

Progress Report on the

# Lake Simcoe Clean-Up Fund

### Government of Canada's Action Plan for Clean Water

Restoring Lake Simcoe Through a Partnership Between the Government of Canada and the Community





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 $\ensuremath{\mathbb{C}}$  Her Majesty the Queen in Right of Canada, 2010

# Lake Simcoe Clean-Up Fund

Lake Simcoe is the fourth-largest lake in the province of Ontario and provides drinking water to more than 400,000 people in the region. Located north of Toronto, Lake Simcoe plays a vital role in the region's economic prosperity and well being. Due to rapidly increasing population growth, urban development and agricultural intensification, ecosystem health in Lake Simcoe has been steadily declining for many years. Excessive amounts of phosphorus pollution from runoff from urban, rural and agricultural uses in the watershed are contributing to excessive algae growth. As a result, the lake is being robbed of oxygen, which is negatively impacting cold water fish, wildlife and overall water quality.

The Government of Canada believes that clean, safe and healthy water is something all Canadians have the right to enjoy. That is why the federal government, under the Action Plan for Clean Water, is investing in regulating and enforcing laws and in restoring and monitoring Canadian water resources. The Action Plan for Clean Water also supports research for a better understanding of the factors that threaten our water quality - everything from pathogens, chemicals and nutrients, to invasive species and acid rain.

As part of the Federal Action Plan for Clean Water, Environment Canada is helping Lake Simcoe residents to preserve and protect Lake Simcoe and restore the health of the lake through a \$30 million, five-year Lake Simcoe Clean-Up Fund (the Fund). The Fund provides financial and technical support to implement priority projects aimed at:

- ✓ Reducing phosphorus inputs to achieve nutrient reduction;
- ✓ Restoring fish and wildlife populations; and
- Enhancing research and monitoring capacity deemed essential for the restoration of Lake Simcoe and its watershed.



### Threats to Lake Simcoe's Ecosystem Addressed by the Clean-Up Fund

- Excessive phosphorus loading
- Lack of riparian vegetation and natural areas
- Degraded nearshore fish habitat

The Fund is administered by
Environment Canada in
consultation with a variety of
federal, provincial and municipal
agencies, a Technical Review
Committee, and a Public Advisory
Committee - Protect and Preserve
the Environment of Lake Simcoe
Committee (PROPEL)



The federal Fund contributes to and leverages community partners in taking action to address immediate and long term threats to ecosystem health of Lake Simcoe. In the first year, for every dollar of the Fund, four dollars of in-kind contributions were provided by project partners.

In addition to supporting innovative techniques, technologies and measures the Fund supports 'tried and proven' activities, studies and projects in order to achieve tangible improvements to:

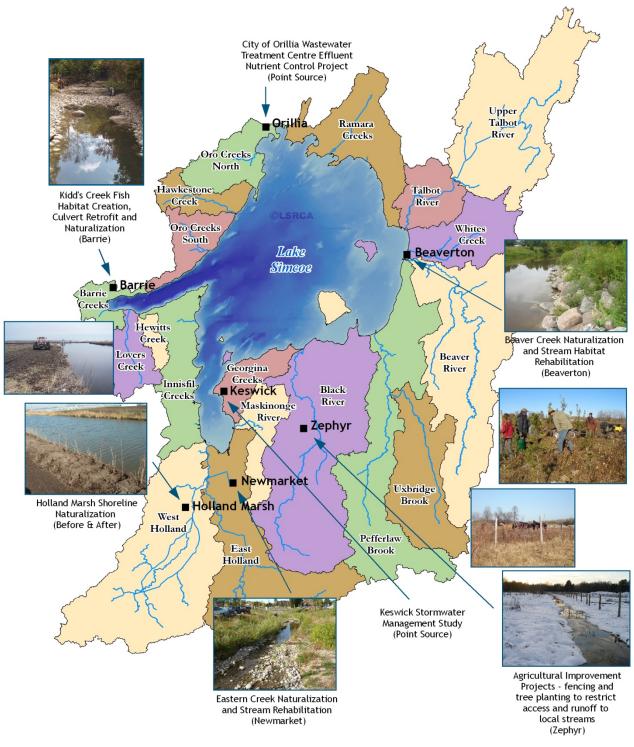
- Reduce Non-Point Sources of phosphorus inputs from rural and urban sources (e.g., farm upgrades and septic system programs);
- Restore Fish Habitat and the health of the aquatic ecosystem (e.g., naturalizing shorelines, rehabilitating streams);
- Control Point Sources of pollution including retrofitting existing stormwater ponds; and
- Conduct Research and Monitoring to improve our scientific understanding of the lake for better decision-making.

