

## RAIN BARRELS: AN OLD IDEA THAT STILL MAKES SENSE

A rain barrel collects and stores rainwater from downspouts and rooftops for watering lawns and gardens. Rain barrels can be constructed in a number of ways, but they all serve the same purpose — to collect rainwater and decrease the amount of storm water runoff that leaves your property. During the summer months it is estimated that nearly 40% of household water is used for lawn and garden maintenance. A rain barrel collects water and stores it for those times that you need it most — during the dry summer months. Using rain barrels can help homeowners lower water bills and improve the vitality of lawns, plants, flowers and trees.

Rain barrels are easy to install and provide relatively clean water for non drinking purposes. It's a simple idea but one that can reduce domestic water use, water bills and demands on municipal water system - Especially during summer water peak use. Equally important it puts natural water back into the environment and not into the sewer system.

### TIPS

- A splash pad is required to be installed with the rain barrel, located under the barrel's tap and overflow spout, in order to direct roof water away from your home's foundation walls.
- Install the rain barrel on a strong, level surface as it can weigh up to 1200 lbs when full -- a patio or paving stone is ideal.
- If the barrel is slightly elevated, an attached hose can use gravity to feed water toward a garden or lawn.
- To limit mosquito-breeding, ensure that your barrel is mosquito/vector proof. Most manufactured rain barrels come with this feature.
- Drain your rain barrel before each storm event to allow for full capacity and before the winter to prevent cracking.

### QUICK BITS

#### Other ways to conserve water and energy in your home:

- Check for leaks in your toilet or faucets and repair if necessary.
- Take shorter showers or replace your showerhead with a water efficient version.
- Turn the tap off when brushing your teeth or shaving.
- Operate automatic dishwashers and washing machines when they are fully loaded and use cold water for washing clothes.
- Insulate your water pipes. You'll get hot water faster and save on energy costs.
- Buy water-efficient appliances.
- Instead of running water to thaw meat, defrost overnight in the refrigerator.
- Re-use water where possible for watering plants or for cleaning.



### CONTACT US

**Town of Markham: 905-475-4862**

Help is only a phone call away!

#### Call us about:

- How to assess and disconnect your downspouts
- Materials
- Landscaping with your disconnected downspouts

**Waterworks staff will be happy to help you.**

[www.markham.ca](http://www.markham.ca)

# EVERY DOWNSPOUT COUNTS

COMMUNITY NEWS FROM THE TOWN OF MARKHAM

JUNE 2008

## SANITARY SEWER PROTECTION PROGRAM

### DOES THIS AFFECT ME?

If you live in the Grandview area, and your rain downspout is directed to the ground, **please read this important news.**

### WHAT'S THE PROBLEM AND WHAT NEEDS TO BE DONE?

Sanitary sewer systems are not designed to carry rainwater and can become overwhelmed when severe rain events occur. On April 29, 2008, Markham Council approved a Sanitary Sewer Protection Pilot Program for the Grandview area. The purpose of the program is to identify and disconnect the downspouts connected to the sanitary sewer system to help reduce the risk of basement flooding and help the environment. Home owners that need to make these changes are eligible for financial assistance.

- Some homes have downspouts improperly connected to the sanitary sewer system that need to be disconnected.
- Preventing roof top rainwater from entering the sanitary sewer can help reduce basement flooding.
- This summer, Town of Markham staff will be testing downspouts in the Grandview Pilot area to determine if they are connected to a sanitary sewer.

**Plan to attend a community meeting on June 19, 2008 at 6:30 p.m., Henderson Public School to find out more about this program and how it will affect the Grandview area.**

*See inside for more details about this important community meeting.*



## WHAT WILL HAPPEN AND WHEN?

- Community Information Meeting, June 19, 2008, 6:30 p.m., Henderson Public School
- Downspouts directed to the ground will be tested in the Pilot area. Homeowners will be notified 2 to 3 days in advance.
- Homeowners will be contacted September 1st to September 19th, 2008, if testing verifies their downspouts are connected to the sanitary sewer system.
- Property inspection will be done by town staff who will identify downspouts that need to be disconnected by the homeowner or a contractor.
- Homeowners that disconnect from a sanitary sewer may apply for financial assistance and are eligible for 80% reimbursement up to a maximum of \$500 and 1 free rainbarrel.

## WHAT ARE THE BENEFITS OF DISCONNECTING OR REDIRECTING DOWNSPOUTS TO THE LAWN AND GARDEN?

- Helps reduce sanitary sewer overflow during rain events.
- Helps prevent basement flooding.
- Helps reduce energy and cost of municipal water system and treatment plants.
- Helps the water quality of lakes, rivers and streams.
- Helps replenish and protect ground water.

