



Muskoka Watersheds Progress Report Card Municipal Progress Since 2007

Introduction

The principal objective of the 2007 Watersheds Report Card was to evaluate changes in ecosystem condition and the impact of human actions against a standard of a healthy, functioning and sustainable watershed. Achieving this objective is a shared responsibility of everyone who lives within the watershed. This report will explore new programs and actions that have been taken by municipalities to move toward that long-term goal of sustainability. Although municipal action is only one component of the overall equation, there is no doubt that our municipal governments can, and do, take a lead role by their example and by implementing policies and regulations that support a more sustainable approach to development and community activities.

The Watersheds Report Card reports on the health of the land, water and air in watersheds that are partly or totally within the District Municipality of Muskoka. The key message of the 2007 Report Card was to "Strengthen Nature's Capacity to Cope with Change." This is an elusive goal and although each municipality across the watershed has taken some steps to help strengthen Nature's defences, there is and always will be more to do.

Although this report focuses on the actions of municipalities over the last few years with respect to improving both corporate and program standards of behaviour when it comes to environmental issues, the report is not solely about municipal actions. Municipalities do not act in isolation but rather are an indication of the public will to embrace change and tackle some very difficult environmental and lifestyle issues. Where municipalities have had success is where the public opinion has supported or encouraged action. Where municipalities have not achieved what some people feel is necessary, it is often because local public support for the action is not there. While municipalities are often the focal point, the real work has to occur as a cooperative effort of many sectors to inform and educate the greater public, acquire knowledge that can support informed decisions, and lead by example both as individuals and organizations.

Background

Recent scientific thinking challenges us to understand the importance of the local, regional and global interconnectedness of the natural systems. While natural evolutionary change occurs regardless of human activity, people cause other kinds of change. At the global level we're seeing the effects of climate change, acid deposition and invasive species. At the local level we see changes to natural habitats resulting from forestry practices and the way that development is influenced and controlled. Developing and implementing best practices as we develop our watersheds will be critical if we want to be able to leave our children the rocks, trees, clean water and blue skies of Muskoka that we all enjoy and love.

The 2007 Watersheds Report Card identified eight key areas of improvement to strengthen Nature's capacity to cope with change:

- Protect shoreline vegetation
 - Reduce hardened surfaces
 - Protect significant wetlands
 - Reduce habitat fragmentation
 - Maintain large natural areas
 - Remediate degraded sites
- } For the purpose of this report these two components have been combined

- Contain urban sprawl – For clarity in this report this component has been renamed “Encourage New Development to Locate in Urban Areas”
- Reduce carbon emissions

All the municipalities in the watersheds are involved at some level in a variety of programs and activities that will encourage more sustainable communities and result in the protection of the lifestyle and values shared by many across the watersheds. In this report, the review of municipal actions focuses on the eight key areas that require improvement as identified through the 2007 Watersheds Report Card. However, we would be remiss not to identify and acknowledge the other good work being done by our municipal partners. Appendix A highlights a wide variety of programs currently being undertaken by municipal councils across the watershed. Programs include corporate approaches to internal programs as well as municipal bylaws and public programs. Corporate programs include pesticide and anti-idling policies, transition to paperless agendas, energy conservation programs for municipal buildings, and green fleet programs (purchase of fuel-efficient and hybrid vehicles). Municipal bylaws and public programs include pesticide and anti-idling bylaws, septic re-inspection programs, water quality monitoring programs and restrictive shoreline development policies; tree-cutting and site alteration bylaws; community cleanup days, and stewardship programs, to mention a few. No municipality is implementing all these programs, but all municipalities are involved in some programs.

Review of Report Card Key Messages

A review of the key activities identified in the 2007 Muskoka Watersheds Report Card indicates some progress is being made to address the unprecedented change facing our watersheds and to strengthen Nature’s ability to cope with that change. At a strategic level, Muskoka is developing a growth management strategy. The Lake System Health program is being implemented both in Muskoka and in the Township of Seguin. Municipalities are beginning to develop and adopt tree-cutting and site alteration bylaws; Muskoka is developing a more strategic Forest Health program. Issues like the protection of endangered species and fish habitat continue to be addressed through the review of development applications.

However, although progress is being made, there is still more to do. Wetlands are still vulnerable; there is no comprehensive natural areas strategy; and the percentage of new development occurring in the rural area is still very high. Below is a review of the successes and challenges facing not only municipalities but everyone in Muskoka as we strive to establish a Muskoka lifestyle that will support strong economic growth, protect a traditional “Muskoka lifestyle” and ensure that we continue to be good stewards of the land and pass on to our children the resources we enjoy today.

