Chatham-Kent & Lambton Children's Water Festival

Teacher's Planning Guide

Festival Date: September 30th – October 2nd, 2025

"Water is the basis of all life in the world. Without it, nothing lives, nothing grows".

Contents

Purpose

Clean water and a healthy environment provide many ecological, social, and economic benefits. The Chatham-Kent & Lambton Children's Water Festival (CKLCWF) will help improve our quality of life while maintaining sustainability in our community by fostering respect for water and encouraging environmental stewardship.

Introduction

Water plays an essential role in the economic, social and industrial development of our communities. Recent droughts and water contamination issues underline the importance and need for abundant, clean water. Educating our young people about water conservation practices and protection of our natural environment is essential to ensure a high quality water supply for future generations. The CKLCWF brings Grade 4 and 5 students outside the classroom, teaching them the importance of water conservation and protection in ways that they can easily understand and remember. Activities will be relevant to the Chatham-Kent and Lambton areas. Elementary students, high school volunteers, parents and teachers will develop pride of our natural resources and carry this to others in our community. By fostering respect for water and encouraging environmental stewardship, we can help maintain and improve the quality of life in Chatham-Kent and Lambton. This Planning Guide has been compiled to prepare classes for participation at the festival and to aid teachers in further developing water related lessons in the classroom. All activities:

- Reflect the beliefs that guide education in our region – accountability, quality, equity, partnerships and a safe environment.
- Are connected to the curriculum in ways that help students achieve the desired expectations (Science & Technology, Social Studies, Mathematics, and Physical Education).
- Are designed to be as hands-on and experiential as possible in order to enhance and personalize the learning.

Water Themes

Each of the activity centres are directly linked to the current Ontario Curriculum. **The descriptions and direct curriculum links can be found at the end of this document.** All activities have been organized into five categories. The categories are:

1. **Water Science**
   - The physical science of surface water and groundwater.
   - The hydrological (water) cycle.
   - Watersheds.
   - The role of water quality and quantity to aquatic life.

Activities that cover this theme	Something Fishy Going On Muddy Waters Great Water Race Water Cycles Give Life Ponds and Pollywogs Wetland Friends Water Cycle Madness Water, Vital to Life What's Up, Doc? Porosity and Permeability Protecting Your Drinking Water Where is Your Watershed?

2. **Water Technology**
   - The connection between water and technology in our daily lives.
   - The methods for locating, extracting, treating, and distributing water.
   - Using water to produce energy.

Activities that cover this theme	Simply Divine Treating Trash Where it Goes When I Go

3. **Water Conservation**
   - The importance of using less water in our homes, schools, and communities.
   - Comparing conventional and water-saving methods for daily activities.
   - Ways to reduce water consumption.

Activities that cover this theme	3 X's a Day A Drop in the Bucket Lather Up! Royal Flush We Use That Much? Water Footprints

4. **Water Protection**
   - The interdependence of people, plants, animals, soil, and water.
   - Positive steps we can take to keep water and air clean.

Activities that cover this theme	Protect the Source Farmer and the Fish Glow Germ Go! Deadly Links Poisonous Pollution Oil Slick! Rolling Through the Shed Run off or Recharge? Wildlife Wheel of Fortune Beach Postings Mean Green Algae Machine Scales Reptilia

5. **Water Attitude**
   - Comparing historical, present day, and future water utilization.
   - Ways in which culture effects ideas and behaviours.
   - Common misconceptions towards water and ways to improve current attitudes and consumption patterns.

Activities that cover this theme	Bucket Brigade Make Your Way by Water Arsenic and Old Waste Doing the Laundry Saturday Night Bath Up on the Roof

Pre- and Post-Festival Activities

We have included a series of simple pre- and post-festival activities related to water concepts and ideas.

Pre-Festival Activities: Water Ways and Watershed Journey

Post-Festival Activities: Recount Activity, Persuade Me, Water Savers, Water Pledge, Well Art, Thrill and Spills Board Game, Dripial Pursuit, Crossword and Wordsearch.

These activites are available on the CKLCWF website: www.cklwaterfestival.com

We have also prepared pre- and post-lesson plan ideas.

Pre-Lesson Plan Ideas:

- Discuss the purpose of the field trip to the festival and how it will relate to the current unit(s) of study.
- Introduce potentially new vocabulary words that will be used at the festival (aquatic, watershed, water cycle, ground water, etc).

