislation and guidelines. The LSRCA also investigates issues related to the Fisheries Act under an agreement with the Department of Fisheries and Oceans and conducts enforcement. The Regional Municipality of York administers the Forest Conservation By-law to ensure forest management activities conform to ‘good forestry practices’ and that trees are not cut prior to issuance of a building permit. The following Acts, regulations and guidelines are used in the Province to protect natural heritage features,

Laws, Regulations, Policies

- Provincial Policy Statement
- Federal Fisheries Act
- Federal Plant Protection Act
- Oak Ridges Moraine Act and Conservation Plan
- Ontario Greenbelt Act and Plan
- Forestry Act
- York Region Forest Conservation By-law
- Lake Simcoe Watershed Development Policy
- Ontario Endangered Species Act
- Federal Species at Risk Act
- Ontario Environmental Protection Act
- Ontario Environmental Assessment Act
- Town of Georgina Grading Bylaw
- Town of Georgina Building Permit

Guidelines

- Code of Practice: Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario
- Code of Practice: Consultation in Ontario’s Environmental Assessment Process
- Code of Practice: Using Mediation in Ontario’s Environmental Assessment Process
- Federal/Provincial Environmental Assessment Coordination in Ontario: A Guide for Proponents and the Public
- Code of Practice: Preparing and Reviewing Environmental Assessments in Ontario

- Utilize the Land Use Plan as a basis for policy and decision making
- Protect natural heritage features and areas from negative impacts resulting from development by applying Provincial standards for proximity of development to such features
- Ensure proposed development activities undergo an environmental impact assessment procedure (Environmental Assessment). Policies in Provincial technical guides such as the Natural Heritage Reference Manual, the Oak Ridges Moraine Conservation Plan, the Greenbelt Plan and the Niagara Escarpment Plan shall be considered. Development of an Environmental Assessment protocol is milestone #2 of Step 2 in the EMA development process.
- Require a development review and approval procedure to protect natural heritage features and areas including fish habitat, rare, vulnerable or threatened species. This system would refer to environmental assessment criteria. Environmental assessment is a study, which assesses the potential environmental effects and benefits of a proposal. Key components of an environmental assessment include

Development & environmental assessment

1. Establish a Natural Heritage law. The following are policies that may be reflected in a the law:

4.4 First Nation strategy

To sustain and protect the expansiveness, beauty, history and diversity of the Reserve's flora and fauna for future generations to enjoy and depend upon for their survival.

4.3 Objective of policy

- Georgia Island Timber Harvesting By-law

Georgia Island By-laws

- Lake Simcoe Region Conservation Authority Planning Review Application Form
- Town of Georgia Engineering Grading (Fill) Permit Application Form

Forms

- Code of Practice: Preparing, Reviewing and Using Class Environmental Assessments in Ontario
- MNR silvicultural guidelines and best management practice
- Town of Georgia Site Plan Application & Guide
- Protection and Management of Aquatic Sediment Quality in Ontario (Guideline B-6)
- Natural Heritage Reference Manual
- Guidelines for Evaluating Construction Activities Impacting on Water Resources (Guideline B-6)
- Compatibility Between Industrial Facilities and Sensitive Land Uses (D-6)
- Stormwater Pollution Prevention Handbook
- Sediment control guidelines – Conservation Authorities have their own documents for silt control
- OMAFRA best management practices

consultation with government agencies and the public; consideration and evaluation of alternatives; and, the mitigation and management of potential environmental effects. Conducting an environmental assessment promotes good environmental planning before decisions are made about proceeding with a proposal.

- Establish and utilize a Land Development Advisory Committee to review and screen development plans, and environmental impact assessments against policies established for protection of natural heritage resources
- Liability shall be with anyone that causes destruction of habitat including a Certificate of Possession holder, contractors, lessees, tenants etc

Rehabilitation and improvement

- Restoration of natural heritage features and areas will be a priority on the Reserve. Persons responsible for negatively impacting natural heritage features shall be liable for restoration costs and fines
- Improvement of the function of natural heritage features will be considered in all aspects of land management on the Reserve

Tree cutting

- Protect trees by requiring a tree cutting permit through the Natural Heritage Law to regulate the cutting of trees from unreasonable destruction and to ensure implementation of good forestry practices. The York Region Forest Conservation By-law serves as an example for contents of the policy.
- Amend existing timber harvesting bylaw to refer to relevant policies in the proposed Natural Heritage law
- Ensure tree cutting is considered part of development definition

Invasive species

- Restrict movement of potential sources of invasive species (e.g. firewood) onto the First Nation's islands to prevent the spread of alien invasive pests from damaging the Reserve's forest resources. The Canadian Food Inspection Agency and the Plant Protection Act will serve as support for development of this law component.

