

Durham Children's Watershed Festival Teacher's Guide





Here is your 2018 *Durham Children's Watershed Teacher's Guide*. Everything you need for a successful and enjoyable trip. To help you prepare you have received the following items:

Teacher Quick Reference Checklist - easy to follow checklist with Teacher Session information
DCWF Invoice/Confirmation with your Festival date (Contact Teacher fill out and return)
Adult Volunteer Info Sheet with DCWF Event Map
List of DCWF Activities
DCWF Festival Planner

INTRODUCTION

Clean healthy water is essential for the survival of all living things; plants, insects, birds, mammals and even us. Water connects all earth systems: water, land, air and life. Without it nothing lives and nothing grows.

A <u>watershed</u> is the area of land that catches the runoff water draining from rain and snowmelt. This runoff water drains or "sheds" down the slope of the land to the same creek, stream, river, marsh, lake or other waterbody. Watersheds are separated from one another by higher parts of the landscape; ridges, hills, mountains and other landscape features. Some of the water that falls is stored in the land while some of it evaporates into the atmosphere.

Everyone lives in a watershed and we are all upstream from someone in our *watershed community*. All watershed communities are connected. Everything in the watershed community is dependant on the watershed's health.

Some of the runoff water drains into waterbodies in the ground called aquifers and is referred to as groundwater. Some people get their water from groundwater by pumping it to the surface using a well while others collect surface water from lakes or rivers.

Water has played an essential role in Canada's growth, providing food, drink, transportation and trade routes. It continues to play an important role in our lives today. Landuse impacts the watershed and everything that we do in our watershed community can effect nearby surface and groundwater in both positive and negative ways.

Only 2.5% of the world's water is in freshwater lakes, rivers and groundwater aquifers. The Great Lakes are one of the largest freshwater systems on earth. They represent 21% of the world's supply of fresh water and 84% of North America's surface water. The Great Lakes Basin is home for 40 million people, including 98% of Ontarians and 40% of Canadians. Ontario residents and businesses draw about 58% of their water supply from surface water and 42% from groundwater. In Durham Region 95% of our water comes from Lake Ontario.

The remainder coming from groundwater supplies and Lake Simcoe. The Region of

Durham Works Department supplies 179,000,000 litres of drinking water to the residents of Durham on a daily basis. Ontario has an extensive supply of surface and groundwater resources, yet under the pressure of growing development many of these resources have become degraded. Concerns for water quality and quantity are growing. In comparison to surface water, groundwater is not as easily contaminated, but once it is, it is much more difficult to un-do.

Water issues are best understood in relation to watersheds; i.e., things dumped on the ground may eventually end up in a stream, lake or under ground in an aquifer. Education and media recognition are two of the reasons for the increased awareness about the importance of healthy wathersheds. One of the Ontario educational goals is developing respect for the environment and a commitment to the wise use of resources.

As our communities change and evolve, so has our Festival. The Festival has traditionally been recognized as the *Durham Children's Groundwater Festival (DCGF)* and now that we have reached our 20 year marker, we want to create a *watershed community* consciousness. A name change will replace the word "groundwater" with the word "watershed" and better connect participants to all water resources and their importance to human health and ecosystem function. The activities already support this integrated approach to all water resources, so it is a logical step and will also engage a broader audience of community partners. The *Durham Children's Watershed Festival (DCWF)* is going to continue to help increase awareness among Durham's grade 4 students. The DCWF believes that the value of the watershed as a whole and its protection is fundamental to our existence and requires our attention. There are many ways humans can be stewards of our watershed communities and the ecosystems found within.

GOAL

The purpose of the *Durham Children's Watershed Festival (DCWF)* is to promote awareness that healthy watersheds are the basis of life and encourage participating students to become catalysts for change by taking their respect for water into their homes, schools, and watershed communities.

