

HOMEOWNER FLOOD RISK REDUCTION RESOURCE LIST

Introduction to the Home Flood Protection Program

The Home Flood Protection Program is an educational service designed to help homeowners reduce their risk of basement flooding and minimize damage if flooding occurs. The program is developed by the Intact Centre on Climate Adaptation (ICCA) at the University of Waterloo and is being piloted in Burlington, Ontario.

Introduction to the Homeowner Flood Risk Reduction Resource List

This Resource List has been created to provide a starting point for homeowners to learn about basement flood protection and to support the uptake of practical action to reduce flood risk. Most of the resources will be helpful to homeowners across Canada. Specific resources have also been collected for select municipalities to help residents access flood risk reduction subsidy, permission and permit information.

The list has been compiled by staff at the Intact Centre on Climate Adaptation (ICCA) to provide online water damage risk reduction resources that meet the following criteria:

1. Resources are written at a level of detail and technical language appropriate for the average homeowner to find easy to use.
2. Resources have been developed by reputable government, non-profit, and commercial sources.
3. All videos and factsheets have been selected for their educational value and do not directly promote any one product or service.

Help Us Improve the Resource List

We welcome your input! If there is a resource that meets our criteria that you would like to see added, please share it with us. All requests can be directed to Janet Szydlowski, Home Flood Protection Program Assistant at floodprotect.info@uwaterloo.ca.

***Please Note:** The Intact Centre on Climate Adaptation is providing this list of online resources for the convenience of interested homeowners. The Intact Centre on Climate Adaptation is in no way providing advice of any kind and does not endorse or recommend any of the services or products identified below.*

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Flood Risk Management Resources for Inside your Home

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5. [Indoor Plumbing and Fixtures Maintenance](#)
6. [Finished Walls and Floors](#)
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Additional Resources

1. [What to Consider Before You Start a Project](#)
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3. [Understanding Water Damage Insurance](#)
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| Municipality-Specific Resources | |
|--|--|
| Halton Region and Cities of Burlington and Oakville | |
| <u>Enhanced Basement Flooding Prevention Subsidy Program</u> | Halton Region |
| <u>Basement Flooding – Emergency Preparedness (Website)</u> | Halton Region |
| <u>Halton Region Downspout Disconnection Program (Factsheet)</u> | Halton Region |
| <u>After the Flood- Homeowners Checklist (Factsheet)</u> | Halton Region |
| <u>Key Flood Protection Resources</u> | City of Burlington |
| <u>Key Flood Protection Resources</u> | City of Oakville |
| <u>Flood Assistance (Website)</u> | City of Burlington, Halton Region |
| <u>Flood Prevention Home Check-Up (Website)</u> | City of Burlington |
| <u>By-laws (Website)</u> | City of Burlington |
| <u>Private Drains By-law (Website)</u> | City of Burlington |
| <u>Site Alteration By-law (Website)</u> | City of Burlington |
| <u>Public Tree By-law (Website)</u> | City of Burlington |
| <u>Storm Sewer Discharge By-law (Website)</u> | City of Burlington |
| City of Hamilton | |
| <u>Key Flood Protection Resources</u> | City of Hamilton |

| City of Toronto | |
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| Key Flood Protection Resources | City of Toronto |
| City of Clarington | |
| Key Flood Protection Resources | City of Clarington |
| Waterloo Region and Cities of Kitchener, Waterloo and Cambridge | |
| Key Flood Protection Resources | Waterloo Region and Cities of Kitchener, Waterloo and Cambridge |

| Key Takeaway Messages | |
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| Understanding Different Types of Water Damage at Your Home | Home Flood Protection Program |
| Top 10 Actions You Can Take To Reduce Your Risk of Basement Flooding | Home Flood Protection Program |