To ensure that the Fund complements and enhances clean-up efforts being undertaken in the Lake Simcoe watershed (e.g. Lake Simcoe Conservation Authority, municipal and community-based initiatives; the Ontario Government's 2009 Lake Simcoe Protection Plan), Environment Canada engages a variety of federal departments, provincial ministries municipal and agencies, and organizations.

In administering the Fund, Environment Canada is assisted by a multi-agency Technical Review Committee and a Public Advisory Committee ("PROPEL" - Protect and Preserve the Environment of Lake Simcoe Committee) which advises on priority actions and funding recommendations for the Fund.

### **Activities Around Lake Simcoe**

This map illustrates the Lake Simcoe watershed and highlights several of the 46 projects funded in the first year of the Lake Simcoe Clean-Up Fund.



Watershed Image created by Lake Simcoe Conservation Authority and provided by the Ladies of the Lake Conservation Association.

### **About the Lake Simcoe Watershed**

Lake Simcoe is a natural jewel in the heartland of south-central Ontario and is a tourist destination that attracts thousands of visitors each year. It is popular with seasonal residents who enjoy the lake for swimming, boating and fishing. The Lake Simcoe watershed includes about 3,303 square kilometres, sweeping north from the Oak Ridges Moraine through parts of York and Durham Regions, the City of Kawartha Lakes and Simcoe County, crossing 23 municipal borders. The lake, with a surface area of 722 square kilometres, covers about 20 percent of the total watershed. Approximately 35 tributary rivers within five major systems flow into the lake.

In Ontario, Lake Simcoe is the largest lake outside the Great Lakes system and is a major recreational area, located just north of Toronto. Lake Simcoe is known for its recreational fishery, which supports a tourism industry that generates more than \$200 million a year. The region is a major agricultural area has recently and undergone increased urban development, with more growth expected in coming decade.

As many local residents know, the health of Lake Simcoe had steadily declined for many years. primary environmental challenge for Lake Simcoe is declining water quality caused by phosphorus from land-based rural and urban sources.

Lake Simcoe's annual phosphorus inputs are two to three times the pre-settlement levels. This causes excessive algae growth and robs the lake of oxygen, which affects the overall water quality and the coldwater fish community, such as lake trout and lake whitefish.





Simcoe Region Conservation Authority

### Who is Involved?

The following groups were the recipients of close to two million dollars to implement projects during the first year of the Lake Simcoe Clean-Up Fund (April 2008 - March 2009):

**Individuals** such as rural and urban private land owners initiated projects for private land stewardship including planting trees, erecting fences, and maintaining natural shorelines. These people are leaders in land stewardship and provide good examples of how individuals in the Lake Simcoe watershed are contributing to its overall health.

**Industry** including private businesses and farmers, implemented shoreline habitat enhancements, ground water quality monitoring programs, fencing livestock out of watercourses, upgrading manure storage facilities, and applied other best management practices to minimize runoff and improve stormwater quality entering surface and ground-water sources.

Non-Government Organizations such as the Couchiching Conservancy, Kids for Turtles Environmental Education, Ontario Federation of Anglers and Hunters, Ontario Federation of Agriculture, Zephyr Society of Lake Simcoe, Windfall Ecology Centre, and the Ladies of the Lake Conservation Association created programs that engaged the community in remediation and monitoring projects.

