

GIRL GUIDES OF CANADA
SASKATCHEWAN COUNCIL PRESENTS.....

*Girl Guides Go Green
Challenge*

KICK-OFF DATE IS WEDNESDAY APRIL 22ND, 2015

ACTIVITY REQUIREMENTS MUST BE MET IN ORDER TO RECEIVE YOUR BADGES

TO ORDER CRESTS EMAIL:

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The following is broken up into 4 different challenges. You will need to complete an assigned number of activities within each challenge in order to collect your badge.

Challenge # 1 Water, Water, Water

In order to complete this challenge, you **MUST** complete:

- Storm Drain Activity
- 1 Yellow Fish Road Activity
- 1 other written activity or skit

Challenge #2 Reduce, Reuse, Recycle

In order to complete this challenge you **MUST** complete:

- Super Hero list of ways to Reduce, Reuse or Recycle
- Any other 2 activities listed

Challenge #3 Spruce Up Your Space

In order to complete this challenge you **MUST** complete

- Any 1 activity from the list

Challenge #4 Wetlands

In order to complete this challenge you **MUST** complete

What is a wetland, ecosystem and list different plants and animals that live in a wetland.

Sparks and Embers complete the construction of a wet land animal that can be found at <http://www.ducks.ca/education/activites/>

Guides, Pathfinders and Rangers complete the wetland experiment.

Challenge #1

Water, Water, Water

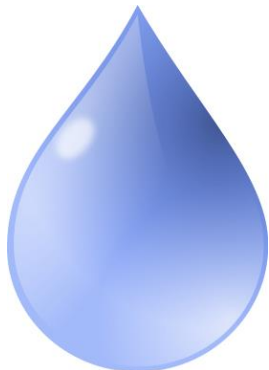
Water is one of the most important things we need to survive. Not only is it important for humans but for plants and animals as well.

Water is life. All living things depend on water to support life functions. Human and animal food supplies are dependent upon fresh water through agriculture and fisheries.

Approximately 1.1 billion people do not have access to safe drinking water and 2.4 billion people do not have access to adequate sanitation.

(<http://www.ec.gc.ca/eauwater/default.asp?lang=En&n=587612E5-1>)

Make a list of all the ways you use water. Write your ideas in the water drops.



Make a list of ways we can pollute our water supply.

List different ways you can conserve water or help to keep it clean.

In groups make a short skit about what it would be like to live in a place where the water was not safe to use or where there is not enough water for everyone. Imagine what your community would look like, feel like, and behave like. The skit cannot be longer than 5 minutes.

Did You Know?

All the water that we use in our houses is cycled back to a water treatment plant. There it is cleaned and put back into our water system for us to use again.

Did you know that our storm drains in the street lead right to a river or another body of water? Dust, dirt, dirty water and garbage that goes into the drains heads goes straight to a body of water. This water is NOT cleaned. It ends up polluting our rivers. Imagine being a fish and living in polluted water

Storm Drain Activity

You will need: foam, glitter, googly eyes, large plastic container or basin, cardboard, tinfoil, dish soap, vegetable oil, chocolate bar, garbage and dirt.

Use foam, glitter, and googly eyes and make a fish. Make sure your fish are dry for the next part of the activity.

1. Fill a large plastic container about half full of nice clean tap water.
2. Put your beautiful fish in the water.
3. Cover the container with a "storm drain grate". Make this ahead of time. Use cardboard and cut out rectangles to make it look like a grate. Cover it in tin foil, be sure to cut out the holes in the tin foil too.
4. Pretend that you are in your driveway washing your car. Pour a little bit of dish soap into the storm drain.
5. Pretend that you are changing the oil in your van. Some poured out and is washed down the storm drain as you clean up the driveway. Pour about 1 cup of vegetable oil down your storm drain.
6. The wind is blowing good today, pour about 1 cup of dirt down the storm drain.
7. Pretend that you are out for a walk with your dog. The dog poops by the drain, you do not bother picking it up. The poop eventually gets washed down the drain from a good spring rain. Put a piece of chocolate bar into the grate.
8. A car is driving through your neighbourhood and throws their litter out the window. It gets blown into the storm drain. Put a couple pieces of garbage into the drain.