2. Establish and maintain an inventory of Natural Heritage Features and Areas

- Establish and regularly update an inventory of terrestrial and aquatic natural heritage to monitor health and change over time. Typical natural heritage features include, among others, forest stands, wetlands, vulnerable/threatened/endangered species locations, wildlife species, ground flora, sensitive areas, invasive species, fish, and fish habitat. Such inventories are often presented in a forest management plan or a littoral zone study and updated on a 5 -10 year cycle.

3. Educate the community and contractors on the First Nation laws

Communication strategy

- Develop and implement a communication strategy to ensure contractors follow the law. This may involve signs at key access points, letter mailings, and radio station advertisements among others.

Invasive species control

- Encourage the community to refrain from planting non-native, invasive plant species such as European honeysuckle, buckthorn, dog-strangling vine, and garlic mustard to list a few. Also encourage removal where possible.

Forest management

- Help to protect the Reserve's forests by providing landowners with forest management "best management practices" as well as a list of contacts for stewardship agencies and forestry consultants

4.5 **Benefits to the community**

- Protection and conservation of natural heritage features and areas
- Prevention of invasive forest pests entering the reserve
- Carefully planned and controlled development activities
- An understanding of the environmental impacts caused by development
- Enhancement of natural heritage features through mitigation and improvement work.

5.0 **Solid Waste**

5.1 **Description of the issue**

The Georgina Island First Nation community has implemented a successful waste management policy for many years. In 1994, Council developed a waste management bylaw which has been amended over the years to reflect the needs of the growing population and their environmental awareness. For example, in 2003 a waste reduction program was initiated to address recycling and the creation of a re-use store on Georgina Island. Items deemed to be in good working condition are made available at the store to the community for free pickup. Other recyclables such as tires, scrap metal, electronics and paper are also recycled. These materials are temporarily stored at the recycling station on Georgina Island and periodically removed from the Reserve under contract with local trucking companies. More recently in 2008, a hazardous waste collection program was initiated for items such as batteries, waste oil, and paints. Medical supplies such as syringes are dropped off at the Medical building on the Reserve.

Existing policies of the waste management by-law address issues such as safe storage of waste, failing to keep properties free of waste, littering, burning of waste, transportation of waste, trespassing at the landfill, disposal of hazardous waste, scrap metal, and tires, recycling, tipping fees, and fine schedule.

A community survey conducted in 2008 found that residents of the Reserve voiced the following numerous concerns related to management of the landfill. Many of these issues relate to operations of the landfill which have been subsequently addressed by Band Administration and Operations.

Landfill operations and management

- Contamination of surface water and ground water resulting from landfill operations
- Landfill monitoring for effluent and gasses
- Illegal dumping and dumping of restricted items
- Landfill gas emissions
- Noise impacts
- Public safety
- Lack of emergency response, standard operating procedures, health and safety procedures, record drawings and record sheets
- Lack of monitoring system for decommissioned landfills
- Open burning and burning of plastics and subsequent release of toxins
- Vermin control

Hazardous materials

- Storage and disposal of hazardous materials (antifreeze, batteries, brake fluid and pads, Freon gas, gasoline/propane/diesel fuel, motor oil, tires, transmission fluid, derelict chassis, frames, and bodies of automobiles, farm machinery, home appliances)
- Medical supply disposal (syringes)
- Battery leakage

5.2 Applicable laws, regulations and guidelines

Laws, Regulations, Policies

- Ontario Environmental Protection Act
 - C-13-1 Engineered Facilities at Landfills that Receive Municipal and/or Non-Hazardous Waste
 - Recycling And Composting Of Municipal Waste (O. Reg. 101/94)
 - Landfilling Sites (O. Reg. 232/98)
 - Land Use On or Near Landfills and Dumps (Guideline D-4)
 - Use of the "Guidance Manual for Landfill Sites Receiving Municipal Waste" (Guideline C-8)
 - Waste Reduction Workplan Summary (O. Reg. 102/94) - Industrial, Commercial and Institutional
 - Regulation #153 Environmental Protection Act - records of site condition
 - Regulation #347 Environmental Protection Act - waste management
 - D-4 Land Use On or Near Landfills and Dumps
 - C-7 Burning at Landfill Sites
 - Used Oil Material (O. Reg. 85/03)
 - Used Tires (O. Reg. 84/03) Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfill Sites
 - Land Use On or Near Landfills and Dumps (Guideline D-4)