**Educational Institutions** such as Trent University and the University of Guelph initiated research and monitoring programs, grade school students completed restoration projects, and both provided educational opportunities to improve our understanding of the Lake Simcoe watershed.



Eastern Creek - stream banks were stablilized using river stone and native plantings, and plunge pools to create fish habitat.

Municipalities such as the Regional Municipality of York, Town of Georgina, and the City of Orillia focused on storm and waste-water collection and treatment, and the protection of shorelines and environmentally sensitive areas. They also provided forums and opportunities for local community groups to become active in stewardship initiatives.

Lake Simcoe Region Conservation Authority worked with many local organizations to build new partnerships and facilitate community-based projects that focused on shoreline naturalization, in-stream rehabilitation, private land stewardship, stormwater retention and diversion, as well as research and monitoring programs.

**Provincial Government Agencies** such as the Ministry of Agriculture, Food and Rural Affairs and the Ministry of Natural Resources initiated research that focused on improving phosphorus management on private land and efficient agricultural practices through innovative best management practices.

### **Recipients and Partners**

In its first year, the Lake Simcoe Clean-Up Fund provided funding to 19 recipients to implement various projects and programs in the Lake Simcoe watershed, which generated cash and in-kind contributions from 56 other community stewards and collaborative partners. For every dollar of Clean-Up Fund money, four dollars of in-kind contributions were provided by community partners to help complete projects.

In addition, 100s of people contributed 1,000s of hours of volunteer time.

	Recipients	
Individuals	Private property owners	
Industry and Business Associations	First Leaside Group of Companies Ontario Farmers Association Ontario Federation of Agriculture	
Non-Government Organizations	Kids for Turtles Environmental Education Ladies of the Lake Conservation Association Loretto Maryholme Ontario Federation of Anglers and Hunters The Couchiching Conservancy Windfall Ecology Centre Zephyr Society of Lake Simcoe	
Education Institutions	Trent University University of Guelph	
Municipalities	City of Orillia Regional Municipality of York Town of Georgina	
Government Agencies	Lake Simcoe Region Conservation Authority Ontario Ministry of Agriculture, Food and Rural Affairs Ontario Ministry of Natural Resources	



Students and volunteers planted 560 trees and shrubs over 15 sites across York Region to help naturalize shorelines.









Gordon Drain

Anglers

Adopt a Stream

Lagoon City Workshop

# **Project Partners**

Individuals	100's of volunteers worked with the following partners	
Industry and Business Associations	Club Link (Highland Gate Golf Club) Holland Marsh Growers Association Holland Marsh Drainage Commission Local Farmers, Ranchers and Landowners	Ontario Corn Producers Association Phil's Haulage Stonemen's Valley Inc.
Non-Government Organizations	Bogart Creek Restoration Committee Ducks Unlimited Durham Land Stewardship Council Friends of Maryholme Green Communities Canada Helen McCrea Peacock Foundation Lake Simcoe Conservation Foundation Lake Simcoe Stewardship Rangers North Simcoe Private Land Stewardship Network North Simcoe Stewardship Ontario Invasive Plant Council Ontario Soil and Crop Improvement Association Ontario Streams Orillia District Soccer Club Our Lady of the Lake Women's Group	RiverSides Roches Point Community Association Save the Maskinonge South Lake Simcoe Naturalists Simcoe County Planting Partnership South Simcoe Streams Network Tallgrass Ontario The Nature Conservancy of Canada Trout Unlimited Twin Lakes Conservation Club Water for Tomorrow Wildlife Preservation Canada York Bassmasters York Environmental Stewardship Council York Natural Planting Partnership
Education Institutions	University of Waterloo's Centre for Community Mapping	York Region community/school groups York Region School Board
Municipalities	City of Barrie City of Kawartha Lakes Regional Municipality of Durham Township of Bradford West Gwillimbury Township of Brock Town of East Gwillimbury	Town of Georgina Town of Newmarket Township of Ramara/Lagoon City Parks and Waterways Commission Township of Uxbridge
Government Agencies	Lake Simcoe Region Conservation Authority Ontario Ministry of the Environment Ontario Ministry of Municipal Affairs and Housing	Ontario Ministry of Natural Resources Ontario Parks Ontario Stewardship Southlake Regional Health Centre