- As a class, brainstorm a set of standards of conduct for the trip including gear for rainy weather.
- Discuss with students how to ask good questions and brainstorm a list of open-ended observation questions to gather information during their visit. Record questions on chart paper or in student field trip journals.
- Assign student groups "specialists" roles in one water theme (e.g. attitude, science, conservation, preservation and technology) that they will be learning about. Encourage students to share observations, make sketches, and take notes about what they learned about their theme during the festival. The parent leaders can help with this.
- Have students think about a "water poem" and submit with their comments to the festival organizers. Encourage students to be creative, add artwork and get excited for the festival.

Post Lesson Plan Ideas:

- Provide time for students to share general observations and reactions to their field trip experience. Have student group "specialists" share specific observations or information they learned about their water theme while at the festival.
- Link field trip stations to multiple curricular areas. For example, students can develop vocabulary lists based on field trip observations; record field trip observations in a classroom journal, create a bulletin board about their experiences, etc.
- Create a short news report about what happened on the field trip. Publicize the trip via an article in your local newspaper, school bulletin board, trip presentation for parent's night, or class web page.
- Have each student complete the "student evaluation" included in the Teachers Guide. Encourage them to include favorite objects or special information learned during the field trip.

Preparing for Your Visit

Planning will play an important part in the success of your visit to the CKLCWF. Review of this planning guide is vital and will assist you in your preparation.

The following checklist has been designed to help you prepare for your visit:

- Using your class list, divide students into small groups (5-6 students). Ensure that you have at least one adult supervisor per group.
- Advise all group supervisors that they are responsible for the behaviour of their group during the visit and that students must be accompanied by an adult at all times.
- Distribute copies of the attached Festival Scheduler and Site Map to all group leaders (teachers and parent volunteers) – additional copies of the site map and festival scheduler may be downloaded from our website: www.cklwaterfestival.com.
- Familiarize yourself with the site map and plan ahead by selecting activities which best suit your classes interests. A Festival Scheduler has been provided for your convenience. However, this is only a guideline and it does not need to be followed in order.
- Start each group from a different location to avoid congestion. Each activity centre has been described for planning and organization.
- Please note that the lunch period is from 11:35am to 12:00pm. During lunch, ALL activity centres at the festival will be shut down. Students will not be permitted to eat lunch in or around the activity centres. A lunch area with entertainment will be supplied. Have students pack litter-less lunches. This means any

litter (wrappers, bottles, cans) generated from a lunch must be taken back with you. "Pack it in ... Pack it out!"

- You will not be able to purchase food at the festival.
- The LTVCA Communications Specialist will be on site taking photographs of the festival, please sign and return a photo release form on behalf of your class (electronically or in-person at the headquarters tent). A copy of the photo release form is also attached in the "Teacher's Planning Guide" email. Our staff will confirm with you if any students are not to be photographed as she makes her way around the festival.

Checklist

- **Sunny Day:** Hats, sunglasses, running shoes, sunscreen.
- **Rainy Day:** Rain coat, rubber boots, warm clothing.
- **Lunch Time:** Children are to bring a litter-less lunch with them. This means any litter – wrappers, bottles, cans – generated from a lunch must be taken back with you. "Pack it in, pack it out". There are two drinking water fountains in the festival area so water bottles may be filled.
- **Site Map:** This will give your adult supervisors a good idea of the festival layout.
- **Festival Scheduler:** This will help your adult supervisors visit all the requested activities.
- **First Aid:** There will be a first aid station located at the festival headquarters. Trained staff will be on-hand to deal with any first aid issues.
- **Lost and Found:** There will be a lost and found located at the festival headquarters. If a backpack or other item is list, this is where you may find it. Children who become seperated from their group will also be brought here. Volunteers will ensure that they are reunited with their group.