The progress of each activity toward achieving the goal of a healthy watershed has been rated based on relative improvement. 😊 **Optimistic** means that all municipalities have identified the issues and are taking steps to address or improve the situation. 😊 **Cautiously Optimistic** means that some but not all municipalities have identified the issue and are taking action. 😞 **Concerned** means that no municipality has taken significant action to address this issue.

A. Protect Shoreline Vegetation



Evaluation	
Achievements	<ul style="list-style-type: none"> a. Adoption of restrictive shoreline development policy by Muskoka and the Township of Seguin. b. Adoption of tree-cutting and site alteration bylaw by Muskoka Lakes and Seguin and a development permit bylaw by the Township of Lake of Bays. Bracebridge is considering a tree-cutting and site alteration bylaw.
Challenges	<ul style="list-style-type: none"> a. Shorelines are still vulnerable in five (5) of the eight (8) municipalities to clear-cutting of trees, blasting of rock shorelines and filling in of wetlands. b. While policies and the intent of Council are often very strong, on-site implementation and compliance monitoring is often under-resourced and complaint-driven. c. Shorelines in urban areas do not have the same level of protection as shorelines in the traditional waterfront area.
Required Action	<ul style="list-style-type: none"> a. Adoption of tree-cutting and site alteration bylaws, or development permit bylaws to control removal of shoreline vegetation on all shoreline property. b. Additional resources for bylaw enforcement. c. Continued education on the need to protect shoreline, with greater involvement by property owners. Muskoka Watershed Council has a role to play in this program.

Analysis

Municipal Policy

For many years, municipalities in Muskoka have focused on the protection of shoreline vegetation from a policy and stewardship perspective. In 2007, the District Municipality of Muskoka led the way with the adoption of an official plan policy that requires new development and redevelopment to protect existing natural shorelines and renaturalize shorelines where the native vegetation has been removed. As required under the Planning Act, over the last five (5) years, each of the six Muskoka Area Municipalities has brought their plans into conformity with the Muskoka plan. In 2008, the Township of Seguin also adopted official plan policy that requires the protection or enhancement of shoreline vegetation.

Official plan policy establishes the program framework; however, strong implementation tools are required to ensure that policy objectives can be achieved. Where lakes are especially sensitive to development, District Official Plan policy requires that tree-cutting and site alteration bylaws, or a development permit bylaw, are in place before new lot creation can occur. These tools are the only implementation tools available to a municipality to protect shoreline vegetation where there is no development application under consideration. The Townships of Muskoka Lakes, Bracebridge, and Seguin have recently passed tree-cutting and site alteration bylaws. The Township of Lake of Bays was the first municipality in Ontario to pass and implement a Development Permit By-law that regulates the removal of trees and site alteration in the waterfront area. The Township has regulated vegetation removal on the shoreline for over four (4) years.

Where a municipality does not have a tree-cutting or site alteration bylaw, protection of the shoreline is achieved through the use of site plan control. This is a much weaker tool and very difficult to enforce. The site planning process is not applicable where the proposed activity is not associated with a development application. Where action can be addressed, fines or other forms of remediation are minimal.

Urban Areas

The high standard for shoreline stewardship and naturalization does not always translate into a similar high standard of protection on private property in urban areas. Oftentimes there is a belief that urban areas are different than the recreational waterfront area and a less natural shoreline is acceptable. As the shoreline buffer is the last line of defence against nutrients, pesticides and other contaminants reaching our recreational and drinking water sources, it is even more important to maintain this natural barrier in the more developed portion of the watershed. Stronger urban shoreline protection policies and programs are required in all urban areas.

B. Control Stormwater Runoff



Evaluation	
Achievements	<ul style="list-style-type: none"> a. Muskoka, in conjunction with the Area Municipalities, has initiated a strategic Stormwater Management Strategy. b. Redevelopment projects in Huntsville and Gravenhurst have incorporated improved stormwater management facilities. c. Large new development is beginning to incorporate upgraded stormwater management techniques.
Challenges	<ul style="list-style-type: none"> a. Stormwater in urban core areas is not being treated before entering surface water sources and there is no plan to develop such a program. b. Compliance monitoring of stormwater facilities on large commercial, industrial and residential developments is not occurring. c. Compliance monitoring of construction-mitigation facilities is not occurring. d. There is still a heavy reliance on end-of-pipe solutions, such as stormwater ponds, instead of a treating stormwater in a more dispersed system that allows rain water to soak into the ground where it falls.
Required Action	<ul style="list-style-type: none"> a. Update standards or guidelines that require the use of Low Impact Development (LID) methods. b. Develop programs to remediate urban areas. c. Enforce stronger compliance monitoring during construction and for the operational life of the facility. d. Develop and implement a proactive education program that supports the use of LID methods. Muskoka Watershed Council has a role to play in this program.