Talbot River



Kidd's Creek



Holland Marsh Farmer Workshops



# Fund Accomplishments 2008-2009

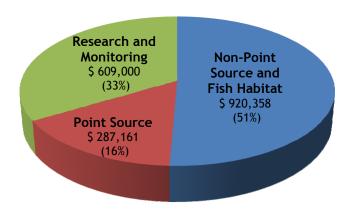
### Allocation of Funds

During Rounds 1 and 2 of the Lake Simcoe Clean-Up Fund \$1,816,519 was spent on 46 projects categorized into the three priority project areas.

### **Project Achievements**

The following are the measurable achievements of the various projects and programs funded by the Lake Simcoe Clean-Up Fund from April 1, 2008 to March 31, 2009.

### The Fund Contribution (\$)



### Non-Point Source and Fish Habitat

- ✓ 114.53 kg/yr of phosphorus diverted from use or
- √ 7,276 native trees and shrubs planted
- ✓ An area of 25,385 m<sup>2</sup> and a length of 4.25 km of stream/lake bank stabilized/protected
- ✓ 402 hectares (4.02 km²) of wetlands/aquatic ecosystems created, restored or rehabilitated
- √ 6.308 km of fencing installed to restrict livestock access to surface waters
- √ 420 cows restricted from surface waters
- ✓ 5.97 tonnes of sediment release reduction
- √ 1 erosion control structure constructed
- ✓ 1 Environmental Management Plan implemented
- √ 5 in-stream fish habitat structures installed
- ✓ 0.6691 ha (6.691 m²) of aquatic habitat created or restored
- ✓ 190.01 (1.9 km²) of shoreline habitat created or restored
- ✓ 2 ha (0.02 km²) of shoreline habitat preserved or protected
- ✓ 60 ha (0.6 km²) of habitat protected by land stewardship agreement



Talbot River shoreline naturalization and fish habitat creation project.

Simcoe Region Conservation Authority

### **Point Source**

- √ 3 stormwater ponds retrofitted
- √ 1 stormwater facility upgraded into an engineered wetland to enhance water quality control
- √ 600 households installed with Storm Water Protection Kits, including rain barrels
- √ 15,000 pieces of educational materials to reduce nutrients load in household raw sewage distributed
- √ 1 enhanced monitoring system to analyze surface and ground-water phosphorus (P) movement to maximize P assimilation
- √ 1 feasibility study identified major contributors of nutrients to sanitary wastewater and the operational changes and their associated cost/kg for enhanced nutrient removal
- ✓ 1 stormwater management strategy identified the
  beneficial combinations of technologies for site specific application including
  harvesting/reclaiming wastewater and stormwater
- ✓ Operating conditions, pollution reduction benefits, and cost requirements identified for 2 projects



- ✓ Monitoring sites at 3 sod farms were installed to measure runoff and tile drain loss of phosphorus
- ✓ Changes in sediment chemistry and biological communities were monitored over winter and over time (paleolimnology) in Lake Simcoe
- √ Variability of rainfall and the potential dust emission rates from various land uses around the lake were identified to develop a wind erosion vulnerability map for the Lake Simcoe airshed
- ✓ A nearshore monitoring program identified and described:
  - 4 significant plant growth triggers (depth/light levels; substrate; phosphorus loading; and watershed area), and 4 new areas of concern;
  - The benthic community;
  - · Water quality parameters for recovery targets; and
  - · Sediments to determine loading/release triggers.
- √ 8,656 best management practice opportunities were identified within the Lake Simcoe watershed
- ✓ A community website was established to promote Lake Simcoe Clean-Up Fund accomplishments and project successes



Portage Road Farm Upgrades — uncovered manure pile (top right) and the construction of a new manure storage facility to minimize non-point source runoff into local streams.