If you can think of any other scenarios add them to your list.

Once you have completed all the scenarios take the lid off your storm drain.

Have the girls observe what the water looks like now. Are the fish in the same habitat that they had been in before all the pollution? Do the fish look the same?

Leave the fish in there and give the girls a turn with tongs and a small strainer. Have them try and clean the water. Ask them if the water will ever be completely clean again.

Discuss:

1. What happened to the water when pollution was put down the storm drains?
2. How can we make people aware of what happens if they are not careful about what goes down the storm drains?
3. Do you know where the storm drains are in your community?
4. Have you ever heard of Yellow Fish Road?

The following is taken from Trout Unlimited Canada, Yellow Fish Road webpage.

"What is Yellow Fish Road?"

"Yellow Fish Road is a nation-wide environmental education program designed and managed by Trout Unlimited Canada. The Yellow Fish Road program's goal is to help Canadians understand that storm drains are the doorways to our rivers, lakes and streams. Preventing pollutants from entering our storm drains is critical to protecting and improving our watersheds, water quality and aquatic habitat."

[Yellow Fish Road™ Program and Sanitary Sewer System | Partners for the Saskatchewan River Basin \(saskriverbasin.ca\)](http://saskriverbasin.ca)

Yellow Fish Road Project

Ahead of time, contact your local area office about signing out the Yellow Fish Road kit or to inquire about what Yellow Fish Road supplies they have available.

OR

Have the unit get into pairs or groups. Have them draw a fish on a yellow piece of paper. Cut the fish out. Have them make a list of all the things we can do to prevent the pollution from getting into our storm drains. Post your yellow fish around your community.



Challenge #2

Reduce, Reuse, Recycle

You are a **Girl Guides Go Green** Superhero, make a list of 10 ways you can reduce, reuse or recycle.



Choose 2 activities to complete with your unit

Recycle Boxes

Materials Needed:

2 large cardboard boxes, markers, coloured paper, tape

Directions:

1. Use the markers to decorate the coloured paper. Be sure to label 1 sheet each with: Paper Recycling and Bottle Recycling
2. Once the signs are labelled, use the tape to attach them to the box.
3. Use the new boxes in your meeting place to help reduce on waste.

OR

Earth Promise

Materials needed: markers, pencil crayons, a colouring page of the world (attached), scissors, glue and coloured paper (not blue or green)

Directions:

1. Have the unit colour in the picture of the world using pencil crayons.
2. Cut out the picture of the world.
3. Trace their hands on coloured paper and cut them out.
4. On the picture of the world, have each girl write down one thing **THEY** can do to help reduce, reuse or recycle.
5. Glue the world to the hands. Should look like the hands are holding the world.



Earth

OR

Light Switch Reminders

Materials Needed: light switch plate for every girl, sharpie markers

Directions:

1. Discuss the following with your guiders; why is it important to shut the lights off when you leave a room, and what impact does it have on the earth if we do not conserve electricity?
2. Give each guider a light switch plate. (You can buy boxes of 10 for about \$5)
3. Let the girls use the sharpies to decorate the switch plates with reminders to shut the lights out when leaving. You could make it a game to see who could come up with the catchiest slogan to remind people to shut the lights off.
4. Let dry completely before taking them home or packing them up.
5. Encourage the girls to have their caregiver install the light switch plate in their house. **OR glue** the switch plate to a piece of foam. Have the girls add a magnet to the back or put ribbon on it to hang.

OR

Visit a recycling center. Find out how much recycling is brought to the center in a 1 week time period.