- Mandatory or Discretionary Hearings on Waste Disposal Sites (Guideline C-1)
- Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act
- Protocol for Updating Certificates of Approval for Waste Management
- Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act
- Environmental Penalties: Code of Toxic Substances
- Guideline for Implementing Environmental Penalties (ON Regulations 222/07 and 223/07)
- Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities
- Guideline for Use at Contaminated Sites in Ontario (Guideline C-15)
- Hazardous Waste Categorization and Review (Guideline C-16)
- Management of Biomedical Waste in Ontario (Guideline C-4)
- Mandatory or Discretionary Hearings on Waste Disposal Sites (Guideline C-1)
- Protocol for Updating Certificates of Approval for Waste Management
- Training of Drivers of Liquid Industrial or Hazardous Waste Transportation Vehicles (Guideline C-12)
- Training Programs for Drivers of Liquid Industrial and Hazardous Waste Transportation Vehicles (Procedure C-12-1)
- Environmental Penalties: Code of Toxic Substances
- Determination of Contaminant Limits and Attenuation Zones (Procedure B-7-1)
- Ontario Water Resources Act
 - Water Management - Policies, Guidelines, Provincial Water Quality Objectives of the MOE
 - Incorporation of the Reasonable Use Concept into MOE Groundwater Management Activities (Guideline B-7)
- Indian Act
 - Indian Reserve Waste Disposal Regulations
 - Waste Diversion Act
- Georgina Island By-laws
 - Georgina Island Open Air Burning By-law
 - Georgina Island Removal and Disposal of Garbage bylaw
 - Georgina Island Waste Management By-law
- Guidelines
 - Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites (May 1998)
 - Settlement Agreements: A Guide to Submitting Beyond Compliance Projects and Requesting Abatement Measures
 - Guideline for Implementing Environmental Penalties (ON Regulations 222/07 and 223/07)
 - Regional Municipality of York Household Hazardous Waste Guide
 - Interim Guidelines for the Production and Use of Aerobic Compost in Ontario

5.3 Objective of policy

To protect the health, safety, welfare and property of the residents of the Reserve from the hazards associated with the dumping or burning of waste and to protect the environment.

5.4 First Nation strategy

1. Establish a Solid Waste Law. Policies to consider for inclusion in addition to those listed in the existing Waste Management Bylaw include,
 - A schedule of substances considered to be household hazardous waste and suitable for drop-off. The schedule utilized by the Regional Municipality of York should be considered.
 - Importation of non-household hazardous materials to the Reserve shall be controlled through a permit system as similarly addressed in the current by-law
 - A schedule of waste items considered suitable for burning on private properties
 - Ensure a link is established between this law and the proposed Environmental Protection Law
 - Repeal existing waste management by-laws
2. Establish a composting and green bin drop-off and pickup program.
 - Further utilize the landfill site as a location to situate a collection bin for compostable materials
 - Compostable materials are to be removed periodically from the Reserve
 - Potential partners and support agencies include Work with the Regional Municipality of York, Miller Waste, Turtle Island Recycling, and Waste Diversion Ontario
3. Waste disposal operations and management.
 - Utilize the services of a consultant to monitor landfill operations and environmental impacts to ensure they meet provincial standards
 - Develop an emergency management protocol for the landfill site
 - Management of landfill operations shall closely follow Provincial guidelines to ensure protection of the environment
 - i. MOE's Guideline - Burning at Landfill Sites
 - ii. Monitoring protocol for ground water quality

5.5 Benefits to the community

- Aesthetically appealing neighbourhoods
- Prevention of contamination of soil, and water and air pollution
- Sustainability of the Reserve's landfill
- Protection of property values, human health

6.0 Environmental Emergencies & Protection

6.1 Description of the issue

An emergency is a situation, or an impending situation, that may affect the health, safety, welfare, and property of a community and that requires a controlled and coordinated response by

- Classification and Exemption of Spills (O. Reg. 675/98)
- Spill Cleanup Options (Procedure G1-1)
- Spills Action Centre Operations (Guideline G-2)
- Role of the Ministry in Spills and Emergencies (Guideline G-1)
- Training of Drivers of Liquid Industrial or Hazardous Waste Transportation Vehicles (Guideline C-12)
- Guideline for Use at Contaminated Sites in Ontario (Guideline C-15)
- Environmental Penalties: Code of Toxic Substances
- Guideline for Implementing Environmental Penalties (ON Regulations 222/07 and 223/07)
- Policy and Guideline on Access To Environmental Evaluations (Guideline H-9)
- Release of Scientific Data and Reports (Guideline H-1)
- Settlement Agreements: A Guide to Submitting Beyond Compliance Projects and Requesting Abatement Measures
- Forest Fires Prevention Act
- Ontario Technical Standards and Safety Authority Act
- Dangerous Goods Transportation Act