Analysis

Stormwater runoff from built-up areas is generated from a number of sources including residential areas, commercial and industrial areas, roads, highways and bridges. Essentially, any surface that does not have the capability to pond and infiltrate water, or let it absorb into the ground, will produce runoff during storm events. When a land area is altered from a natural forested ecosystem to a landscape consisting of rooftops, streets and parking lots, the hydrology of the system is significantly altered. Water that previously ponded on the forest floor, infiltrated into the soil and converted to groundwater, or was used by plants and evaporated or transpired into the atmosphere, is now converted directly into surface runoff. An important measure of the degree of urbanization in a watershed is the amount of hardened surfaces. As the amount of hardened surfaces increases in a watershed, more rainfall is converted to runoff and is not available to the watershed processes that depend on it.

Currently the District of Muskoka, with the support of the Area Municipalities, is developing a strategic stormwater management strategy. The associated guideline document encourages developers to take a treatment train approach to stormwater, managing stormwater from the minute it hits the ground to when it flows into the

receiving waterbody. This approach uses site-level facilities such as rain barrels and rain gardens; transport facilities such as grassed swales and infiltration systems; and end-of-pipe solutions such as stormwater ponds, natural filters and naturalized wetlands. Recent new residential development projects have already incorporated several of these techniques.

There is no question that stormwater management on new residential developments will improve and incorporate up-to-date techniques. However, new commercial and industrial facilities are still large barren and hardened areas with few natural areas to absorb, cleanse and return rain water to the natural system. The redevelopment of existing urban areas will also be a challenge. Across the watershed the downtown area of each municipality is located on a waterbody. There are few options for increasing the permeability of these areas; however, as redevelopment occurs steps should be taken to address this issue.

Some Area Municipalities are beginning to explore improved stormwater techniques in urban core areas. The Town of Huntsville has taken some preliminary steps to remediate an area of hardened surfaces within their urban core by creating a small park area with a stormwater management pond, stormceptors (prefabricated, underground units that separate oils, grease, and sediment from stormwater) and end-of-pipe eco-filters. The Town of Gravenhurst also incorporated enhanced stormwater techniques in the redevelopment of the Muskoka Wharf project.

The future challenge for municipalities will be to develop and implement design guidelines for all types of development that ensure that post-development stormwater quality, quantity and flow equal pre-development stormwater quality, quantity and flow. This will require creative solutions by both municipalities and developers. Existing land use policy in some local official plans has begun this process. The Town of Bracebridge Official Plan requires that natural streams, watercourses and wetland areas are retained, as much as possible, in their present form and that stormwater management facilities are naturalized using native species. Stormwater management facilities, intended to protect natural features, are to be developed on the basis of best management practices. Although these policies are a good start, studies demonstrate that there is degradation to a watershed where as little as 10% of the area is hardened. Municipal policy or guidelines that challenge developers to incorporate alternative development techniques that reduce hardened areas would further protect and improve our water resources.

C. Protect Wetlands



Evaluation	
Achievements	a. All municipalities have policy that supports the protection of wetlands.
Challenges	a. Identification of Provincially Significant Wetlands (PSW). b. Implementation of strong wetland protection policy on a site-specific basis. c. There is little control over the filling-in of privately owned wetlands in rural and urban areas and waterfront areas that are not subject to specific controls.
Required Action	a. Evaluation of large wetlands with potential to be Provincially Significant. b. Stronger Official Plan policy to protect non-Provincially Significant Wetlands is required. c. Adoption of implementation tools to control destruction of wetlands without having to submit a development application. d. Education on the value of wetlands for ecological, health, economic and recreational values. Muskoka Watershed Council has a role to play in this program.

Analysis

Wetlands are the kidneys of the watershed and critical for the long-term protection of water quality, water quantity and base flow. The protection of wetlands is critical for both human use and ecosystem health and yet it is a difficult issue to address.