Safety Protocol and Basic Rules

- First aid is available on site by the festival headquarters tent. The tent also serves as a lost and found area. Please refer to the site map.
- A 25-minute lunch from 11:35am to 12:00pm is scheduled each day under the lunch tent. Student groups or classes have the option to eat their lunch in the open grass areas outside of the lunch tent area.
- **Cancellation policy** – Many of the participating schools and most of the High School Volunteers who assist in the festival are based out of School Bus Zone 7/ 8. If buses are cancelled in Bus Zone 7/8 due to fog or any other unsafe weather conditions, the CKLWF will not run that day. Announcements of school bus cancellations will be as outlined in school board policy. There are no plans for rescheduled days lost due to cancellations.
- **Severe Sudden Weather Changes** – Although we will be monitoring weather conditions/warnings each day we have made provisions for severe sudden weather events such as lightning storms, extreme high wind conditions or other situations where it is not safe to remain on the site. If severe sudden weather appears imminent, we will provide notices to all activity leads for all stations to either return to the lunch tent area, board the buses or to seek shelter in the Childrens Safety Village. If we foresee severe weather conditions forecast the day before the event we may, in extreme circumstances, decide to cancel the event a day in advance. This decision would be made prior to 6:30am and all bus companies and school leads (the primary contact) will be notified by email.

- Should a child become separated from his or her group, they will be taken to the festival headquarters tent and a festival committee member will ensure they are reunited with their group.
- In the event of a serious health or accident emergency – call 911 and notify a festival committee member. Festival committee members will be wearing a red water festival vest. The on-site first aid will be deployed to the area immediately.
- In the event of a minor injury, direct the entire group involved to report to the Mobile St. Johns First Aid station at the headquarters tent - please refer to site map.
- The pond area, wooded areas, and parking area are off limits and unsupervised. The campground, hill area, and playground equipment area are off limits – ropes, flagging tape and signage will be in place as much as is practical to remind everyone about these restricted areas.
- The campground area will be open to the public for the duration of the festival. Please notify a festival committee member if you notice any suspicious persons within the festival area. Everyone except the children should be wearing a wrist band, vest, or name tag.
- Please direct any questions to water festival committee members.

Festival Day

The festival will be held rain or shine! Please ensure you have went over the checklists above so that you come prepared.

Upon arrival at C.M. Wilson Conservation Area, please have all students wait on the bus until a festival volunteer greets you and provides special instructions for the day. Proceed to the large lunch tent area. A space has been reserved for your school and a volunteer will provide you a brief orientation. You can leave your lunches and backpacks in your assigned area. This is the area you return to at lunch time and the end of the day to group together before you load your buses. Instructions will be given on bus loading procedures and locations of buses.

The festival starts at 9:15am and ends at 1:15pm. All activity centres will shut down at that time. Some schools will leave prior to that time due to bussing considerations.

Please help us improve our services for future festivals by providing any comments and suggestions to the Lower Thames Valley Conservation Authority through Mariah Alexander, mariah.alexander@ltvca.ca.

Festival Scheduler

We suggest that you use the schedule organizer below for your class trip. Please check 10-15 activity centres that you would like your students to visit, you can find activity descriptions and their curriculum connections at the end of this document. Please note that the activity centres should be visited in random order and not in the order listed on the scheduler. Festival volunteers will assist in ensuring that wait times are minimized by suggesting that groups move to available, less busy activity centres.

We suggest that each of the adult supervisors complete the following for their group and have available for their reference and use:

School:

Teacher:

Group Supervisor:

Students in Group:

1.

2.

3.

4.

5.

6.

Festival Scheduler

Festival Hours: 9:15am – 1:15pm. Lunch from 11:35am – 12pm (all activity centres close).

Note: For activity #20, Arsenic and Old Waste (a play about historical Chatham-Kent), there will be a sign up sheet near the festival headquarters tent as these presentations are at scheduled times for groups of 60 at each seating. This activity is located in the Stenton Barn (see site map).

	1. Bucket Brigade		21. Farmer and the Fish
	2. Moo's Thirsty		22. Make Your Way by Water
	3. Up on the Roof		23. A Drop in the Bucket
	4. Scales		24. Farm Grow Bingo
	5. Water Cycles Give Life		25. Runoff or Recharge
	6. Ponds and Pollywogs		26. Oil Slick!
	7A. Glow Germ Go!		27. You're Mostly Water
	7B. Water Footprints		28. Something Fishy Going On
	7C. Where is Your Watershed?		29. Simply Divine
	8. Doing the Laundry		30. We Use That Much
	9. Saturday Night Bath		31. Muddy Waters
	10. Porosity and Permeability		32. Great Water Race
	11. Great Lakes Invaders		33. 3 X's a Day
	12. Protect the Source		34. Royal Flush
	13. Water Cycle Madness		35. Deadly Links
	14. Rolling Through the Shed		36. Lather Up!
	15. Make it Rain (Virtual Reality Sandbox)		37. Water Vital to Life
	16. Protecting Your Drinking Water		38. What's Up, Doc?
	17. Poisonous Pollution		39. Beach Postings
	18. Treating Trash		40. Where it Goes When I Go
	19. Wildlife Wheel of Fortune		41. Learn to Fish
	20. Arsenic and Old Waste		42. Mean Green Algae Machine