| FLOOD RISK REDUCTION RESOURCES FOR OUTSIDE YOUR HOME | |
|---|-----------------------------|
| Storm Drains and Proper Drainage | |
| Storm Water Drainage in the City of Burlington (Factsheet) | City of Burlington |
| Home Drainage and Causes of Basement Flooding (Factsheet) | City of Toronto |
| Storm Drain Survival Kit (Factsheet) | City of Lethbridge, Alberta |
| Storm Drain Clean Up (Video) | City of Lethbridge, Alberta |
| Adopt a Storm Drain (Factsheet) | City of Lethbridge, Alberta |
| Lot Grading and Overland Drainage | |
| Bylaws Enforcement Grading & Drainage/Site Alteration (Factsheet) | City of Burlington |

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| Lot Grading and Drainage (Factsheet) | City of Hamilton |
| Lot Grading (Video) | City of Hamilton |
| Lot Drainage Issues (Video) | Institute for Catastrophic Loss Reduction |
| Trees | |
| Trees Near the House? Foundations Beware! (Factsheet) | Quebec CAA |
| Landscaping and Overland Drainage Around Your Home – Gardens and Lawn | |
| How to Build a Rain Garden (Factsheet) | This Old House |
| Creating a Rain Garden (Factsheet) | Credit Valley Conservation Authority |
| Maintaining Your Rain Garden (Factsheet) | Rutger's |
| Rain Gardens: Design and Maintenance (Factsheet) | Canada Mortgage and Housing Corporation |
| Native Plants for Your Rain Garden (Factsheet) | Toronto Region and Conservation |
| Rain Garden Case Study: St John's Parish, Kitchener Ontario (Video) | REEP Green Solutions |
| Soak It Up! How to Install a Soak-away Pit and Increase Permeability of Hard Surfaces (Factsheet & Video) | REEP Green Solutions |
| Outdoor Water Management – Permeable Paving and Soak-away Pits (Video) | REEP Green Solutions |
| Infiltration Galleries (Video) | REEP Green Solutions |
| The Benefits of Bioswales, Permeable Pavement, Rain Gardens, Downspout Disconnection and Green Infrastructure (Factsheet) | Green Infrastructure Ontario Coalition |
| Permeable Paving | |
| Permeable Pavement (Factsheet) | City of Edmonton |

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| The Benefits of Bioswales, Permeable Pavement, Rain Gardens, Downspout Disconnection and Green Infrastructure (Factsheet) | Green Infrastructure Ontario Coalition |
| Soak It Up! How to Install a Soakaway Pit and Increase Permeability of Hard Surfaces (Factsheet & Video) | REEP Green Solutions |
| Outdoor Water Management – Permeable Paving and Soakaway Pits (Video) | REEP Green Solutions |
| Eaves Troughs and Downspouts | |
| Halton Region Downspout Disconnection Program (Factsheet) | Halton Region |
| Downspout Disconnection Subsidy (Factsheet) | Halton Region |
| Disconnecting Downspout DIY (Factsheet) | City of Toronto |
| Are Your Gutters and Downspouts Doing Their Job? (Factsheet) | Quebec CAA |
| Cleaning Gutters and Downspouts: An Essential Task! (Factsheet) | Quebec CAA |
| How to Install a Rain Gutter (Video) | This Old House |
| How to Drain Downspout Water Flow Away From a House (Video) | This Old House |
| Proper Water Drainage (Factsheet) | Mike Holmes, Make it Right |
| How to Clean Gutters and Downspouts (Factsheet) | Do it Yourself.com |
| Rain Barrels | |
| Rain Barrel Assembly, Installation and Maintenance (Video & Factsheet) | Rainbarrel.ca |
| Rain Barrels (Video) | REEP Green Solutions |
| How to Make a Rain Barrel (Video) | Today's Homeowner |
| Foundation Drain and Sewer Lateral Maintenance | |

