



# The Home Flood Protection Program

## -Frequently Asked Questions-

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## Program Background Information

### 1. How is basement flooding impacting Canadians?

Over the past decade, increases in the frequency and severity of precipitation events in Canada have resulted in a sharp rise in the costs associated with repairing the damage caused by household basement flooding. Nationally, such flooding has resulted in Property & Casualty (“P&C”) insurance claims exceeding \$1 billion per year since 2009 onwards, whereas in previous years annual claims were typically in the range of \$200-500 million (IBC 2014).

In worst-case scenarios, P&C insurers no longer offer insurance in high-risk flood zones, putting homeowners at risk of mortgage default in the event that a significant flood occurs. The importance of basement flood risk reduction cannot be overestimated in light of the fact that home ownership represents the single greatest investment of most Canadians.

In Canada, flooding (primarily basements) now accounts for greater than 50 per cent of all P&C claims (in contrast, hail, wind, ice and fire collectively constitute less than 50 per cent of P&C claims) (Intact 2015). Damages not covered by insurance account for an additional 3 to 4 times the amount of insurable losses annually and the cost of repairs are borne by homeowners and government.

### 2. How will the Home Flood Protection Program address Canada’s basement flood challenge?

The Home Flood Protection Program offers a practical and cost-effective means to reduce the risk of basement flooding and limit the cost of damage if a flood occurs. Widespread rollout of the Program therefore represents a significant opportunity to reduce losses by homeowners, insurance companies, and governments.

### 3. How is the Program’s community engagement strategy developed?

The Home Flood Protection Program’s community engagement strategy is developed in consultation with local government, conservation authorities, community groups and citizen volunteers, ensuring that the Program enhances and is complementary to existing flood-risk-mitigation programs.



Each target neighbourhood has a volunteer committee consisting of a neighbourhood members with a wide variety of perspectives. This committee provides direct feedback about the content of targeted promotional materials and helps define the outreach approaches that will be most effective in the neighbourhood.

#### 4. What free resources will the Program provide for all homeowners?

The Home Flood Protection Program helps homeowners reduce the risk of basement flooding and minimize damage if flooding occurs. Free web resources available to all homeowners include risk-prevention checklists, how-to videos, tips for finding qualified contractors, questions to ask your insurance company and information about local subsidies for home flood prevention measures. The resources will consist of a collection of existing web resources that are available from a wide variety of government, institutional and non-profit websites across the globe. A growing list of resources will be developed by ICCA as the project progresses to address homeowner frequently asked questions and to provide case studies of practical and cost-effective opportunities to reduce flood risk.

#### 5. Why was Burlington, Ontario chosen for the City-scale Home Flood Protection Program Pilot?

Burlington, Ontario experienced the large scale flooding of over 3,000 homes on August 4, 2014. High concentrations of rain fell on specific portions of the City and caused basement flooding, while other sections of the City received little to no rain and did not experience flooding. The variety of homeowner experiences with basement flooding in Burlington, Ontario provides a unique opportunity to test the effectiveness of the Home Flood Protection Assessments as well as the effectiveness of targeted community engagement campaigns with homeowners with a variety of flood experience.

The Program also aligns well with Burlington's ongoing efforts to help its citizens reduce their risk of basement flooding in the event of future extreme rainfall events.



## Who is Involved in the Development and Delivery of the Home Flood Protection Program?

### 6. Who is the University of Waterloo?

In just half a century, the University of Waterloo, located at the heart of Canada's technology hub, has become a leading comprehensive university with more than 36,000 full- and part-time students in undergraduate and graduate programs.

Consistently ranked Canada's most innovative university, Waterloo is home to advanced research and teaching in science and engineering, mathematics and computer science, health, environment, arts and social sciences. From quantum computing and nanotechnology to clinical psychology and health sciences research, Waterloo brings ideas and brilliant minds together, inspiring innovations with real impact today and in the future.

### 7. What is in the Intact Centre on Climate Adaptation (ICCA)?

The Intact Centre on Climate Adaptation (ICCA) is an applied research centre at the University of Waterloo. The Intact Centre was founded in 2015 with a gift from Intact Financial Corporation, Canada's largest property & casualty insurer. The ICCA helps homeowners, communities and businesses to reduce risks associated with climate change and extreme weather events. For more information visit our website at [www.intactcentreclimateadaptation.ca](http://www.intactcentreclimateadaptation.ca) or visit our Twitter feed @ICCA\_Canada.

As a research centre at the University of Waterloo, the creation, collection, organization, and dissemination of knowledge is done freely and without bias in support of the research, teaching, and study needs of the university community.

***Note: The Intact Centre on Climate Adaptation and its programs operate independently of all funders and program partners and does not promote the sale of any products or services.***



## 8. Who is AET Group?

The Home Flood Protection Program is proud to partner with the award-winning consultants at AET Group to deliver the Home Flood Protection Assessments in Burlington, Ontario.

AET Group is an employee-owned multi-disciplinary environmental consulting, auditing and scientific services company, with over 1,000 projects completed in Ontario and across Canada. To learn more about AET Group's reputation as a highly-trusted and leading-edge environmental consulting firm. From more information visit [www.aet98.com](http://www.aet98.com)

## 9. Who are the Home Flood Protection Assessors?

The Home Flood Protection Assessors are managed by AET Group Inc. (AET), an environmental consulting firm that has been contracted by the University of Waterloo to deliver the program in Burlington, Ontario. Each Assessor possesses a clear criminal records check and has demonstrated competencies in relevant areas including but not limited to home construction, home inspection, environmental assessments/inspections, water resources management and/or environmental engineering. Assessors have successfully completed the Home Flood Protection Assessment Training Program overseen by the University of Waterloo. Assessors have a variety of professional experience and the Intact Centre makes no guarantee that they will be certified home inspectors, building inspectors or building engineers.