Activity Descriptions and Curriculum Connections

Activity	Description	Curriculum Links
Zone 1		
1 – Bucket Brigade	Students will compare firefighting methods of the past to those of today. They will learn the importance of City and County water service in the form of hydrants in firefighting. Students will pretend to be children living in the past and take part in fighting a simulated fire by using buckets that are filled from a "well" and passed down a human assembly line to put out a "fire" at the end of the line.	**Social Studies, Grades 1-6:** Heritage and Identity, People and Environments.
2 – Moo's Thirsty	Students will experience watering farm animals with present day methods. Students will learn the quantity of water that various farm animals consume and how modern watering equipment conserves water and allows for 24-7 access to the water they need.	**Social Studies, Grades 1-6:** Heritage and Identity, People and Environments. **Science, Grade 5:** Earth and Space Systems – Conservation of Energy and Resources.
3 – Up on the Roof	Students will explore the use of rain barrels and determine how they can help us maximize our use of water by playing a timed running game.	**Social Studies, Grades 1-6:** Heritage and Identity, People and Environments. **Science, Grade 4:** Life Systems - Habitats and Communities. **Science, Grade 5:** Earth and Space Systems – Conservation of Energy and Resources.
4 – Scales	Students learn about and get an up-close look at the many species of reptiles and amphibians that many Ontario wetlands their home. Students will learn that they can play a role in the protection and conservation of wetland amphibians and reptiles, including many that are species at risk.	**Science, Grades 1-6:** Life Systems.
5 – Walpole Island Heritage Centre	Students will learn how seeds and the water cycle are inherently linked, with seeds relying on water from the water cycle to initiate germination and growth. This activity will cover how seeds absorb water, which then triggers a metabolic process (a chemical reaction) that causes the embryo to expand and grow. Students will learn about the small or short water cycle that plays a key role in the life cycle.	**Science, Grade 3:** Growth and Changes in Plants.
6 – Ponds and Pollywogs	Students will discover different organisms, their adaptations to aquatic environments and their function in their aquatic environments by sampling the C.M. Wilson Pond. Students will have to identify what they find and discover what role their organism	**Science, Grades 1, 4 and 5:** Life Systems.

	plays in a wetland web of life. Students will also explore how humans use these small organisms to determine the health of a watershed in terms of water quality.	
7A – Glow Germ Go!	By practicing appropriate techniques, students will become aware of the importance of hand-washing. Unclean hands are responsible for numerous bacterial and viral illnesses at places such as home, school, restaurants and hospitals	**Science, Grade 5:** Life Systems – Human Health and Body Systems. **Health and Phys. Ed., Grades 1-6:** Healthy Living. **Social Studies, Grades 1-6:** Heritage and Identity, People and Environments.
7B – Water Footprints	Everything we use, wear, buy, sell, and eat takes water to make. With the help of 3D printed water droplets, students visualize the water footprint of many everyday items. The water footprint measures the total amount of water used directly and indirectly in the production and transportation of goods. Students will estimate various everyday items' water footprints through manipulation of the 3D printed water droplets.	**Science, Grades 1-6:** Life Systems. **Science, Grade 1:** Matter and Energy – Energy in Our lives. **Science, Grade 1:** Structures and Mechanisms – Everyday Materials, Objects, and Structures.
7C – Where is my Watershed?	Students will be asked to locate their school on the map using a step-by-step process – school, drainage basin, sub-watershed. They will also learn why watersheds are important and what makes their watershed special.	**Science, Grades 1-6:** Life Systems. **Science, Grades 1-6**: Earth and Space Systems.
8 – Doing the Laundry	In this activity students will compare the laundry methods of the 1840s to modern methods by having the opportunity to use historical mechanical equipment. Students will look at how 'doing the laundry' has changed in particular to the amount of water used today to wash our clothes and discuss ways to conserve both water and energy at home.	**Science, Grade 3:** Matter and Energy – Forces and Motion. **Science, Grade 5:** Earth and Space Systems - Conservation of Energy and Resources. **Social Studies, Grades 1-6:** Heritage and Identity.
9 – Saturday Night Bath	In this activity, students will compare hygiene habits and water usage with those of children more than 85 years ago by learning about the routine of a Saturday Night Bath.	**Social Studies, Grades 1-6:** Heritage and Identity. **Science, Grade 5:** Earth and Space Systems - Conservation of Energy and Resources.
10 – Porosity and Permeability	Students will discover through experimentation, which materials hold water and which materials allow water to flow through them. The earth is made up of many types of earth materials that help to hold water or allow water to flow through to plants.	**Science, Grade 3:** Matter and Energy – Forces and Motion, Earth and Space Systems – Soils in the Environment. **Science, Grade 4:** Earth and Space Systems – Rocks, Minerals, and Geological Processes.