The provincial framework for the protection of wetlands is based on the situation in southern Ontario where there are relatively few wetlands left and most have been evaluated under the provincial evaluation system. In that situation, the provincial policy is very clear that Provincially Significant Wetlands must be protected. In Muskoka the situation is different. First, we are fortunate to benefit from having most of our wetlands still intact and fully functioning – leading to the belief that we have lots of wetlands and losing small wetlands is not critical. Second, relatively few of our wetlands have been evaluated, resulting in wetlands that may be potentially provincially significant but are not protected under the provincial policy statement.

This lack of technical knowledge creates a very difficult situation for municipal councils. First of all, without a tree-cutting bylaw and site alteration bylaw, or a development permit bylaw, municipalities can only address wetland issues as part of a development application. Although all Councils have policy that encourages the retention of wetlands, it is difficult to deny a site specific development application when the overall value of the larger wetland is unknown and only a small amount of the wetland is under consideration. Also, the framework provided by the Provincial Policy Statement (PPS) states that if a wetland is not identified as a PSW then development can be considered by the local council.

There are three components to the wetland issue:

1. Wetlands that are not PSW – where a wetland is not a PSW, current planning policy is weak. All official plans talk about protecting these wetlands but the policies allow trade-offs and manipulation of these sites based on site-specific biophysical analysis conducted by the developer. This is especially true in urban areas where there is increased pressure for development. However, it is precisely in these more developed areas that wetlands are required for flood storage, stormwater management, water purification, and base flow regulation.
2. Wetlands that may be PSW but have not been evaluated – Muskoka is a large geographic area and has many large wetlands and wetland complexes. It may never be possible to identify and evaluate all the wetlands that are provincially significant. Where a wetland has not been evaluated, the restrictive provincial policy does not apply. It is possible that Muskoka may lose many valuable wetlands without understanding their significance, resulting in future environmental issues.
3. Where there is no development application – Until very recently, where there is no development application there is no mechanism to control the filling and destruction of wetlands. In the Townships of Muskoka Lakes, Bracebridge, and Seguin, the site alteration bylaw should address this issue in the waterfront area. The Township of Lake of Bays also controls wetland filling and destruction in the waterfront area through its development permit bylaw.

D. Maintain Large Natural Areas



Evaluation	
Achievements	<ul style="list-style-type: none"> a. Algonquin Highlands has established the Water Trails program that manages canoe trails on the old Leslie M. Frost Centre property and ensures proper management of the area. b. Muskoka has initiated a Natural Areas Strategy.
Challenges	<ul style="list-style-type: none"> a. Large natural areas are still vulnerable to clear-cutting, road construction and large development applications. b. No municipality in the watershed has a natural areas strategy that takes a strategic look at protecting large natural areas and ensuring that appropriate linkages and connections are maintained. c. Exceptions to Official Plan policy on a site-specific basis can cumulatively lead to significant loss of natural areas. d. Forestry on private land is unregulated and has resulted in clear-cutting and other poor logging practices. e. Recreational use of Crown land is largely unregulated. Litter, poorly maintained campsites, and human waste create difficulties in some areas.
Required Action	<ul style="list-style-type: none"> a. Develop and implement, through Official Plan policy and zoning bylaws, a watershed-wide natural areas strategy. b. Implement tree-cutting and site alteration bylaws, or a development permit bylaw, across the waterfront <u>and</u> rural areas of the watershed. c. Develop and implement a Forest Health program with education and regulatory components.

Analysis

Programs and activities that will reduce habitat fragmentation and maintain large natural areas are interconnected and closely related. If the goal of watershed municipalities is to maintain the natural values of the area, then these types of programs should also form the base for growth and development within the watershed.

As detailed in the Muskoka Watershed Council position paper on Economic Development released in March 2008, “the natural environment is the foundation of a sustainable Muskoka. Our lakes and natural areas provide our drinking water, sustain plants and animals, moderate climate and clean our air. They are the essential elements of the scenic beauty that attracts visitors, provides the foundation of our tourism industry and underlies much of our recreation. Large natural areas and their ecosystems are the base of our economy. They are critical to retaining watershed health and water quality. They are fundamental to the quality of life that Muskoka residents value.”

This being stated, no municipality in the watershed has a natural areas strategy that takes a strategic look at protecting large natural areas and ensuring that appropriate linkages and connections are maintained. It is anticipated that through the current review of the Muskoka Official Plan, a Muskoka-wide natural areas strategy will be developed; however, the strength of such a strategy will be dependent on the support of local residents for protecting large natural areas.