PALS - Paddles Around Lake Simcoe, Lake Simcoe Region Conservation Authority

# **Summary of Projects**

# Lake Simcoe Region Conservation Authority

Sophia Creek – accumulated sediments were removed and stream banks were stabilized through native tree and shrub plantings.



Bogart Creek – stream bed was enhanced through the installation of small boulders along the banks to promote fish habitat.

# The direct benefits from these projects include:

- ✓ Water quality and fish habitat improvements through the reduction of sedimentation/soil erosion and phosphorus inputs into the watercourse;
- ✓ Improved ecosystem function and visual aesthetics of the shoreline areas; and
- ✓ Engaged partnerships, improved access to resources, and landowner participation in protecting Lake Simcoe.

### Non-Point Source and Fish Habitat

### **Naturalization and Rehabilitation Projects**

Twenty-two projects were involved in naturalizing and stabilizing stream and lake shoreline areas within the Lake Simcoe watershed. Many of these projects planted native trees and shrubs, installed root wads, fascines and live cuttings into the banks, and increased the porosity of shoreline areas by removing hardened structures and replacing them with "green space" corridors, gravel and other permeable substrates.

In-stream bed enhancements and fish spawning habitat rehabilitation and creation was also accomplished by: widening cross sections of stream banks; placing boulders, river rock, cobble and logs in streams; creating plunge pools and micro-wetlands; retrofitting or removing on-line ponds; replacing culverts; installing fish ladders; and monitoring, tracking and mapping invasive species distribution in the basin. These projects involved community education, landowner contact and involvement, and on-going collaboration with various Lake Simcoe stakeholders.

### **Agricultural Projects**

Several projects implemented best management practices on farms in the Oak Ridges Moraine, McGee Creek Provincially Significant Wetland, and Talbot River tributaries. These projects included septic system and nutrient testing, tillage practices to reduce erosion, phosphorus fertilizer and manure storage and application methods to reduce application rates, leaching and runoff, and fencing to restrict livestock access to important headwater spring and wetland areas. These projects will reduce phosphorus loading and improve water quality in six Lake Simcoe sub-watersheds, as well as encourage farmers and ranchers to participate in land stewardship.



Livestock Restriction Access and Naturalization projects in Uxbridge and along McGee Creek and Holland Marsh - farmers erected fencing and vegetation on their property and along critical headwater creeks to prevent cattle from entering the waterways. These projects reduce water quality contamination and bank and in-stream erosion.





Lake Simcoe Region Conservation Authority

Walter Drive Erosion Control Project Before and After - approximately 630 m of shoreline was rehabilitated through bioengineering techniques including placement of river stone, fascines and live stakes, and the planting of 250 native trees and shrubs.

### Stewardship Plans

Stewardship plans provide a framework for shoreline stakeholders and agencies to work together to conserve and protect shorelines, critical habitats and unique features, and to put in place priority restoration and stewardship actions. These plans evolve through community outreach, landowner contact, issue inventory, science analysis and community consultation. Some of the actions include riparian and shoreline naturalization, wetland habitat creation or improvement, water sampling, benthic studies, reforestation, windbreaks, fencing, improved landscaping practices, and reduced use of fertilizers.

The benefits of stewardship plans are the reduction of non-point source pollution implemented through landowner and community partnerships.



Lake Simcoe Rural and Community Stewardship Program - property owners naturalized shorelines, created wetland habitats, and reduced pesticide and fertilizer use.

### The direct benefits from these projects include:

- ✓ Reduction of non-point source pollution implemented through landowner and community partnerships;
- Landowners are encouraged through funding to improve and repair failing septic systems;
- Stormwater is controlled, diverted or re-used minimizing runoff to streams and the lake.



Bogart Creek - approximately 80 m of stream bank was stabilized by installing live cuttings and over 170 native plantings.

### Septic System Project

This program has been developed to make grant funds available to septic system owners to encourage them to improve and/or repair failing systems.