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| Sanitary Lateral Lining and Repair Subsidy (Factsheet) | Halton Region |
| Foundation Drains: Problems and Solutions (Factsheet) | CAA Quebec |
| Getting to Know Your Foundation Drain System - Life Expectancy and Maintenance (Factsheet) | Square One Insurance |
| Sewer Backups and Basement Flooding (Factsheet) | Halton Region |
| Sewer and Sewer Laterals: How Can I Prevent Backups in My Sewer Lateral? (Factsheet) | Municipality of Cornwall Ontario |
| Sewer Lateral Blockages: What Should You Do When Your Sewer Lateral Backs Up (Factsheet) | City of Brantford Ontario |
| Sewer Lateral Blockages FAQ (Website) | City of Brantford Ontario |
| Understanding Your Sanitary Sewer Lateral (Factsheet) | Sanitary District 1, Kentucky, USA |
| Foundations and Grading at Foundations | |
| Bylaws Enforcement Grading & Drainage/Site Alteration (Factsheet) | City of Burlington |
| How to Repair a Crack in a Concrete Foundation (Video) | This Old House |
| Infrared Thermograph: High Tech Inspection to Detect Water Infiltration in Foundation or Roof (Factsheet) | Quebec CAA |
| How to Grade Around a Foundation (Video) | This Old House |
| How to Waterproof a Basement (Video) | This Old House |
| Efflorescence (Factsheet) | Basement Questions |
| Efflorescence: How to Recognize It and Take Action – If Need Be (Factsheet) | Quebec CAA |
| Repairing Cracks in Your Foundation | |
| How to Repair a Crack in a Concrete Foundation (Video) | This Old House |

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| How to Recognize a Problematic Foundation Crack and What to Do About It (Article) | National Post |
| Infrared Thermograph: High Tech Inspection to Detect Water Infiltration in Foundation or Roof (Factsheet) | Quebec CAA |
| Exterior Water Sources | |
| Winterizing Your Hose Bibs (Video) | The Neighborhoods of EYA |
| Basement Windows and Window Wells | |
| How to Seal Basement Windows (Factsheet) | Do It Yourself |
| Exterior Sealants to Guard Against Damaging Infiltrations (Factsheet) | Quebec CAA |
| Weather Stripping Basement Windows (Factsheet) | Natural Resources Canada |
| Getting to Know Your Window Wells (Factsheet) | Square One Insurance |
| Install a Window-Well Cover | Lowe's |

| FLOOD RISK REDUCTION RESOURCES FOR INSIDE YOUR HOME | |
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| Drain Maintenance in Your Home | |
| Green Methods for Indoor Drain Maintenance (Factsheet) | David Suzuki Website |
| How to Clear Any Clogged Drain (Factsheet) | This Old House |
| Grease Management for Your Home | City of Barry |
| Blocked Drain (Factsheet) | Quebec CAA |
| Sewer Lateral and Floor Drain | |
| Sanitary Lateral Lining and Repair Subsidy (Factsheet) | Halton Region |

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| Blocked Drain (Factsheet) | Quebec CAA |
| Drains and Foundation: Prevention or Repair? (Factsheet) | Quebec CAA |
| Backwater Valve | |
| Installation of Backwater Valve Subsidy (Factsheet) | Halton Region |
| Backwater Valves: How They Work and General Maintenance Practices (Video) | Cranberry Township |
| Avoid Sewage Backflow With a Backwater Valve (Video) | Insurance is Evolving |
| The Backwater Valve: A One-Way Trip for Wastewater (Factsheet) | Quebec CAA |
| Backwater Valves (Video) | Institute for Catastrophic Loss Reduction |
| Backwater Valve Maintenance (Video) | Institute for Catastrophic Loss Reduction |
| Focus on Backwater Valves (Factsheet) | Institute for Catastrophic Loss Reduction |
| Backwater Valve (Factsheet) | Insurance Bureau of Canada |
| Sump Pumps and Pits Maintenance | |
| Weeping Tile Disconnection and Installation of Sump Pump Subsidy (Factsheet) | Halton Region |
| Focus on Sump Pump Systems (Factsheet) | Institute of Catastrophic Loss Reduction |
| How to Keep Your Basement Dry With a Sump Pump (Video) | Insurance is Evolving |
| Simple Sump Pump Maintenance (Video) | Central Insurance |
| How to Install a Battery Operated Backup Sump Pump (Video) | This Old House |
| Indoor Plumbing and Fixtures Maintenance | |