The Muskoka River Watershed is fortunate to be comprised of approximately 50% Crown land with the headwater areas protected by Algonquin Provincial Park and the inaccessible Crown land areas in the Township of Algonquin Highlands. Of more immediate concern is the central portion of the watershed that is primarily private land and has no strategic plan in place that ensures the long-term health of the watershed. There is no question that developing a natural areas strategy in this part of Muskoka will be more challenging, as a balance is sought between the expectation of people to use their property, economic development and environmental objectives.

Where there is private land, municipalities must achieve a balance between individuals’ reasonable expectations for the use of their property and the public good. The Ontario planning system establishes a formal process for the municipality to identify the public good, establish development goals and objectives, and implement development regulations. However, because this system is a partnership of the local residents and the municipal government, many considerations come into play and influence Council’s decisions. The strategic or longer-term view of an area can be lost in this process.

While all municipal official plans generally have policy that is supportive of maintaining natural areas, oftentimes the policies are discretionary, using wording such as “should” and “may” and not “shall” or “must.” Site-specific decisions often appear small and insignificant, having little direct negative impact on the broader goals and objectives of the official plan. On a watershed basis, however, individual decisions do have a cumulative impact. Proposals in the rural area are rarely turned down. Currently the urban-to-rural development ratio for two of the three more urban municipalities within the watershed is 80% urban and 20% rural; however, the ratio in the Town of Huntsville is currently 30% urban and 70% rural with a ten (10)-year objective of shifting that ratio to 40% urban and 60% rural¹. Given a population projection of 7,200 new people by the year 2031², approximately 4,000 to 5,000 of those new immigrants may live in the rural area. The pressure this level of rural development will have on fragmentation and the protection of large natural areas would be significant.

Forestry

Although forestry is not a land use that can be regulated under the Planning Act, it is a use of land resources that can significantly impact the health of natural areas. On Crown land, comprehensive forest management plans are developed that consider the economic and ecological aspects of a forestry operation. On private land there is not the same level of control or management required.

As with land use decisions, where a forestry operation is occurring on private land municipalities must achieve a balance between individuals’ reasonable expectations for the use of their property and the public good. The District Municipality of Muskoka has taken initial steps to develop a Forest Health program that will ensure healthy forests that can maintain our logging industry and will encourage ecologically healthier forests with a wider range of biodiversity. The Muskoka Forest Health program will consist of a stewardship and education program. The County of Haliburton passed a Tree Harvesting By-law in 1999 that regulates tree cutting on private property.

E. Remediate Degraded Sites



Evaluation	
Achievements	<ul style="list-style-type: none"> a. The Town of Gravenhurst renaturalized 1000 metres of shoreline at the Muskoka Wharf, removed 7500 tonnes of contaminated soils and improved stormwater runoff. b. The Town of Huntsville is creating a green space in the downtown core where there had historically been a lumber yard. c. In addition, almost 500 metres of public shoreline have been renaturalized elsewhere across Muskoka.
Challenges	<ul style="list-style-type: none"> a. There is no strategic plan identifying large degraded areas across the watersheds that require remediation. b. Remediation can only occur when an opportunity arises through landowner initiatives or redevelopment.

¹ District Municipality of Muskoka, Growth Management Strategy, Phase 2, 2008.

² Ibid.

Required Action	<ul style="list-style-type: none"> a. More detailed analysis of larger degraded systems is required to develop a plan that identifies potential connections between existing healthy natural areas and formulates a remedial action plan to build a future connection for the flow of flora, fauna and genetic material. b. Policies and programs that will encourage the development, protection or remediation of core areas and connection between these areas are required.
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Analysis

Across our watershed there are many healthy, functioning and diverse ecosystems; however, as a result of past development and practices there are several areas that require remediation. As noted below, several municipalities, in conjunction with local community organizations, have renaturalized urban park shorelines, providing a local example of a remedial action that can be implemented on private property.

