



# STORMWATER WALK ACTIVITY SHEET

## BE A DETECTIVE!

You can be a **STORMWATER** detective at your home or school.

### STEP 1: Consider

First, think about and predict where rainwater goes after it falls on the property.

### STEP 2: Observe

Then go outside and explore where rainwater likely flows after it lands on a roof top, driveway, or footpath.

### STEP 3: Explore

Explore what likely happens to it when it falls onto soil or plants like grass, flower beds and trees.



*Trees, shrubs and planted areas help rainwater soak into the ground.*

## BACKGROUND INFORMATION

When water falls to earth as rain, we call that **STORMWATER**.

This activity will start you thinking about what happens to rainwater at your house or school after it hits the roof or ground.

When rain falls on a roof-top it runs off the roof into roof gutters, and out of a downpipe away from the building. Rainwater that is moving over and off a surface is called runoff.

**STORMWATER** runoff happens when rain falls on any hard surface where it can not soak into the ground. Areas with soil and plants do not have much runoff because a lot of the rainwater soaks into the ground (infiltrates). Surfaces that are hard or made of concrete have a lot of runoff because the water cannot soak in.

## INSTRUCTIONS

**Be a Stormwater Detective!** Take a walk around your school or home. While walking, observe and record things that can affect the amount of **STORMWATER** runoff; such as hard surfaces, planted areas, downpipes and more.

Use the activities on the following pages to collect the data. Then use the data to score your house or school. When finished, explore and discuss ways that would help slow down **STORMWATER** so more can soak in and less will run off. Also come up with suggestions on how the neighbourhood could reduce **STORMWATER** runoff.



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## STORMWATER WALK INSTRUCTIONS

### STEP 1: Create a Tally

As you walk around your house or school keep track of how many trees, gardens and flower beds, and storm drains you see on the property. **Use the sheet below to keep to record what you observe:**

WE SAW HOW MANY...	TALLY	NUMBER
Trees		
Gardens and shrub or flower beds		
Storm drains		

### STEP 2: Take a Downpipe Survey

Do you know what a downpipe is? A downpipe takes the water that comes off a roof and directs the water away from the building.

Some downpipes direct water onto grass, plants, mulch or rocks. This practice slows water runoff, giving it a chance to soak into the ground. Some areas move water quickly away from a building and off a property. There can also be downpipes that take water directly to a storm drain, stream or lake.

HOW MANY DOWNPIPES DIRECT WATER...	TALLY	NUMBER
To grass or planted areas?		[A]
To mulched or rocked areas?		[B]
To bare dirt, a driveway, footpath or the street?		[C]
To a storm drain, stream or lake?		[D]
How many downpipes does your house or school have (A+B+C+D)		[E]





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## STORMWATER WALK INSTRUCTIONS

### STEP 3: Score your House or School

Using the data collected on your **STORMWATER WALK**, fill in the blank for each of the following questions. Then circle the number of points that goes with the answer.

**1: How many trees did you count?** .....

- More than 5: **10 points**
- 3 to 5: **5 points**
- 1 or 2: **3 points**
- 0: **0 points**

**2: How many gardens and shrubs or flower beds did you count?** .....

- More than 5: **10 points**
- 3 to 5: **5 points**
- 1 or 2: **3 points**
- 0: **0 points**

**3: How many downpipes are directed onto grass, plants, mulch or rocks?** ..... **[A+B]**

**What is the total number of downpipes?** ..... **[E]**

**What share of the downpipes point onto grass, plants, mulch or rocks?** ..... **[A+B]**

- They all do: **10 points** **[E]**
- At least half: **5 points**
- Less than half: **3 points**
- None: **0 points**

## DID YOU KNOW?

The larger your house or school, the more stormwater runoff it produces. It's important to catch at least some of that runoff before it flows into a storm drain and then into a river, stream or lake. Rainwater is valuable and can be put to good use by slowing it down and soaking it in.



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## STORMWATER WALK INSTRUCTIONS

**STEP 3: Score your House or School (continued)**

**4: Do the storm drains near your house/school have a label saying what they are or where the water goes?**

- All of them: 10 points
- Some of them: 5 points
- None of them: 0 points
- No drain: 5 points

**5: How much litter do you see at your house/school?**

- None: 10 points
- Some: 5 points
- A lot: 0 points

**6: Do you ride a bus, walk, bike or carpool to school?**

- Mostly: 10 points
- Sometimes: 5 points
- Rarely: 0 points

**Now add up all of the points to give your house or school a score.**

## SCORE CARD

Total up the points from question 1 to 6 to find the score for your house or school.

### TOTAL SCORE:

- .....
- 0-20 points: Needs work
  - 21-40 points: Average
  - 41-60 points: Great

## STORMWATER DETECTIVE EXAMINES CAREERS

- Freshwater Ecologist
- Horticulturalist / Forester
- Land Developer / Builder
- City / Community Planner

## DISCUSSION QUESTIONS

- 1:** Stormwater runoff can pick up litter and carry it to surface water. **What else can it pick up?**
- 2:** What can you do to improve the score of your home or school?
- 3:** Why might it make a difference if you ride a bus, walk, bike or carpool to school?
- 4:** Where does the runoff go after it leaves your house or school?



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