Policies

- MNR Emergency management policies
- Agreement between INAC and the Ontario Ministry of the Solicitor General for emergency response on First Nation land

Fact Sheets

- CEPA 1999 and Government Operations and Federal and Aboriginal Land
- CEPA 1999 and Pollution Prevention
- Human Health and CEPA 1999
- Guide to Understanding the *Canadian Environmental Protection Act, 1999* –
- Implementation Guidelines for Part 8 of the Canadian Environmental Protection Act, 1999 - Environmental Emergency Plans
- Factsheet - Environmental Emergency Regulations under Part 8 of CEPA 1999
- Resolution of Groundwater Interference Problems (Guideline B-9)
- Resolution of Groundwater Quality Interference Problems (Procedure B9-1)
- Pollution Prevention Planning - Guidance Document and Workbook

GIFN bylaws

- Georgina Island Unsightly Lands by-law
- Georgina Island Open Air Burning by-law
- Georgina Island Removal and Disposal of Garbage by-law

6.3 Objective of policy

To proactively protect the public safety from hazardous situations and to deliver a highly skilled, coordinated and responsive emergency system to the community.

- The Ontario Environmental Protection Act and Federal Fishery Act will serve as models of this proposed law. Reference will be made in this law to the GIFN Building By-law for the rules on installation and maintenance of septic systems.
- Ensure that all spills of deleterious substances and other substances that negatively affect the land, water and air (e.g., sewage) are reported to the Georgina Island Fire Department and the Environmental Management Agreement Manager.
- Utilize the Ministry of Environment's Spills Action Centre hotline for spills noted as reportable under the Ontario Regulations 675/98 – classification and exemption of spills and reporting of discharges
- The Georgina Island Fire Department will be contacted by the Spills Action Centre to be deployed as the first response to spills with backup support delegated through the Spills Action Centre as necessary
- Require that spills be mitigated and persons responsible for spills are legally accountable for environmental clean-up and restoration
- The law shall incorporate components of the following,
 - i. Canadian Environmental Protection Act - Part 8 Environmental Matters Related to Emergencies
 - ii. Ontario's Environmental Protection Act:
 - Ontario Reg. 224/07 Spill Prevention and Contingency Plans,
 - Ontario Regulation 675/98 Classification and Exemption of Spills and Reporting,
 - Guideline for Implementing Spill Prevention and Contingency Plans
 - Regulatory Requirements
 - Spills Reporting - A Guide to Reporting Spills and Discharges

Spills

- Require permits issued by the Band for the transportation of deleterious substances onto the Reserve or use of such substances on the Reserve. Deleterious substances are those chemicals regulated by the Canadian Environmental Protection Act. This list should be reviewed and possibly include certain pesticides, diesel fuel and other chemicals as deemed appropriate by the community. A list of toxic substances is summarized in Environmental Penalties – Code of Toxic Substances (as referred to in O.Reg. 222/07 and O.Reg. 223/07)
- Ensure spill prevention and contingency plans are in place for regulated substances, as well as Provincial or Federal licences or certificates as part of the permitting process.

Control of deleterious substances

1. Develop agreements for emergency support with the following agencies: York Region Emergency Medical Services, Police, the Town of Georgina Fire Department, and the Spills Action Centre. The roles are identified in the implementation flow chart (Schedule B).
2. Develop an Environmental Protection Law to protect and conserve the natural environment and public health. The following are policies that may be reflected in a the law:

6.4 First Nation strategy

- Adopt the following Provincial standards for soil chemistry, water quality and sediment quality,
 - i. Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Ontario Environmental Protection Act
 - ii. Policies Guidelines Provincial Water Quality Objectives of the Ministry of Environment & Energy
 - iii. Guidelines for the protection and management of aquatic sediment in Ontario

Fires

- Existing policies in the Band's open air burning bylaw shall be adopted in the environmental protection law and the former by-law shall be rescinded

Unsightly and Dangerous lands

- Existing policies in the Bands Regulations of wrecking yards and unsightly lands shall be adopted to ensure the health, safety and protection of persons on the reserve and to prevent the occurrence of nuisances for the residents of the reserve. The former by-law shall be rescinded.

Monitoring

- Establish a Geographic Information System based environmental registry which notes the geographic location of potential point sources of pollutants. Examples includes locations of existing septic systems, grey-water disposal outlets, outdoor toilets, fuel storage tanks, as well as the locations of spills and their nature and contaminated sites.
3. Develop a community emergency response plan that describes activities for environmental emergency situations likely to occur. Examples include spills, forest fires, erosion and flooding. This plan identifies the Band's role in emergency response as well as the Band's inter-relationships with other organizations and communities. The plan will be developed with the assistance of Emergency Management Ontario and shall consider the Ministry of Natural Resources emergency management approach, which is based on what are known as the five pillars of emergency management:

Mitigation

Actions taken to reduce the effects of an emergency. There are two categories, structural and non-structural. Examples of structural mitigation include building dams or re-enforcements. Examples of non-structural mitigation are public awareness/education and building codes.