Municipality	Renaturalization Location	Metres of Shoreline
Bracebridge	Bracebridge Bay Park	61 m
Muskoka Lakes	Hanna Park	30 m
	Windsor Park	
	Divers Park	
Huntsville	Camp Kitchen	30 m
Gravenhurst	Muskoka Wharf	1,000 m
Lake of Bays	Norway Point Park	50 m
	South Portage access	20 m
	Riverbanks in Baysville	300 m

Within urban areas, municipalities have required developers to remediate areas as redevelopment occurs. The most notable project is the redevelopment of the Muskoka Wharf in Gravenhurst where 7500 tonnes of contaminated soil was removed, one (1) kilometre of shoreline was renaturalized and fish habitat was created. Similarly, the Town of Huntsville has taken steps to improve stormwater flow and green an area of the downtown that was historically a lumber yard.

On a watershed scale, the Muskoka Watershed Inventory identifies larger degraded areas that require remediation before they are fully functioning natural areas. Many areas received low ecological scores in the inventory because they are small and lack any connection to other natural areas or because existing or past development has negatively impacted the area. A more detailed analysis of these areas is required to develop a plan that identifies potential connections between existing healthy natural areas and formulates a remedial action plan to build a future connection for the flow of flora, fauna and genetic material. As part of a natural areas strategy, policies and programs that will encourage the development, protection or remediation of core areas and connection between these areas are required.

F. Encourage New Development to Locate in Urban Areas



Evaluation	
Achievements	<ul style="list-style-type: none"> a. Muskoka has initiated a Growth Management Strategy that will be implemented through the Muskoka and Area Official Plans. b. Recent Area Municipal Official Plans have established firmer urban boundaries.

Challenges	<ul style="list-style-type: none"> a. Site-specific rural residential applications are routinely approved. b. Property owners with property on the edge of urban areas often apply significant pressure to allow development. c. There is a demand for two (2) - to five (5)-acre lots in the rural area as early retirees choose that lifestyle. d. The Muskoka economy and lifestyle is based on low-density residential waterfront development.
Required Action	<ul style="list-style-type: none"> a. Finalize the Muskoka Growth Management Strategy and implement it through the Muskoka and Area Official Plans with policy that supports firm urban boundaries. b. Develop an education program on the real costs of rural and waterfront development. Muskoka Watershed Council has a role to play in this program.

Analysis

The District Municipality of Muskoka forecasts an additional 22,000 people in Muskoka by the year 2031³. Growth management strategies are required at both the District and local levels to ensure that this growth supports our urban centres and that our urban centres are contained in order to better protect the rural areas of the municipalities.

Currently, as required by the Provincial Policy Statement under the Planning Act, the District of Muskoka is preparing a District-wide growth management strategy. This strategy will allocate growth to each Area Municipality, who will subsequently develop their own growth strategies and incorporate their allocated growth into identified growth areas. It is expected that this process will occur over the next two (2) to five (5) years.

Population growth in the Townships of Seguin or Algonquin Highlands is not expected to be as substantial as the prediction for the District of Muskoka over the next thirty years. As such there is not the same need for their having detailed growth strategies such as those being undertaken in Muskoka.

I. Reduce Carbon Emissions



Evaluation	
Achievements	<ul style="list-style-type: none"> a. Bracebridge and Huntsville have passed anti-idling bylaws. b. Muskoka and Muskoka Lakes have initiated a paperless agenda program. c. Muskoka and Bracebridge have initiated a corporate conservation strategy. d. All municipalities have initiated energy conservation programs, including significant building upgrades. e. Muskoka has initiated a green fleet program, including the purchase of two hybrid vehicles. f. Muskoka will be monitoring its carbon footprint and developing programs on an iterative (repetitious or ongoing) basis to continue to reduce its carbon output.
Challenges	<ul style="list-style-type: none"> a. Anti-idling bylaws are difficult to enforce. b. The technology to facilitate a paperless agenda program is cumbersome. c. Not all municipalities have embraced the need to develop corporate conservation and carbon reduction programs. d. Green technology is still more costly than traditional alternatives.

³ Ibid.

Required Action	<ul style="list-style-type: none">a. Develop corporate conservation and carbon reduction programs.b. Initiate a public education program to encourage behaviours that reduce carbon emissions.c. Encourage senior government action.
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Analysis

Municipalities cannot regulate actions to reduce carbon emission; however, they can lead by example. In the past two (2) years many of our municipalities have undertaken significant steps to reduce their own emission and set a high standard of practice across the watershed.