11 – Great Lakes Invaders	In this activity, students are able to see fish in person and learn how invasive fish are impacting the Great Lakes.	**Science, Grade 4:** Life Systems – Habitats and Communities.
12 – Protect the Source	Students will learn about sources of drinking water (ground & surface water), and Ontario's multi-barrier approach to protect them. Students will then discuss how their actions matter at home too. Through experimentation they will discover why proper handling, storing and disposing of hazardous household chemicals, particularly dense non-aqueous phase liquids (DNAPLs), is critical for protecting the quality of their drinking water.	**Science, Grades 3-5:** Life Systems. **Science, Grade 2:** Matter and Energy - Properties of Liquids and Solids; Earth and Space Systems – Air and Water in the Environment. **Science, Grade 5:** Earth and Space Systems –Conservation of Energy and Resources.
Zone 2		
13 – Water Cycle Madness	This activity introduces the students to the water cycle by way of a simple game, a model and a poster. The model and poster show how the water "cycle" is a continuous repetition of like events. The movement of water molecules from bodies of water, the land and living things on the land into the air and back again.	**Science, Grade 2:** Matter and Energy – Properties of Liquids and Solids, Earth and Space Systems – Air and Water in the Environment.
14 – Rolling Through the Shed	Students will learn that there are many sources of water pollution affecting the quality of water within a watershed. Students will pretend to be a water droplet as they travel through the watershed encountering different contaminates as they move downstream.	**Science, Grade 4:** Life Systems – Habitats and Communities.
15 – Make it Rain (Virtual Reality Sandbox)	Students will learn about flooding through a virtual reality sandbox, an electronic topographic map where they can create landscapes. They will take away human impacts to rivers and lakes, and the risk of building in floodplains.	**Science, Grade 3: Earth and Space Systems – Soils in the Environment.** **Science, Grade 4: Life Systems – Habitats and Communities; Earth and Space Systems – Rocks, Minerals, and Geological Processes.**
16 – Protect Your Drinking Water	The children will see how water moves through soil and rocks underground then eventually travels to streams, ditches, lakes and rivers with the use of a groundwater model. When water is underground, it is called "Groundwater". The soil and rocks that store the groundwater are called "Aquifers".	**Science, Grades 3-5:** Earth and Space Systems.
17 – Poisonous Pollution	This activity will help students understand hazardous substances, wastes and their effects on the environment by watching an enviroscape demonstration of how pollution contaminates groundwater.	**Science, Grade 4:** Life Systems – Habitats and Communities. **Science, Grade 5:** Life Systems – Human Health and Body Systems.
18 – Treating Trash	Students will learn about treating trash through two activities: 1) sorting recyclables and 2) watching an	**Science, Grade 3:** Earth and Space Systems – Soils in the Environment.

