

# Backwater Valves and Sewage Backflow Prevention

What Homeowners Need to Know

# The Causes of Sewer Backup in Your Home

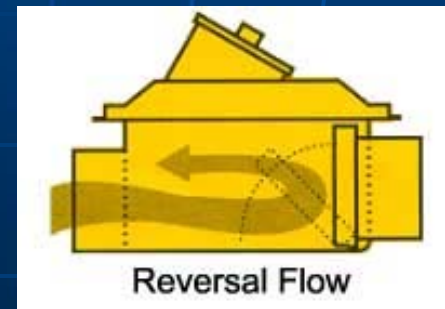
- Heavy rains are a major cause of sewer backup.
- Sewage can back up into your home when the volume of water and sewage flowing into the system exceeds its capacity.
- The best method to protect your home and belongings is to install a mainline backwater valve that protects all plumbing fixtures and drains.
- Sewer back up is not a pleasant experience. If you have one, you won't want another one!

# OUTLINE

- Function of Backwater Valves
- Location of Backwater Valve
- Types/Models
- Maintenance
- Installation
- Resources and Contact Information
- Shopping Tips
- Potential Cost

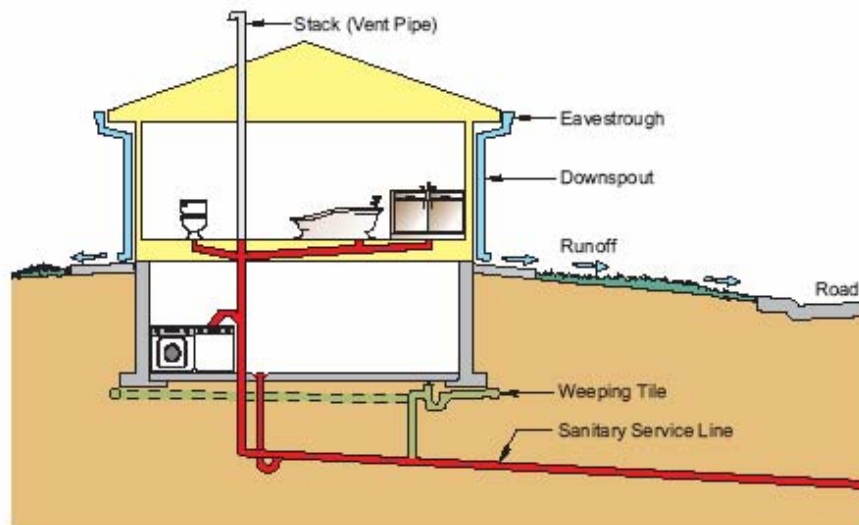
# Function of Backwater Valves

- Provides protection against backflow of sewage into home
- Allows for free flow of air and outflow of sewage (Normally open backwater valve)

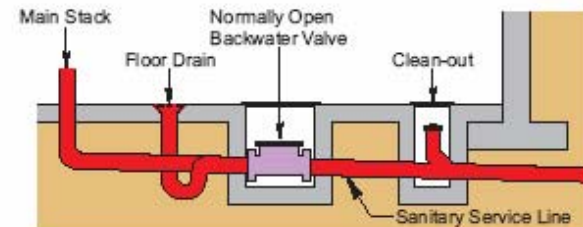


# Location of Main Building Sewer Backwater Valve

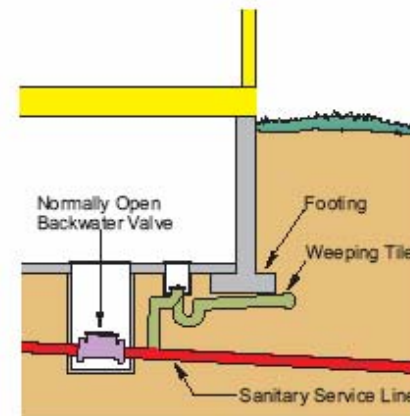
## TYPICAL HOME SERVICING IN MATURE NEIGHBOURHOOD