Prevention

Actions taken to prevent the effects of an emergency. Examples include capital improvements, regulations, and public education programs.

Preparedness

Actions taken prior to an emergency or disaster to ensure an effective response. Preparedness measures include planning, training, exercises and public education.

- Have a capacity of more than 230 litres,
- Are vented to the atmosphere (in other words operate at atmospheric pressure),
- And are designed to be installed in a fixed location

In Ontario the Technical Standard and Safety Authority administers and enforces the Ontario Technical Standards and Safety Act, 2000, which governs fuels safety on non-Federal land. Fuel storage tanks must comply with the Act and its regulations. On Federal land, Environment Canada's Regulations for Storage Tank Systems for Petroleum Products and Allied Petroleum Products are applied under the Canadian Environmental Protection Act. These Regulations apply to both aboveground and underground storage tanks and containers that

A chief concern to the community is the potential for spills or leaks from storage tanks. A leaking fuel tank can have a devastating impact to property owners and the environment. Leakage of just a few litres can seriously damage personal property, pollute groundwater and potentially cause an explosion.

Like many Canadians, the Chippewas of Georgina Island First Nation are highly dependent on liquid fuels and/or compressed gas (e.g., propane) to heat their homes, power equipment and move transportation vehicles. Above ground stationary tanks are used for homes or businesses for storage of such fuels on the Reserve. Mobile fuel tanks, such as those placed in the back of a pickup truck, are also used on the Reserve to fuel heavy equipment, such as excavators used at the quarry on Georgina Island. The marina on the mainland is the only location where fuel is stored below ground on the Reserve and where there is a propane fueling station. An above ground fuel tank is located at the Snake and Fox Island's Administrative Building in Island Grove.

7.1 Description of the issue

7.0 Fuel storage tanks

- Protects the Reserve's environment, property and community health through a planned and coordinated approach to swiftly responding to emergencies
- Provides a stringent system to regulate the presence and use of deleterious substances on the Reserve
- Ensures the environment is restored should accidents happen
- Ensures liability is with the persons responsible

6.5 Benefits to the community

Actions taken to recover from an emergency or disaster. Recovery measures include environmental clean-up, return of evacuees and emergency financial assistance.

Recovery

Actions taken to respond to an emergency or disaster. Examples include evacuations, establishing incident management teams and forest fire fighting.

Response

The following tank systems do not fall under the regulations.

- Containers smaller than 230 litres
- Indoor storage tanks
- Pressurized tanks like those storing propane
- Mobile tanks such as those on the back of pickup or other trucks
- Outdoor, aboveground tanks that have a total combined capacity of 2500 litres or less and are connected to a heating appliance or an emergency generator
- Tanks regulated by the National Energy Board

7.2 Objective of policy

To reduce the risk of contaminating soil and groundwater due to spills and leaks of petroleum products and to protect the community and the environment.

7.3 Applicable laws, regulations and guidelines

Laws & Regulations

- Canadian Environmental Protection Act
- Ontario Environmental Protection Act
- Ontario Technical Standards and Safety Authority Act and its regulations
- Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products
- Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations

Guidelines

- Tank Tips - on Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations
- Environmental Management Protocol for Fuel Handling Sites in Ontario
- Green Tips: Residential Fuel Oil standards
- Technical Guidelines for Aboveground Storage Tank Systems that Contain Petroleum Products and Allied Petroleum Products
- Guidance Manual for Developing Site-specific Soil Quality Remediation Objectives for Contaminated Sites in Canada
- CEPA 1999 and Government Operations and Federal and Aboriginal Land
- CEPA 1999 and Pollution Prevention

Enforcement Tools

- Compliance Policy - Applying Abatement and Enforcement Tools

7.4 First Nation strategy

1. The Chippewas of Georgina Island will educate the community on the Federal Government's Canadian Environmental Protection Act Regulations for Storage Tank Systems for Petroleum Products and Allied Petroleum Products. A communication strategy will be developed that will highlight components of the law. Publications from TSSA, Ministry of Environment, and Environment Canada on fuel storage systems and protecting the land and water will be included in the program. The following policies shall be promoted:

A total of 27 people (about 14% of the on-reserve membership) responded to the survey. Respondents represented a diversity of community groups (Table 3). The strongest response (33%) was from "heads of families". The next most common respondent (30%) was from "Band Administration and public works personnel". About fifteen percent (15%) were elected officials, and both elders and youth each represented 11% of the respondents.