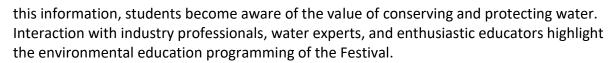
LEARNING OUTCOMES

Through participation in hands-on and interactive activities focused on the general theme of watersheds, students will have the opportunity to learn about:

- groundwater and surface water as a resource; management and utilization in rural and urban settings
- the water cycle
- the interdependence of people, plants, soil, air and water
- the results of interaction between people and water and what effects this has on the environment
- the role of water in historic and contemporary processes and technology.

Water has played an essential role in the social and economic development of Ontario. Watershed communities, depend on water resources to support the growth of commerce, industry and transportation. The Festival motivates students to become stewards in their homes, classrooms and watershed communities. By combining hands-on, interactive activities with messages relevant to their daily lives, students "soak"up knowledge on the properties, uses, connections and importance of water. With

Central ake Ontario





2017 Durham Children's Groundwater Festival Partners & Financial/In-kind Sponsors

Thank you for your generosity...

Double Di	amond Sponsor
The Regi	on of Durham \$
Diamond S	ponsor (\$5,000+)
Central Lake Ontario Conservation \$♦	RBC Blue Water Project \$
Ontario Power Generation \$♦	TransCanada Pipelines Ltd \$
Durham Region Health Department ♦	
Platinum Spor	nsor (\$2,500 - \$4,999)
Cargill Ltd \$	Advanced Tent Rental \$
Gold Sponso	or (\$1,000 - \$2,499)
Dufferin Aggregates (CRH Canada Group Inc.) \$	Walmart Foundation \$
♦ Covanta \$	
Silver Spon	sor (\$500 - \$999)
City of Oshawa – Fire Prevention Services ◊	Municipality of Clarington \$
Johnny on the Spot ♦	
Bronze Sp	onsor (to \$499)
o 3Mgives Team ◊	○ Monarch Joint Venture ◊
○ Atlantic Salmon Federation (ASF) ◊	 ○ Natural Resources Canada ◊
○ The Canadian Canoe Museum ◊	 ○ Nature Conservancy of Canada ◊
○ City of Toronto ◊	 The Niagara Parks Commission ◊
 ○ Council of Canadians ◊ 	\circ Ontario Federation of Anglers and Hunters (OFAH) \diamond
 Durham Region Works Department 	 Ontario Water Centre (Ladies of the Lake) ◊
○ Forests Ontario ◊	○ Reptilia ◊
 ○ Friends of the Greenbelt Foundation◊ 	 ○ Royal Ontario Museum ◊
o Hike Ontario ◊	 Safe Drinking Water Foundation ◊
 Lake Ontario Waterkeeper ◊ 	o Scholastic Canada Ltd. ◊
○ Michigan Sea Grant ◊	

Festival Partners

Central Lake Ontario Conservation Authority Durham Catholic District School Board Durham District School Board Durham Region Health Department Durham Region Works Department Friends of Second Marsh
Kawartha Pine Ridge District School Board
Ontario Power Generation - Darlington Nuclear
Scouts Canada - Camp Samas

Scouts Canada – Camp Samac

\$ - Financial Sponsorship 🔷 - In-kind Sponsorship







THINGS YOU NEED TO KNOW

Planning is important to a successful visit to the Festival.
Attend the *Teacher's Information Session* – <u>Tuesday, Sept. 18, Council Hall Camp Samac</u>.