## HOW IS THE TESTING DONE?

**Smoke and Dye testing** is used as a safe and effective technique to identify connections to the sanitary sewer system. Smoke testing involves adding a coloured smoke into sewer manholes and observing the exit points. A non toxic, biodegradable dye may be used to further verify downspouts connected to the sanitary sewer system. The dye is not permanent and washes away with water.

### Is there a possibility of the smoke entering my home?

Yes, there is a possibility of smoke entering your home if your floor drain and basin "P" traps are dry. Simply pour some water down your floor drain or unused basins prior to testing. The town will notify residents 2 to 3 days before testing. This is also recommended every few months to prevent sewer gases from entering your home. If smoke should enter your home after following these steps, you should have a plumber come and inspect your home to check for deficiencies.

### Is the smoke harmful?

NO. The smoke is not harmful to your health, pets or your home furnishings and disappears in a few minutes.



Smoke exiting a sewer manhole

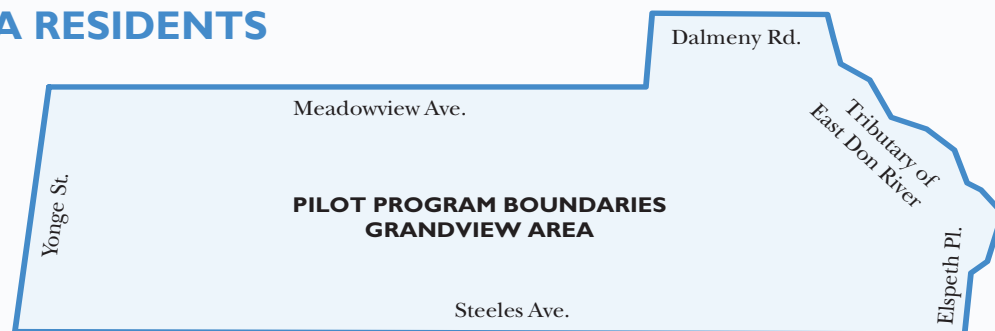


Smoke exiting a downspout

## PLAN TO ATTEND A COMMUNITY MEETING TO LEARN MORE ABOUT HOW THE PILOT PROGRAM MAY AFFECT YOU

### COMMUNITY INFORMATION MEETING FOR GRANDVIEW AREA RESIDENTS

Markham Sanitary Sewer Protection  
Pilot Program Meeting  
June 19, 2008 at 6:30 p.m. - 9:00 p.m.  
Presentation begins at 7:30 p.m.  
Henderson Public School  
66 Henderson Ave., Thornhill



## FINANCIAL ASSISTANCE

Markham's Sewer By-Law prohibits downspouts to be connected to the sanitary sewer system. Markham Council has approved a financial assistance program for the Pilot area to assist homeowners with the cost to disconnect their downspouts from the sanitary sewer. Only homeowners who receive a disconnection notice from the Town will be eligible.

- The Town will reimburse 80% of the total cost up to a maximum of \$500 for eligible homeowners
- One free rainbarrel

Payment will be issued upon submission of detailed receipts and after inspection by the Town.

**Financial assistance ends  
Summer 2009**

## DISCONNECTING DOWNSPOUTS IS EASY!

### WHAT WILL I NEED?

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• sheet metal screws</li> <li>• rubber or plastic plugs or caps</li> <li>• downspout elbows</li> <li>• downspout extensions</li> <li>• plastic or concrete splash blocks</li> </ul> | <ul style="list-style-type: none"> <li>• hacksaw</li> <li>• tape measure</li> <li>• screw driver</li> <li>• pliers</li> </ul> |
|--|---|

**Disconnecting a  
downspout from the  
sanitary sewer system  
benefits the community  
and the environment**



Step 1



Step 2



Step 3



Step 4



Be sure that the slope of the ground allows for water to flow away from all structures. Direct the storm water to a storage device, lawn or garden. It is recommended that disconnected downspouts be extended to discharge water at least 1 meter from any structure's foundation (including your neighbor's) or public sidewalk and 2.5 meters from retaining walls.

## DOWNSPOUT DISCONNECTION

### Things to consider

- Repair all cracks in walls, floors, doors, windows and foundations
- Ensure downspouts are disconnected and drain properly away from foundation walls
- When disconnecting downspouts remember not to drain directly onto neighbouring properties, lanes or sidewalks
- Ensure eavestroughs are clean and drain properly
- Ensure the ground slopes away from the house for a minimum of 1 metre
- Obtain professional advice and service from a knowledgeable and licensed roofer, eavestrough contractor or civil engineer