8.1 Surveyed community groups

Several possibilities for enforcing laws on First Nation lands have been suggested by Edgar & Graham (2008). These options were proposed to the community through a survey to determine their preference. It is also recognized that compliance with the laws can be enhanced by providing incentives to those who participate in the law's permitting system or to those who go beyond the law to protect the environment. Some possible incentive scenarios were suggested in the survey and participants were asked to rank them in terms of their preference. The survey was distributed at the community centre on Georgina Island during Earth Day celebrations (April 22, 2010) and at the Band Administrative building during the following week.

8.0 Community Survey

- Safe communities as a result of reduced leaks, reduced impacts of spill events
- Prevention of soil contamination and water pollution
- Saved money through pro-active maintenance and reduced emergencies
- Sustainability of the land and water resources
- Maintenance of property value

7.5 Benefits to the community

2. Potential spills will be addressed through the development of an Environmental Protection Law as noted in Chapter 6.0.

- It is the owner's responsibility to arrange / ensure they have yearly maintenance examinations
- Ensure all existing fuel storage tank systems (aboveground and underground) are inspected and maintained annually, performed by a Technical Standard and Safety Authority (TSSA) certified technician. Such services include visually inspecting for leaks and testing and servicing the unit to ensure it is operating properly.
- Ensure all tanks that meet Environment Canada's regulation criteria follow the Regulations and display an Environment Canada identification number
- Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products

Table 3 Summary of survey respondents sorted by community group representation.

Community Group Representation	Number of respondents	% of survey respondents
Head of family	9	33%
Band Administration and public works personnel	8	30%
Elected official	4	15%
Elder	3	11%
Youth	3	11%
Total	27	100%

8.2 Preferred method for enforcing the laws

Survey participants were asked to prioritize four possible scenarios to enforce the Band's laws. These scenarios are listed in Table 4 with the average ranked score. Survey results suggest an equal desire to have the Band Administration and/or the Chippewas of Georgina Island Police services enforce the laws.

Table 4 Summary of environmental theme ranked by score. A score of 5 is considered to be most desirable.

Law Enforcement Scenario	Average Score
An enforcement body shared between local first nations	2
Chippewas of Georgina Island Band Administration (e.g., by-law officer)	3
Chippewas of Georgina Island Police (an officer specially trained on the environmental laws)	3
Using the services of a Provincial or Federal agency such as Ministry of Natural Resources or Ministry of the Environment, or Health Canada	2

8.3 Potential incentive programs

Survey participants were asked to prioritize three potential incentive programs to encourage compliance with the Band's laws. These programs are listed in Table 5 with the average ranked score. All three programs were looked upon favourably by the community, with draw prizes being the most desirable system.

Table 5 Summary of environmental theme ranked by score. A score of 5 is considered to be most desirable.

Average Score	Incentive program scenario
4	Draw prizes. Prizes could include ferryboat passes, dinner tickets, fishing trips, helicopter or plane rides over the island, and shares in Pukwis Windfarm.
3	Public recognition (e.g., awards, citations)
3	Financial or other subsidies (e.g., financial assistance to upgrade septic system)

9.0 Implementation Strategy

The results of the community survey were reviewed with the Band's Environmental Coordinator to strategize the resources and personnel required to implement the Environmental Management Agreement. This information is presented as an implementation flow chart in Schedule B. The strategy will require the Band Administrator to hire a new full time person that will be the manager of the Environmental Management Agreement and responsible for implementing the strategies in this report. Existing infrastructure on the Reserve such as administrative buildings and emergency response facilities shall be utilized. Court services will be sought through the Ontario Court of Justice and appeal services through the Superior Court of Justice of Ontario.

9.1 Funding

Funding from the Department of Indian and Northern Affairs Canada will be essential to pay for a new administrative position, a raise in salaries for existing support staff as a result of increased duties and responsibilities, retain a consulting prosecutor and environmental specialists involved in inspections and monitoring (e.g., solid waste, invasive species, septic systems), pay for training, and fees associated with maintenance of annual agreements with support agencies, emergency management plans, as well as court services and periodic review of laws. Capital infrastructure that will be required include computers, database and mapping software, presentation equipment, vehicles, and uniforms. Potential sources of additional funding may be provided through the following agencies for specific projects,

- Environment Canada
- Ministry of the Environment
- Lake Simcoe Region Conservation Authority
- Indian and Northern Affairs Canada
- Canadian Food Inspection Agency
- Invasive Species Centre

9.2 Process for law development and review

The following process shall be applied to draft and enact the proposed laws,

Law Development

1. Laws shall be drafted by the Environmental Management Agreement Manager with the assistance of the Environmental Management Coordinator and other personnel involved in monitoring, compliance and enforcement
2. Establish a Law Review Committee made of community members which will serve to review proposed laws at least twice before proceeding to the community for adoption
3. Review draft laws with consulting prosecutor
4. Submit draft laws for community approval
5. Adopt the law or make edits as necessary and re-submit for community approval.