	enviroscape demonstration of a landfill site. They will also learn about local trash services.	**Science, Grade 5:** Life Systems – Human Health and Body Systems.
19 – Wildlife Wheel of Fortune	Students will learn that animals are adapted to different types of habitats based on their requirements of food, water, shelter, and space. Students will spin the 'Homes for Wildlife' wheel and have to match a living organism to the selected habitat: forest, wetland or prairie while learning that natural habitat is important for both wildlife and humans.	**Science, Grade 4:** Life Systems – Habitats and Communities.
Zone 3		
20 – Arsenic and Old Waste (Play)	Children will listen and participate in an interactive mystery game set in Kent County in 1890. There will be an actor who will lead a performance and set the scene and provide the clues to enable the students to solve a crime. The children will learn about the historical dumping of industrial waste into waterways, and the resulting illnesses caused by this practice.	**Social Studies, Grades 1-6:** Heritage and Identity. **Science, Grade 4:** Life Systems – Habitats and Communities. **Science, Grade 5:** Life Systems – Human Health and Body Systems. **The Arts, Grades 1-6:** Reflecting, Responding, and Analysing, Exploring Forms and Cultural Contexts. **Language, Grades 1-6:** Literacy Connections and Applications.
21 – Farmer and the Fish	Students will learn about modern farming, how farming impacts watersheds, and how farmers can protect waterways.	**Science, Grade 3:** Matter and Energy – Forces and Motion, Earth and Space Systems – Soils in the Environment. **Science, Grade 4:** Earth and Space Systems – Rocks, Minerals, and Geological Processes.
22 – Making Your Way by Water	Water has always been key in transportation of people and goods. In this activity, students will learn how important water was as a means of transportation and which waterways were most often used in our communities. Students will also get to race boats in a water table as well as in the pond.	**Social Studies, Grades 1-6:** Heritage and Identity, People and Environments. **Science, Grade 2:** Structures and Mechanisms – Simple Machines and Movement.
23 – A Drop in the Bucket	By using a demonstration, students will be shown that although the earth is covered mainly by water, only a small amount is available for human consumption. Learning that water is a limited resource will help students appreciate the need to use water resources more wisely.	**Science, Grade 5:** Earth and Space Systems - Conservation of Energy and Resources.

24 – Farm Grow Bingo	Students will learn how farmers, as the largest single group of landowners in Canada, are in a unique position to provide solutions to conservation challenges such as water quality, air quality, climate change and biodiversity loss.	**Social Studies, Grades 1-6:** Heritage and Identity, People and Environments. **Science, Grade 3:** Matter and Energy – Forces and Motion, Earth and Space Systems – Soils in the Environment. **Science, Grade 4:** Life Systems – Habitats and Communities.
25 – Runoff or Recharge	In this demonstration, students will examine the ways in which water recharge rates change based on which type of surface precipitation falls on. Students will determine whether water will runoff or recharge groundwater when it falls on four surface types of vegetation, bare soil, gravel and pavement and the impacts.	**Science, Grade 3:** Life Systems – Growth and Changes in Plants, Earth and Space Systems – Soils in the Environment.
26 – Oil Slick	Students learn about the sources and hazards of oil pollution in our natural environments and how this pollution can affect wildlife and their habitats.	**Science, Grade 4:** Life Systems – Habitats and Communities.
27 – You're Mostly Water	In this activity, students will learn that the human body is mostly water and that it need an adequate amount of clean water to survive by using a teeter-totter to balance their body weight.	**Science, Grade 5:** Life Systems – Human Health and Body Systems.
28 – Something Fishy Going On	In this activity students will investigate the life cycle of fish species living in the Great Lakes and learn the importance of protecting all of their habitat requirements and water quality.	**Science, Grade 4:** Life Systems – Habitats and Communities.
29 – Simply Divine	In this activity, students will learn about the art of "divining" or "dowsing" and its use in finding critical water sources historically and today. Students will be shown and get an opportunity to try using a divining rod (forked stick) to demonstrate its ability to find underground water.	**Science, Grade 3:** Earth and Space Systems – Soils in the Environment. **Science, Grade 4:** Earth and Space Systems – Rocks, Minerals, and Geological Processes. **Social Studies, Grades 1-6:** Heritage and Identity, People and Environments.
30 – We Use That Much?	Students use an interactive display to investigate how much water is used in every day activities in relation to a known reference (2 litre pop bottles).	**Science, Grade 3:** Matter and Energy – Forces and Motion. **Science, Grade 5:** Earth and Space Systems – Conservation of Energy and Resources.
31 – Muddy Waters	Using a stream table, students will study the effects of water erosion on bare soil and soil that is stabilized by buffer strips and wetlands. Students will learn the	**Social Studies, Grades 1-6:** Heritage and Identity, People and Environments.