## BACKWATER VALVE INSTALLATION



## WEeping TILE LAYOUT



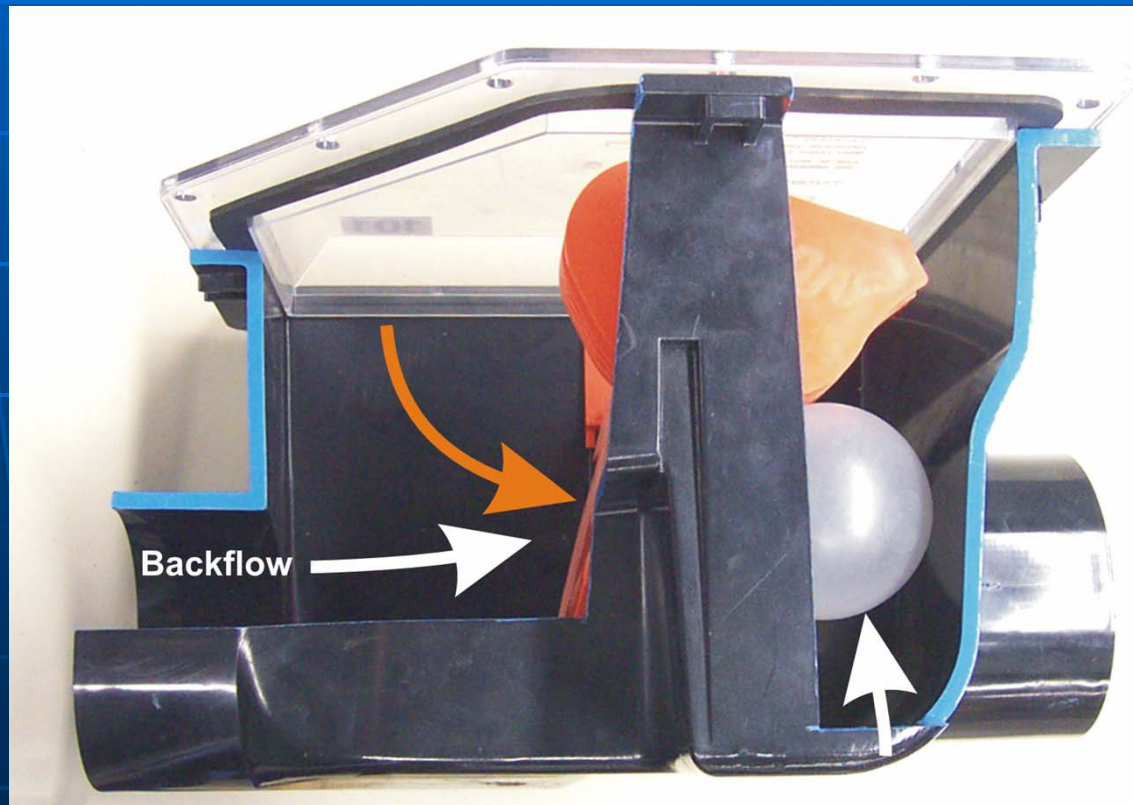
# Types of Backwater Valves

- Fio Backwater Valve Open (Normally open)



# Types of Backwater Valves

- Fio Backwater Valve Closed



# Types of Backwater Valves

- Mainline Backwater Valve – Normally Open





# Maintenance

- Annually check valve for free movement of all moving parts
- Clean away any debris that may have accumulated inside the trap
- If uncertain about valve's condition contact a plumber

# Installation - Retrofit

- A retrofit will require uncovering the building sewer
- This entails some concrete removal around the area of installation
- Once installed the cover of the backwater valve must be accessible for servicing
- Some manufacturer's require that the closest branch connection upstream of the backwater valve must not be closer than 2 feet (due to turbulent flow)

# Installation - New

- The National Plumbing Code requires a backwater valve to be installed on all new buildings when you have fixtures installed below the adjoining street (Fixtures subject to backflow).

# Installation - New

- If the backwater valve is installed when the home is being built it affords the owner some choices of type:

Normally open – to protect the entire building. Installed in the building sewer.

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# Resources and Contacts

- Mechanical Contractor's Association of Saskatchewan



# SHOPPING TIPS

- Get 3 quotes from different contractors
- Seek out references – from the company or personal references from people who have done business with a contractor
- Get the work done before the next storm season
- Make sure contractor is licensed to work in your community

# SHOPPING TIPS

- Ask the plumber to show you how to maintain your new backwater valve
- Check your home insurance to see if you are required to have a backwater valve installed in order to be covered for sanitary backup

# Potential Cost

- Price range of \$900.00 to \$1700.00
- Includes Breaking up of concrete, installation of backwater valve, refinishing of concrete and removal of all debris
- Price may be subject to increase if unforeseen circumstances arise -  
i.e. piping severely degraded, blockages or damage to piping.



# Acknowledgments

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- Thanks also to the Mechanical Contractors Association of Saskatchewan for providing their expertise on this subject.