### Stormwater Project

One program built on previous successes of the Regional Municipality of York by increasing its rain barrel distribution to more residents and small businesses and schools within York Region. Through the diversion, control and creative re-use of rainwater these solutions will control non-point sources of pollution and allow homeowners to become water stewards for Lake Simcoe.



Holland River Boulevard Stormwater Management Retrofit and Shoreline Naturalization - to filter nutrients that flow into the Holland River.



Roches Point Eco Park - increased pervious surfaces, naturalized the area creating a green space corridor.

### **Point Source**

### **Wastewater Treatment Projects**

Wastewater treatment projects focused on approaches to reduce phosphorus from entering Lake Simcoe and its tributaries. Some of these projects involved the integration of eco-technology methods like engineered wetlands and Phosphex™ (recycled metal oxides which absorb and immobilize both dissolved and non-soluble forms of phosphorus and contaminants) shoreline habitat enhancements, and working with residential homeowners to retain, filter and use rainwater in their own yards. Other projects included: sampling wells to monitor water quality and analyze phosphorus movement; retrofitting existing stormwater ponds;

# The direct benefits from these projects include:

- ✓ Reduction of point source pollution implemented through landowner stewardship efforts to retain, filter and use rainwater; and
- ✓ Upgraded wastewater treatment facilities and creation of stormwater ponds which reduce stormwater runoff and pollution to the tributaries improving lake water quality.

upgrading and monitoring the efficiency of wastewater treatment facilities; and preparing Stormwater Management and Implementation Plans that are environmentally effective and maximize phosphorus reduction from urban sources.



Holland Landing Riparian Planting - 1,650 native trees and shrubs were planted along 1,750 m of streambank to reduce soil erosion and decrease phosphorus loading.

### **Research and Monitoring**

### Information Resource Project

An on-line public database (<u>www.our30million.ca</u>) has been created for the Lake Simcoe basin to promote the Lake Simcoe Clean-Up Fund initiative and to enhance knowledge of its priorities, funding opportunities, and project successes.

### **Aquatic Habitat Monitoring Projects**

Two independent multi-year aguatic habitat research programs focused their efforts on collecting information on the nearshore community including: aguatic plant biomass and distribution; benthic invertebrate composition and density; water quality monitoring and its effect on species composition; sediment nutrient concentration, distribution and (phosphorus cycling); winter loading and paleolimnology (historical phosphorus load) chemical and biological changes; and sampling the influences of zebra mussels to better understand their impacts on the nearshore zone.



Ramara Creeks Stewardship Plan - newly planted windbreak to provide runoff protection, filtration and prevent loss of soil.









### **Phosphorus Loading Research Projects**

The goals of these multi-year studies are to develop more accurate methods and estimates of atmospheric deposition of phosphorus to Lake Simcoe; to quantify the contribution of local sources of atmospheric phosphorus; and to assess the cost-effectiveness of options for management and control of these sources of pollution. The benefits of these projects include efficient nutrient use, enhanced phosphorus fertilizer use, identified and validated best management practices to reduce phosphorus and waste water loss, and the development of a phosphorus management plan to share with local producers.

### Stormwater Research Project

A multi-year study measured discharges at the Atherley Narrows using a technique vetted through the Water Survey of Canada to fill an important data gap by providing critical information to help manage water levels and discharge control and increase accuracy of calculating phosphorus loads to Lake Simcoe.







Ramara Creeks Stewardship Plan - native shrubs were planted along this municipal drain to provide a buffer and erosion control, and a treed windbreak was planted to provide runoff protection and filtration and prevent loss of soil.

### **Water Quality Project**

This multi-year project is testing and modifying existing models that link phosphorus concentrations in Lake Simcoe to phosphorus inputs and to bottom water summer dissolved oxygen which is important to the survival of lake trout and other species.

### **Wastewater Treatment Projects**

One project tested engineered wetlands and their efficiency for removing pollutants and nutrients from waste-water year round. The second project inventoried the best management practice opportunities within three key areas of the watershed: 1) agricultural; 2) tributaries; and 3) urban areas to reduce nutrients and/or improve fish habitat.