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| Preventing Water Damage: Appliance Maintenance and Water Shut-Off Valve (Video) | Insurance is Evolving |
| How to Unclog a Toilet and Keep the Problem From Recurring (Factsheet) | Quebec CAA |
| Plumbing Defects and How to Prevent Them (Factsheet) | Quebec CAA |
| Flushing Your Water Heater (Factsheet) | Quebec CAA |
| How to Repair a Crack in a Concrete Foundation (Video) | This Old House |
| Finished Walls and Floors | |
| The Right Flooring for Your Basement (Factsheet) | Money Sense |
| Basement Floor Finishes: Your Options (Factsheet) | Quebec CAA |
| Floor Covering Options (Factsheet) | Quebec CAA |
| Checklist: Moisture Problems in the Basement (Factsheet) | Canada Mortgage and Housing Corporation |
| Basement Waterproofing Options (Factsheet) | HGTV |
| Storage and Limiting Indoor Humidity | |
| Moisture Problems in the Basement (Factsheet) | Canada Mortgage and Housing Corporation |
| A Guide for Understanding and Fixing Interior Moisture Problems in Housing (Factsheet) | Canada Mortgage and Housing Corporation |
| Mold: Get Rid of It for Good (Factsheet) | Quebec CAA |

ADDITIONAL RESOURCES

What to Consider Before You Start a Project

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|---|---|
| Call Before You Dig (Website) | City of Burlington |
| Call Before You Dig (Website) | OntarioOneCall |
| Bylaws Enforcement Grading & Drainage/Site Alteration (Factsheet) | City of Burlington |
| Do I Need a Building Permit? (Website) | City of Burlington |
| How to Find a Reliable Contractor | |
| Your Rights When Starting Home Renovations and Repairs (Factsheet) | Province of Ontario |
| Need Work Done? Here's How to Find a Reliable Contractor (Factsheet) | Quebec CAA |
| Finding a Contractor for Small Jobs (Factsheet) | Quebec CAA |
| Do Not Sign Without Reading the Fine Print (Factsheet) | Quebec CAA |
| How to Hire a Contractor (Factsheet) | Mike Holmes, Make it Right |
| Understanding Water Damage Insurance | |
| Preventative Tips to Avoid Water Damage (Video) | Insurance is Evolving |
| Renovations and Home Insurance: Check Your Coverage Options (Factsheet) | Quebec CAA |
| Flood Insurance: What is Covered? What is Excluded (Factsheet) | Square One Insurance |
| Handbook for Reducing Basement Flooding (Factsheet) | Institute for Catastrophic Loss Reduction |
| Does Your Home Need a Flood Prevention Tune Up? (Factsheet) | Intact Centre on Climate Change Adaptation |
| Emergency Preparedness | |
| Sandbagging Demonstration (Video) | State Emergency Service - Australia |

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| Floodproofing (Website) | Government of Canada |
| Proper Use of Sandbags (Factsheet) | District of Columbia |
| Helping Canadians Prepare for a Flood (Website) | Flood Smart Canada |
| Flood Facts Canada (Factsheet) | Government of Canada |
| Being Prepared for a Flood(Factsheet) | Government of Canada |
| Emergency Preparedness Guide for People with Disabilities | Government of Ontario |
| After a Flood – A Homeowner’s Checklist (Factsheet) | Canada Mortgage and Housing Corporation |
| Cleaning Your House After a Flood (Factsheet) | Canada Mortgage and Housing Corporation |
| Flood Recovery Guide (Factsheet) | Canadian Red Cross |