Challenge #3

Spruce Up Your Space

Choose 1 activity to complete this challenge

This challenge is all about lending a hand to clean up your community. In your units, plan a time to go out and clean up an area in your community. This could include parks, schools, or meeting places. Make sure that your girls are all wearing gloves and have garbage bags. Also discuss what to do if they see used needles or broken glass. Do they pick it up? Do they call an adult over to pick it up? Did you know that in some cases the closest fire department may come and assist in picking up used needles. They have better gear to protect themselves from harm. *(Tim Horton's Clean Up participation does count for this challenge)*

OR

Read the book, The Lorax, by Dr. Seuss.

Have the girls prepare a skit about what would happen if we cut down all our trees and we had no more plants.

Plant flowers, trees or shrubs. This can be done in a public space (please get permission first) or as a unit for the girls to take home. You can talk about how we need plants to live. Plants give off oxygen which we as humans (and animals) need to live. Girls can make starter plants in egg cartons or decorate an inexpensive planter and plant their seeds directly in a pot. Use the book The Lorax, to remind the girls about the importance of plant life.

OR

Find out if there is a community garden in your area. If there is find out how you can get involved with caring for the garden.

Challenge #4

Wetlands

Activity:

Have the girls brainstorm ideas on what they think a wetland is.

Definition: any piece of land that holds water long enough to create its own ecosystem.

What do you think an ecosystem is?

Answer: any place where plants, animals and bacteria work together to make a healthy home for themselves.

Name at least 2 examples of a wetland.

(This can include but is not limited to slough, marsh, pond, bog, swamp)

Have your unit brainstorm different animals and plants that live in a wetland.

Wetland Plant	Wetland Animal

1. What happens to the plants and animals when wetlands are destroyed? (drained, filled in, polluted)

The following link will take you to Ducks Unlimited Canada. There are paper wetland animals that can be printed off and put together for a craft.

[Educational Resources — Ducks Unlimited Canada](#)

Wetland Experiment

Adapted from the Wet and Wild activity on www.wonderville.ca

<http://www.wonderville.ca/asset/wet-and-wild>

Purpose: To create a working model of a wetland.

Materials: 1 foil roasting pan

1 large sponge (needs to fit the width of the pan)

Spray bottle or watering can

Clay

Soil

Directions:

1. Use the clay to build land on half of the pan. Be sure to create a hill that slopes towards the middle of the pan.

Clay=Land

2. Place the sponge next to the clay. The sponge needs to fit the width of the pan but NOT the length.

Sponge=Wetland

3. The remaining space is left open. It represents a body of water, a lake, for example.
4. Sprinkle soil on the clay.
5. Use the spray bottle or watering can to gently and slowly make it rain at the **TOP** of the hill.

Observations:

1. How long did it take for the water to end up in the lake?

2. How much, if any, dirt ended up in the lake?

3. Draw a picture of what the water look like once it seeps into the lake.

Directions Part 2:

1. Remove the wetland sponge from the pan.
2. Carefully pour out any remaining water from the pan.
3. Repeat the experiment without the wetland sponge.

Observations:

1. How long did it take for the water to get to the lake?
2. What does the water look like without the wetland barrier?
3. If we do not have any wetlands how might the water in lakes and rivers affect the plants and animals living there?
4. Would this affect people in anyway?
5. Name 3 consequences if we pave over or drain wetlands.

Conclusion:

1. Do you think wetlands are important? Why or why not?

If you choose to, you can apply to become Wetland Heroes by reporting what you did in this challenge by going to Ducks Unlimited Canada.

[Wetland Heroes—Ducks Unlimited Canada Education Program](#)

Field Trip Challenge Extension

If you are looking at doing a field trip, you might want to contact the College of Education at the University of Saskatchewan or Ducks Unlimited

[EcologyWorkshop.pdf \(usask.ca\)](#)

[Field Trip Guide — Ducks Unlimited Canada](#)

Thank you to Jennifer Lavoie for creating the challenge