# **List of Projects**

The following table lists all the projects and recipients within the three priority areas that received Lake Simcoe Clean-Up Fund dollars during the first year of the Fund. The total project funds were also included in the synthesis to acknowledge the contributions provided by other project partners.

PROJECT	RECIPIENT	The Fund Contribution (\$)	Total Project Funds (\$)
NON-POINT SOURCES AND FISH HABITAT			
Adopt-A-Stream-Crossing Stewardship Program	Regional Municipality of York	12,667	99,900
Beaver River Erosion and Habitat Creation	LSRCA	12,491	24,154
Bluff's Creek Water Quality Improvement Plan	Kids For Turtles Environmental Education	7,000	18,300
Bogart Creek Stabilization Project	LSRCA	11,200	60,535
Community Stream Steward Program - Lake Simcoe Initiative	Ontario Federation of Anglers and Hunters	35,706	68,306
Eastern Creek Stabilization Project - South Lake	LSRCA	85,950	212,687
Enhanced Rain Barrel Sales Program for Residents of York Region in the Lake Simcoe Watershed	Regional Municipality of York	10,000	22,658
Highland Gate Habitat Improvement Project	LSRCA	24,000	55,000
Holland Landing Riparian Planting	LSRCA	6,039	17,521
Holland Marsh Riparian Pilot Project	LSRCA	13,176	16,801
Hotchkiss Creek Outlet to Kempenfelt Bay	LSRCA	112,493	208,452
Kidd's Creek Erosion Control Measures at Cundles Rd	LSRCA	72,091	515,907
Kitchener Park Naturalization Project	City of Orillia	30,000	52,300
Lagoon City Shoreline Management	LSRCA	2,337	8,160
Lake Simcoe Rural and Community Stewardship Program	Dufferin South Simcoe Stewardship Network	74,405	2,888,950
Lake Simcoe Septic System Funding Program	LSRCA	6,500	15,716
Lake Simcoe Shoreline Management Plan	LSRCA	34,000	53,219
Livestock Access Restriction - Town of Uxbridge	LSRCA	1,140	4,682
Loretto Maryholme Shoreline Restoration	Loretto Maryholme	6,650	10,350
Maskinonge River Adopt a Watershed - Phase 1	LSRCA	14,916	39,286
McGee Creek Fencing Project	The Couchiching Conservancy	35,875	56,241
On-line Pond Removal - Justification and Inventory	LSRCA	32,693	49,535
Phosphorus Efficient Agriculture for Lake Simcoe Watersheds	OMAFRA	36,120	221,740
Portage Road Manure Storage & Management	LSRCA	19,000	54,139
Ramara Creeks Stewardship Plan - Phase 1	LSRCA	12,297	30,770
Roches Point Eco Park	LSRCA	16,003	55,003
Scanlon Creek Watershed Project	LSRCA	9,675	12,353