<u> Prepar</u>	ing for	r the '	Festiva	<u> :</u>

	We arrange and cover the cost of bussing. If your bus does not arrive between 9-9:30 contact the bus company directly (contact information provided in your <i>Invoice/Confirmation</i>).									
П	Aboriginal Voices program times are scheduled once final student numbers are submitted.									
	Familiarize yourself with the Event Map and plan ahead. Select activities that meet your desired learning									
	-	outcomes. An optional <i>Festival Planner</i> has been provided and can also be found on the website								
		vww.watershedfestival.ca (Teacher Resources).								
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ш	Arrange for special needs students who require one-on-one supervision. Ensure that an appropriate									
_	-	upervising adult is assigned to meet all of your student's needs.								
Ц	safe place to leave them.	tudents should be prepared to carry their backpacks with them throughout the entire day as there is no								
П	•	with	a hoomerang lung	h EVERVTI	HING you and your students brit	ng GOES				
_	This is a LITTERLESS FESTIVAL with a boomerang lunch. EVERYTHING you and your students bring GOES									
П	BACK HOME. There are no facilities at the Festival to purchase food, drink or water.									
☐ The Festival runs rain or shine. Come prepared for the possibility of wet and cold weather.										
	severe weather check our website (<u>www.cloca.com</u>) the morning of your visit or call the voice message a (905)-579-0411 Ext 144. We will indicate if the Festival has been cancelled for that day.									
	(905)-579-0411 EXL 144. WE W	/111 11	idicate ii the restr	vai nas beer	i cancelled for that day.					
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	nme Tags:			911 t la	alla saddadaa adhada a Nassa					
ш			= -		allowed to leave the bus. Name	e tags will				
_	be available if you have forgot			•						
Ш	Name tags should follow the to	emp	lates below for stu	ident, teach	ner and volunteers:					
	Full Name of School		Full Name of School Teacher's full name		Full Name of School					
	•									
	<u>Student</u> s First Name				<u>Volunteer</u> 's full name					
			followed by (Teacher) in brackets		followed by (Volunteer) in brackets					
		_								
Pr	<u>eparing Adult Volunteers:</u>									
	Before the Festival, divide stud	lent	s into groups (<u>5-8</u>	students m	aximum per/adult volunteer).					
☐ Distribute to all group leaders (teachers, EA's and adult volunteers) the following items from yo										
	Teacher's Guide (items may also be found on www.watershedfestival.ca website):									
	DCWF Adult		Festival							





Planner

(optional)

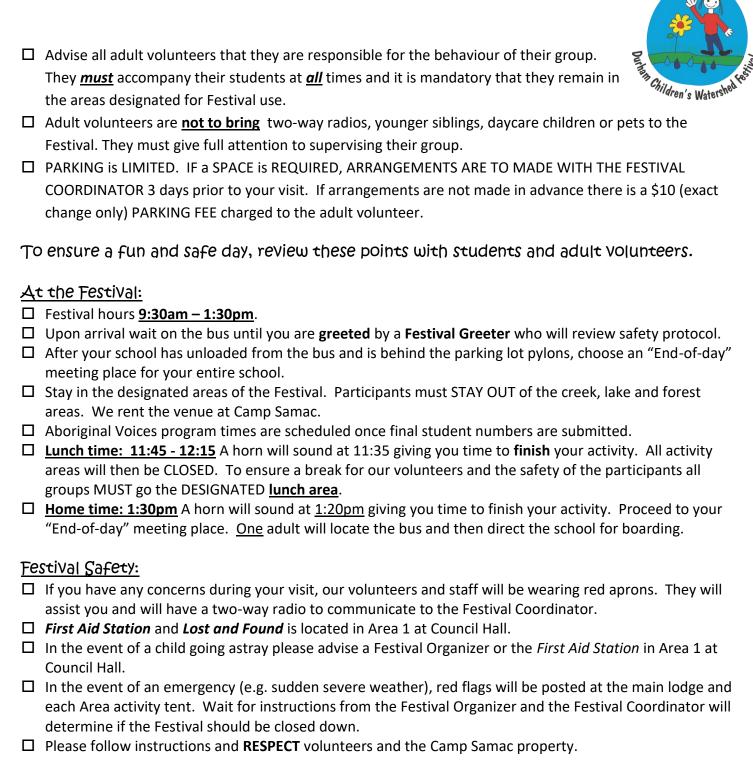
Volunteer

Info

Sheet

Festival Event

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After the Festival:

☐ The Festival Coordinator will send your <u>Festival Receipt via email</u> and will include a link to the *Durham Children's Watershed Festival (DCWF)* online survey. Please complete the survey to become eligible for our draw.

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