APPENDIX A

MUNICIPAL PROGRAMS

Muskoka Watersheds Progress Report Card – Municipal Progress Since 2007

Activity	District of Muskoka	Bracebridge	Georgian Bay	Gravenhurst	Huntsville	Muskoka Lakes	Lake of Bays	Algonquin Highlands	Sequin
Water									
<i>Recreational Water Quality (2007 grade of A-)</i>									
Water Quality Monitoring	Monitors over 160 lakes	Part of Muskoka extensive water quality monitoring program	Part of Muskoka extensive water quality monitoring program. Participate in the Severn Sound Environmental Association	Part of Muskoka extensive water quality monitoring program	Part of Muskoka extensive water quality monitoring program	Part of Muskoka extensive water quality monitoring program	Part of Muskoka extensive water quality monitoring program	By lake association	Monitors all significant lakes
<i>Drinking Water (2007 grade of A-)</i>									
Source Water Protection	Currently undertaking projects in both the Muskoka and Black/Severn Watersheds	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Septic System Re-inspection Program	N/A	yes	yes	yes	yes	yes	yes	yes	yes
Municipal Waste Treatment	All plants are tertiary treatment. Working on eliminating the use of chlorine in the water. Conservation program under development	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Improved Stormwater Management Facilities	Developing a Strategic Stormwater Management Strategy with updated guidelines to be implemented through the subdivision approvals process	Sits on the technical working group for the Muskoka Stormwater Management Strategy	Sits on the technical working group for the Muskoka Stormwater Management Strategy	Upgraded stormwater facilities were included at the Muskoka Wharf development. Sits on the technical working group for the Muskoka Stormwater Management Strategy	Addressing stormwater issues in the redevelopment of a downtown site. Sits on the technical working group for the Muskoka Stormwater Management Strategy	Sits on the technical working group for the Muskoka Stormwater Management Strategy	Sits on the technical working group for the Muskoka Stormwater Management Strategy	Very limited urban areas	Very limited urban areas
<i>Stewardship Activities (2007 grade A-)</i>									
Stewardship	Active member of Muskoka Watershed Council	Active member of Muskoka Watershed Council	Active member of Muskoka Watershed Council	Active member of Muskoka Watershed Council	Active member of Muskoka Watershed Council	Active member of Muskoka Watershed Council	Active member of Muskoka Watershed Council	Active member of Muskoka Watershed Council	Active member of Muskoka Watershed Council
<i>Aquatic Habitats (2007 grade B)</i>									
Protection of Fish Habitat				Created fish habitat at the Muskoka Wharf			\$25,000 study of fish habitat concerns on Lake of Bays and recommendation for remedial action		

Muskoka Watersheds Progress Report Card – Municipal Progress Since 2007

Activity	District of Muskoka	Bracebridge	Georgian Bay	Gravenhurst	Huntsville	Muskoka Lakes	Lake of Bays	Algonquin Highlands	Sequin
Protection of Shoreline Buffer	Strong policy direction in Official Plan. Implemented through Area Municipal planning decisions	Through zoning, site plan, and new tree bylaw and site alteration bylaw	Through zoning and site plan on site-specific basis	Through zoning and site plan on site-specific basis	Through OP, zoning and site plan on site-specific basis	Through zoning, site plan, and new tree bylaw and site alteration bylaw	Through Development Permit Bylaw. In Baysville a community group has improved access to riverfront with a stairway	Through zoning and site plan	Through zoning, site plan, and new tree cutting and site alteration bylaws
Renaturalization of shorelines	N/A	Bracebridge Bay (61 m)		Muskoka Wharf Redevelopment project (1000m)	Camp Kitchen (30 m)	Hanna Park (30m) Windsor Park Diver's Park	Norway Point Park (50 m) South Portage access (20m). Riverbanks in Baysville (300m)		
Land									
<i>Ecosystem Protection (2007 grade A)</i>									
Natural Areas Strategy	Request for proposals for background studies has been issued							Large areas of Crown land. Management occurring through Water Trails Program	
Development Policy	Official Plan is under review and will include a Growth Strategy, Natural Areas Strategy, Endangered Species Policy, and Source Water Protection Policy amongst others	Focuses on urban development and relies on strategic level District policy in the rural and waterfront area. Urban boundary expansions require a detailed growth needs analysis	Developing a Community Master Plan for Port Severn that will address the many unique ecological challenges in the community	New Official Plan implements higher development standards in waterfront area. Development standards require lot grading, stormwater and construction mitigation. Urban boundary expansions require a detailed growth needs analysis	New Official Plan implements higher development standards in waterfront area. Urban boundary expansions require a detailed growth needs analysis	Official Plan implements higher development standards in waterfront area. Undertaking a comprehensive review of Port Carling prior to consideration of a boundary expansion. Review to include an environmental review	Relatively strong policy that directs development to settlement areas that are already built up. Rezoned 1600 acres of forest to limit use to passive recreation		Environment-first policy. Less development pressure than the southern portion of the watershed
Development Permit Bylaw (to deal with tree cutting and Site Alteration)	N/A			Considering as part of the process to update the zoning bylaw		N/A	Approved 2006 to address vegetation removal and site alteration in the waterfront area		N/A
Tree-Cutting bylaw	Decision not to have a tree-cutting bylaw	Approved Fall 2008 for waterfront and urban				Approved August 2008 for waterfront area and selected sites	N/A		Approved August 2008 for waterfront area and selected sites
Site alteration bylaw	N/A	Under development				Approved August 2008 for waterfront area and selected sites	N/A		Approved August 2008 for waterfront area and selected sites
<i>Development Impacts (2007 grade C)</i>									
Solid Waste	Goal of achieving 60%	N/A	N/A	N/A	N/A	N/A	N/A	Three (3) drop-off	Seven (7) drop-off