Law Review

1. Community comments and issues regarding the laws shall be made to the Band Administration at any time
2. The laws will be reviewed by the community every 5 years or as Band Council deems necessary to reflect shifts in the community's opinion and to account for new technologies, information, or procedures among other items
3. On an annual basis, the Lands Department will prepare a report to Band Council to summarize the effects of the laws on the community. This report may include among other items,
 - The number of issued permits, the number of incident reports, orders issued, and prosecutions
 - A summary of community response to the laws
 - A budget summary including costs, funding and potential environmental and monetary savings to the community

9.3 Procedures to ensure voluntary compliance with laws

The Lands Department will develop a communication strategy for all laws. The strategy shall include brochures, signs installed at key access points, letter mailings, radio advertisements and interviews (102.7 Nish Radio Station) as well as workshops and public information sessions. One of the key audiences of the strategy will be construction contractors who do work on the Reserve. Ensuring they are aware of the laws will be an essential component of the communication strategy.

Compliance will be encouraged by providing draw prizes to those who participate in the permit system and well as public recognition to community members that show exemplary environmental stewardship. Prizes to consider could include ferryboat passes, dinner tickets, fishing trips, helicopter or plane rides over the island, and shares in Pukwis Windfarm. Corporate donors will be invited to provide prizes. Compliance with the laws may also be made a condition of receiving additional or future permits.

Financial incentives will also be an important component of an incentive program. For example, information about grants or other funding systems will be readily provided to the

community. As well, environmental products such as no phosphorous soap, rain barrels, and low flow faucets among other items will be provided to encourage participation.

9.4 Proposed enforcement program

The results of the community survey clearly indicated a desire to involve the Chippewas of Georgina Island Police Services as well as Band Administration staff to enforce the proposed laws. The implementation flow chart (Schedule B) indicates the various staff members and their involvement in monitoring, enforcement and a program for responding to emergencies. Orders to comply and/or tickets will be issued by the Police and / or the Environmental Management Agreement Manager.

Where orders are issued and not complied with, a meeting will be arranged between the individual (or company), the inspector and the Environmental Management Agreement Manager to try to resolve the issue. Should this process fail, a permit if issued will be revoked and or the individual will be prosecuted.

The Environmental Management Agreement Manager shall receive incident reports from all parties involved in a law violation including monitoring and enforcement staff members and members of the emergency response program. The incident reports will be used to determine compliance and enforcement actions if necessary. The consulting prosecutor will be involved in determining if the evidence obtained and documented is sufficient to ensure a reasonable prospect of conviction and whether a prosecution would be in the community's best interest.

A First Nation's Justice System for Lands Management First Nations will be developed to provide adjudication and appeals services. Until this system has been developed, The Ontario Court System will be engaged through a service agreement with the Ontario Ministry of Attorney General to provide adjudication and appeals services as noted in Section 24 of the First Nations Land Management Act.

9.5 Potential punishments

The First Nations Land Management Act specifies fines should be commensurate to those applied under Provincial law. For example, an individual who is charged and found guilty of an offence under the Ontario Building Code Act, 1992, such as building without a permit, can be fined up to \$50,000 for a first offence and up to \$100,000 for subsequent offences. For a corporation, a first offence could result in a maximum fine of \$100,000 and \$200,000 for subsequent infractions. Failure to comply with an order is also an offence.

Specific fines for each type of violation will be identified at the time the laws are crafted. The level of punishment will depend on the level of damage done to the environment, community, and property, costs to mitigate and restore and monetary gain as a result of the violation. The amount of the fine shall be consistent to those set by neighbouring municipalities for similar violations, as well as to fines noted in Provincial laws. Fines may also be established using the calculation in Reg. 222/07 - ENVIRONMENTAL PENALTIES of the Ontario Environmental Protection Act.

9.6 Proposed implementation schedule

The following laws are listed in priority for implementation: septic system law, natural heritage law, solid waste law, environmental protection law. Implementation is expected to follow the timeline as shown in Table 6.

Table 6 Proposed 5-year implementation schedule.

