Why My Basement?

Basement flooding is most likely to occur after heavy rain or a rapid snow melt. The amount of water in your basement can often help determine the cause of the problem.

If portions of your basement are wet, the cause could be:

- a leak in your home's foundation, basement walls, basement windows or doors
- a failure in your weeping tile system
- overflowing eavestroughs
- missing splash pads or downspout leaders
- downspout leaders are too short
- insufficient drainage due to poor grading.

If your basement has flooded, the cause could be:

- a loose or missing cap on the storm or sanitary backwater valve or cleanout
- a failure of the storm or backwater valve
- a plugged line between your house and the main sewers
- a failure of a sump pump to pump out weeping tile water

This brochure will take you through the steps to help flood protect your home. You might be surprised to learn that a couple of simple fixes can save you money and make your spring more relaxing. Annual maintenance is necessary to help flood protect your home. If you continue to experience basement flooding after following the information provided in this brochure, contact us.

For more information, or if you have a question or comment, please contact:

The City of Red Deer Environmental Services 403-342-8750 Monday to Friday 7:30 a.m. to 4:30 p.m. environmentalservices@reddeer.ca www.reddeer.ca



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Red Deer

Environmental Services

Flood Protecting Your Home





To help flood protect your home it's important to understand Red Deer's two types of sewer systems and some key plumbing features.

The sanitary sewer carries wastewater (sewage) from your home's toilets, sinks and laundry to the Wastewater Treatment Plant.

The storm sewer carries water from the street and lane to nearby storm detention ponds, creeks and ultimately the Red Deer River.Weeping tile is the perforated pipe buried around the foundation of your home.This pipe collects water that pools around your foundation and channels it to the sewers. Older homes (built before the 1950's) may not have weeping tile.

The backwater valve is a component of your plumbing system that prevents water from backing up your sanitary and storm sewer services when the sewers are overloaded.

The cleanout allows you to access your sanitary and/ or storm service connection for maintenance and inspection through a screw on cover.

Removing the valve covers during storms or line blockages will cause water to enter your basement.



Backwater valve and cleanout maintenance

During heavy rainfalls, the storm sewer – and sometimes the sanitary sewer – may become overloaded and force water back into your property's service line. If your backwater valve or cleanout is not secure, missing a cover or broken, this water can be forced from the pipe and into your basement.

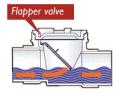
- Your backwater valve and cleanout are located near a perimeter wall in an access chamber below the basement floor.
- Depending on the age of your home, you may only have sanitary service or both sanitary and storm service.
- Ensure the flapper valve and threads are free of debris, sand and sediment. and the flapper valve hasn't come loose. A pail of warm water (no soap) should be used to clean the valve body.
- When the flapper valve is clean and positioned correctly, tighten all covers, so they are water tight.





Threaded cover

Sanitary water backflow valve







Lot grading and drainage

A properly graded lot ensures rainwater runs away from your home. The more water you keep away from your foundation, the less chance there is of basement flooding.

- Refill flat spots and depressions around your foundation with topsoil to ensure water drains away from your home.
- Ensure window wells are high enough to prevent rainwater build up.
- Backfill the ground under decks anddoorsteps to avoid rainwater buildup.
- Make sure downspouts are secure, in good working order and directed away from your foundation.