Muskoka Watersheds Progress Report Card – Municipal Progress Since 2007

Activity	District of Muskoka	Bracebridge	Georgian Bay	Gravenhurst	Huntsville	Muskoka Lakes	Lake of Bays	Algonquin Highlands	Sequin
Management	diversion of all solid waste, including green composting, e-waste, household hazardous waste, and curbside recycling programs that accept a wide variety of household recycling products							locations for a wide variety of household recycling products including e-waste and household hazardous waste. Recently added a "Red Bin" program for batteries, cell phones, compact fluorescent bulbs and printer cartridges	locations for a wide variety of household recycling products and household hazardous waste
Salt Management Plan	Salt Management Plan. Ongoing implementation	Salt Management Plan approved	Salt Management Plan. Cover storage facilities in town and at PW yard	Salt Management Plan approved. Built covered storage facility. Reduce salt usage by 30-40%	Salt Management Plan. Pre-wetting capability being added to trucks	Salt Management Plan. New salt storage facility	Salt Management Plan. Salt dome at Baysville. Plans for a dome in Dwight 2010	N/A	Salt Management Plan approved
Pesticide Bylaw	Provincial legislation now addresses cosmetic use of pesticides								
Community cleanup days	Undertake cleanup on District property	Undertaken in conjunction with Earth Day		Undertaken in conjunction with Earth Day	Undertaken in conjunction with Earth Day	Undertaken in conjunction with Earth Day	Undertaken by community groups		
<i>Protection of Wetlands (2007 grade C)</i>									
Wetlands Programs			Required the donation of a PSW to the local Land Trust through a development application						
<i>Air (2007 grade C)</i>									
Anti-idling bylaw	N/A	Yes. Enforcement through education program			Yes				
Corporate Programs									
Corporate Conservation Strategy including facilities energy audit	Comprehensive program being developed and implemented including the purchase of hybrid vehicles	Comprehensive program being developed and implemented	Some facilities have had energy audits and upgrades			Some facilities have had audits and upgrades	Energy audit completed. Upgrading of facilities is ongoing		Energy conservation program in facilities
Transition to paperless agenda	Yes					Yes			

Muskoka Watersheds Progress Report Card – Municipal Progress Since 2007

Activity	District of Muskoka	Bracebridge	Georgian Bay	Gravenhurst	Huntsville	Muskoka Lakes	Lake of Bays	Algonquin Highlands	Sequin
Tree-Cutting Policy	Use only native vegetation			Yes					
Pesticide Policy	Use Integrated Pest Management System	Yes	Yes	Yes	Yes	Yes	Yes		
Anti-idling policy	Yes		Yes		Yes				
Community Greening Program	Native planting at all facilities	Communities in Bloom Community		Communities in Bloom Community		Communities in Bloom Community	Community group plants and maintains vegetation in Baysville. Baysville group is undertaking a long-term tree planting project in community		
Citizens' Environmental Committee				Committee created in Spring 2009	Committee was first created in 2007 and has evolved in both form and function				
Remediation of Degraded Sites				Muskoka Wharf project removed toxic soils, created fish habitat	Greening of old lumber yard downtown				

NOTE:

N/A means that the parameter is **not applicable** to the municipality either because they have chosen to use an alternative tool or because they do not have jurisdiction under the Municipal Act.
Blank Cell means that the municipality has chosen **not to take any action** to address the particular parameter.