Year	Milestones
2011	<ul style="list-style-type: none"> • Hire an Environmental Management Agreement Manager • Establish service agreements with the following, <ul style="list-style-type: none"> ○ Consulting prosecutor ○ Ministry of Attorney General (Ontario Court of Justice, Superior Court of Justice) ○ York Region Emergency Medical Services ○ York Region Police Services ○ Town of Georgina Fire Department ○ Spills Action Centre • Develop the septic system law and natural heritage law • Establish and implement training programs for inspection, enforcement and emergency response for the two laws • Develop a community emergency response plan • Establish a composting and green bin drop-off and pickup program.
2012	<ul style="list-style-type: none"> • Implement monitoring and enforcement of the septic-system law and natural heritage law • Develop the solid waste law, and the environmental protection law • Establish and implement relevant training programs for inspection, enforcement and emergency response • Establish a Geographic Information System based environmental registry which notes the geographic location of potential point sources of pollutants • Develop and implement a communication campaign for fuel storage tanks
2013-2014	<ul style="list-style-type: none"> • Establish and maintain an inventory of Natural Heritage Features and Areas • Implement inspection and enforcement of all laws and ensure the EMA implementation flow chart is followed (Schedule A).
2015-2016	<ul style="list-style-type: none"> • Begin 5 year review of the laws starting with the septic system law and natural heritage law

9.7 Potential support agencies

Agency	Proposed Roles and Responsibilities for Implementation
Dispute Resolutions Body	Section 25 of the Georgina Island Land Code identifies that the dispute resolution body as the method of appealing unresolved issues.
Indian and Northern Affairs Canada	Financial support through INAC will be critical for implementation of the laws. Provides guidance in law development, technical support for document review, field inspection support, administrative review of and comment on documents related to the environment on the Reserve.
Fuel Suppliers	Adhere to all Provincial and Federal laws to safeguard the First Nation community.
Technical Standards and Safety Authority	Regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. They protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions.
Ontario Petroleum Contractors Association	The Ontario Petroleum Contractors Association is a non-profit association of member companies incorporated to establish, promote and maintain the highest standards of quality, safety, and environmental protection for all types of installations and modifications of petroleum systems.
Chippewas of Georgina Island Fire Department	Provides first line of defence for spills or leaks.
Consulting Prosecutor	Provides prosecution services as requested. Determines if the evidence obtained and documented in an incident report is sufficient to ensure a reasonable prospect of conviction and whether a prosecution would be in the community's best interest.
Environment Canada	Technical support for the Canadian Environmental Protection Act and Fuel Tank Regulations, and registration of fuel tanks on the Reserve. As well as Fisheries Act and Species at Risk Act.
Ontario Ministry of Attorney General	Provides adjudication services through the Ontario Court of Justice and Superior Court of Justice.
Georgina Island Police	Provide police security, community service, monitoring, inspection and law enforcement.
Ministry of Environment	Cleanup advice and support for spills or leaks. Provides guidelines for septic systems.
York Region Health Department	Provides technical and field support for public health issues including fuel spills.
Municipal Law Enforcement Officers Association	Provides training on law enforcement.

*A Regime for Environmental Protection, Administration, Monitoring and Enforcement
Chippewas of Georgina Island*

Agency	Proposed Roles and Responsibilities for Implementation
Health Canada	A Federal Health Inspector will provide septic inspector services such as conducting field inspections, and provide recommendations to the Band Administration and landowners.
Consulting inspector	First Nation members with MMAH septic installation training will provide inspection services upon request.
Georgian College	Develop and implement a baseline inventory of septic systems.
Lake Simcoe Region Conservation Authority	Funding sources and technical advice on septic systems, development, fisheries, and natural heritage
Ministry of Municipal Affairs & Housing	Provides technical advice on the Ontario Building Code and approved septic system designs; maintains list of trained and qualified professionals (Qualified Registered Tracking System); Publications on operating a septic system.
Ontario On-Site Wastewater Association	Maintains list of trained and qualified professionals; Guides to operating and maintaining septic systems
Ontario Rural Wastewater Association	Promotes environmentally sustainable development of rural and urban areas through the effective use of wastewater treatment and dispersal technologies
Ministry of Environment	Provides guidelines for septic systems. Cleanup advice and support for spills or leaks. Permits for pesticide applicators and operators Permits for fuel transportation Permits for transportation of regulated substances Backup emergency response services Review of environmental management programs
York Region Health Department	Provides technical and field support for public health issues including failing septic systems
Town of Georgina	Septic inspector provides technical advice and potential field support
Ministry of Natural Resources Emergency Operations Centre	Provides backup emergency response for forest fires, floods and erosion upon request.

10.0 References

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