	impacts of flooding and sedimentation to our local watersheds.	**Science, Grade 3:** Earth and Space Systems – Soils in the Environment, Life Systems – Growth and Changes in Plants. **Science, Grade 4:** Life Systems – Habitats and Communities.
32 – Great Water Race	Students can manipulate these models to discover what controls the direction and speed of water flow. Students learn the concepts of slope and angle.	**Science, Grade 3:** Earth and Space Systems – Soils in the Environment, Matter and Energy – Forces and Motion. **Science, Grade 5:** Matter and Energy – Properties of and Changes in Matter.
Zone 4		
33 – 3 X's a Day	Students will simulate brushing their teeth using two methods (leaving tap running and turning tap off while brushing) and determine the amount of water used for each method.	**Science, Grade 3:** Matter and Energy – Forces and Motion. **Science, Grade 5:** Earth and Space Systems – Conservation of Energy and Resources.
34 – Royal Flush	Students will examine how much water can be saved by comparing the differences between water efficient (low flow) toilets and regular-flow toilets.	**Science, Grade 3:** Matter and Energy – Forces and Motion. **Science, Grade 5:** Earth and Space Systems – Conservation of Energy and Resources.
35 – Deadly Links	Through a role-play activity, students will experience how organisms are exposed to toxic chemicals by becoming part of an aquatic food chain to witness how toxins become more concentrated (biomagnification) as ones moves up the food chain.	**Science, Grade 4:** Life Systems – Habitats and Communities.
36 – Lather Up	In this activity, students find out how much water they use by showering each day. They compare the water use from a normal showerhead and a low-flow showerhead.	**Science, Grade 3:** Matter and Energy – Forces and Motion. **Science, Grade 5:** Earth and Space Systems – Conservation of Energy and Resources.
37 – Water Vital to Life	A variety of hands-on demonstrations will be used to help students to discover why water is essential to our body's organs and life systems.	**Science, Grade 5:** Life Systems – Human Health and Body Systems.
38 – What's Up, Doc?	Students will learn about certain waterborne diseases by solving a medical mystery. In doing so, they will be able to compare their current understanding of how diseases can be spread with ideas at the turn of the century. Cleaner water and water contamination will also be discussed.	**Social Studies, Grades 1-6:** Heritage and Identity, People and Environments. **Science, Grade 4:** Life Systems – Habitats and Communities.

		Science, Grade 5: Life Systems – Human Health and Body Systems.
39 – Beach Postings	This activity station will demonstrate to the students how land use can affect water quality and ultimately, the state of our beaches. A hands-on exercise will involve some shrub planting along the shoreline as part of this activity.	**Science, Grade 3:** Earth and Space Systems – Soils in the Environment. **Science, Grade 4:** Earth and Space Systems – Rocks, Minerals, and Geological Processes.
40 – Where it Goes When I Go	Students will learn the sewage treatment process as well as realize the importance of clean water by pretending to be sewage that goes through an obstacle course to emulate the steps taken to become cleaned, disinfected, and ready to go back to the river.	**Science, Grade 4:** Life Systems – Habitats and Communities. **Science, Grade 5:** Matter and Energy – Properties of and Changes in Matter, Earth and Space Systems – Conservation of Energy and Resources.
41 – Learn to Fish	An interactive activity where students will learn how to cast a fishing rod (dry land casting).	**Health and Phys. Ed., Grades 1-6:** Social-Emotional Learning Skills, Active Living, Movement Competence, Healthy Living.
42 – Mean Green Algae Machine	This activity will help students understand why algal blooms are happening in local waters (Lake Erie and the Thames River), why they're bad for the environment and ourselves, and things we can do to stop them.	**Science, Grades 1-6:** Life Systems. **Science, Grade 2:** Earth and Space Systems – Air and Water in the Environment. **Science, Grade 5:** Earth and Space Systems – Conservation of Energy and Resources.
43 – Reptilia	Students learn about and get an up-close look at the many species of reptiles and amphibians that many Ontario wetlands their home. Students will learn that they can play a role in the protection and conservation of wetland amphibians and reptiles, including many that are species at risk.	**Science, Grades 1-6:** Life Systems.