PROJECT	RECIPIENT	The Fund Contribution (\$)	Total Project Funds (\$)
NON-POINT SOURCES AND FISH HABITAT (continued)			
Sophia Creek Erosion Control and Bank Stabilization	LSRCA	54,561	109,436
Talbot River Erosion and Habitat Creation	LSRCA	5,760	12,465
Tracking System for Monitoring Invasive Species in the Lake Simcoe Basin	Ontario Federation of Anglers and Hunters	51,849	307,900
Walter Drive Erosion Control	LSRCA	6,155	13,652
Zephyr Creek and Tributaries Habitat Restoration/Water Quality Improvement Study - Phase 1 and Phase 2	Zephyr Society of Lake Simcoe	67,609	306,889
POINT SOURCES			
Engineered Wetland-Phosphex Integration Program at Centre for Advanced Wastewater Treatment	LSRCA	57,000	162,684
First Leaside Co-op Stormwater Management Project	First Leaside Group of Companies	63,420	629,570
Lake Simcoe Stormwater Protection Project	Windfall Ecology Centre	43,101	219,280
Stormwater Management Strategy to Address Uncontrolled Urban Areas using Site Controls and Innovative Stormwater BMPs	LSRCA	65,000	210,000
Stormwater Retrofit using New Technology (George Richardson Park)	LSRCA	24,640	675,000
Stormwater Management Retrofit using New Technology Holland River Boulevard, Town of East Gwillimbury - Phase 1	LSRCA	4,000	12,439
Wastewater Treatment Centre Effluent Nutrient Control	City of Orillia	30,000	45,170
RESEARCH AND MONITORING			
Flow Monitoring Enhancements - Atherley Narrows	LSRCA	70,000	120,000
Cleaning Up Lake Simcoe - Interactive Online Database to Increase Public Uptake in Lake Simcoe Clean-Up Fund	Ladies of the Lake Conservation Association	67,000	289,750
Developing Engineered Stormwater Wetland Technology to Greatly Improve Clean-Up by Stormwater Management Facilities - Phase 1	LSRCA	80,000	119,150
Lake Simcoe Basin BMP Inventory	LSRCA	60,000	145,847
Lake Simcoe Nearshore Monitoring Program	LSRCA	200,000	394,096
Lake Simcoe Pelagic-Benthic Coupling and Nearshore Production Processes	OMNR	32,000	75,000
Management and Control of Atmospheric Sources of Phosphorus to Lake Simcoe	University of Guelph	100,000	462,500
TOTAL		\$1,816,519	\$9,183,493

### Please note:

- Acronyms: LSRCA Lake Simcoe Region Conservation Authority; OMAFRA Ontario Ministry of Agriculture, Food and Rural Affairs; and OMNR - Ontario Ministry of Natural Resources.

  There are 17 additional projects that were approved, but were either delayed, cancelled or began work after April 1st, 2009.

  Final contribution and total project values may vary slightly as some projects are to be completed in 2010.

# How do I Apply for Funding?

Please see the Lake Simcoe Clean-Up Fund website at <a href="www.ec.gc.ca/lakesimcoe">www.ec.gc.ca/lakesimcoe</a> for details on how to apply or send an email to <a href="lakesimcoefund@ec.gc.ca">lakesimcoefund@ec.gc.ca</a> and request to be added to the distribution list to receive the call for letters of intent.

The Fund uses a two stage process for funding eligible projects:

- 1. Approval of letters of intent and request for detailed proposals; and
- 2. Approval of detailed proposals and development of funding agreements.

Applicants are required to send a Letter of Intent in response to scheduled calls in April and October of each year in electronic format by email in Microsoft WORD.

The Clean-Up Fund targets a federal contribution of one-third, but will provide up to twothirds of total project cost, with an emphasis on leveraging other funding sources and collaborative partnerships.

# **Acknowledgements**

Environment Canada would like to acknowledge and recognize the members of PROPEL (Protect and Preserve the Environment of Lake Simcoe Committee) and the Technical Review Committee for their contribution to the administration of the Lake Simcoe Clean-Up Fund. PROPEL is an advisory committee to the Minister of the Environment that represents the interests of people who live and work around the lake. The Technical Review Committee is a multi-agency partnership that provides technical expertise throughout the process.

PROPEL committee members (during 2008-2009):

- · Richard Simpson Chair
- Robert Bowles
- David Edwards
- Paul Harpley
- Robert Matthews

- Neil Roe (past member)
- Susan Self
- Annabel Slaight
- George Taylor (past member)

### Technical Review Committee Agencies:

- · Environment Canada
- Agriculture and Agri-Food Canada
- Fisheries and Oceans Canada
- Lake Simcoe Region Conservation Authority
- Ontario Ministry of Agriculture, Food and Rural Affairs
- · Ontario Ministry of the Environment
- Ontario Ministry of Natural Resources

### www.ec.gc.ca/lakesimcoe

Additional information can be obtained at:

Lake Simcoe Program Unit Great Lakes Basin and Lakewide Management Section Ontario Strategic Integration and Partnerships Division Environment Canada 867 Lakeshore Road Burlington, Ontario, L7R 4A6

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