## Program Definitions

### 10. What is the Home Flood Protection Program?

The Home Flood Protection Program is a flood risk reduction education program developed by the Intact Centre on Climate Adaptation, an applied research centre at the University of Waterloo. It achieves maximum community impact by delivering the program in cooperation with local government and community groups. The goal of the program is to help homeowners reduce their risk of basement flooding and minimize damage if flooding occurs. The program provides free online self-help



resources and a custom, fee-for-service flood-risk evaluation, known as the 'Home Flood Protection Assessment.'

### 11. What is the Home Flood Protection Assessment?

The Home Flood Protection Assessment is a one-on-one visual flood-risk evaluation available to owners of single-detached homes. For a small fee, a trained Flood Protection Assessor works with the homeowner to complete a 50-point visual assessment of potential sources of water entry into the home. A concise, easy to read report identifies top ranked actions to reduce flood risk. A live customer service help-line, personal follow-up from the Assessor, and seasonal maintenance reminders provide additional support to homeowners as they work to protect their homes from flooding.

### 12. What is the Burlington Home Flood Protection Study?

The Home Flood Protection Study (Study) is a confidential analysis of home flood risks identified at the time of the Home Flood Protection Assessment and action taken to reduce flood risk as reported in follow-up surveys and noted during follow-up on-site assessments. Data is collected and analyzed ONLY from homeowners (or their designated representatives) who have voluntarily consented to share the results of their Home Flood Protection Assessment Reports and follow-up surveys by signing a participation agreement. All information that is gathered as part of the Study is stripped of its personal identifying information (name, all elements of address, contact information), stored in an encrypted, secure online database and is analyzed in aggregate form. Information gathered as part of this Study is used only for the express purposes laid out in this agreement.

### 13. What is the Burlington Home Flood Protection Program Pilot?

The Home Flood Protection Program will be field-tested in Burlington, Ontario in 2017. Free online resources, many of which focus on serving the specific needs of Burlington-area residents, will be available to all residents through the Program website. In addition, 4,000 Home Flood Protection Assessments will be available to single family homeowners in Burlington for a subsidized fee of \$125. Four neighbourhoods will be targeted for intensive promotion but all single-family



homeowners will have the opportunity to register. Homeowners who participate in a Home Flood Protection Assessment will also have the option to volunteer to be part of a confidential Home Flood Protection Study that will help improve the program and report results in aggregate at a City scale to funders and partners.

## Who is Funding the Program?

### 14. Who is funding the Home Flood Protection Program?

The Home Flood Protection Program is funded by the Intact Centre on Climate Adaptation, the Ontario Ministry of the Environment and Climate Change (MOECC), the City of Burlington and by participating homeowners. The MOECC is providing \$237,000 to support program development. The City of Burlington is providing \$50,000 to support the first phase of the Home Flood Protection Assessment rollout to 500 homes in Burlington in June 2017. Each participating homeowner will contribute a small fee to support the completion of the assessment and follow-up support at their homes.

Burlington will consider additional funding of the Program in the Fall of 2017 to support the second phase of the Program that will feature the completion of an additional 3,500 homes.

### 15. Will the second phase of the project take place regardless of funding from the City of Burlington?

Yes, additional funding sources will be sought and secured by the ICCA in order to ensure that the rollout of an additional 3,500 Home Flood Protection Assessments will be completed in Burlington in 2017.

## What are the Program Goals?

### 16. What are the short and long term goals of the Home Flood Protection Program?

The short term goal of the Program is to develop an on-the ground community-based flood risk reduction program that helps homeowners reduce their risk of basement



flooding and to reduce their risk of property damage in the event of a flood. The long term goal for the Program is to create a model for delivery that can be rolled out across Canada.

### 17. What are the goals of the Burlington Home Flood Protection Study?

The goals of the Home Flood Protection Study are to improve program delivery and to report the findings and impacts of our work in aggregate at a City scale to program funders and partners.

Data analysis will determine:

- Most common flood risks identified at different ages of homes in Burlington;
- The degree to which participation in the program influenced practical action to reduce flood risk.
- The degree to which participation in the program impacted knowledge levels about home flood risks; and
- Participant level of satisfaction with the program.

## Where and When will the Pilot be Delivered?

### 18. Where will the Home Flood Protection Assessments take place? Which neighbourhoods?

The first 500 Home Flood Protection Assessments will take place in Burlington's Aldershot neighbourhood by July 2017. An additional 3,500 assessments will take place in three subsequent neighbourhoods between July and December 2017.

ICCA is working with the City of Burlington and Halton Region to select neighbourhoods that meet our program design requirements and that also complement existing flood risk reduction educational campaigns in the City of Burlington.

These designated neighbourhoods will be carefully selected to be representative of neighbourhoods across Ontario (based on home size and age, age and type of municipal infrastructure and past experience with basement flooding). Home Flood



Protection Assessments will be available to single-detached homes only. An announcement about the locations of the other three designated neighbourhoods will be made this spring.

#### 19. What is the timing for the Program rollout in Burlington?

The first 500 Home Flood Protection Assessments will take place in Burlington's Aldershot neighbourhood by July 2017. An additional 3,500 assessments will take place in three subsequent neighbourhoods between July and December 2017. The Program will wrap up in the spring of 2018 when the final follow-up evaluations and the program summary report will be completed.

### Assessment Participation Details

#### 20. Who can register for an assessment?

You can register for an Assessment if you own or live in a single-detached home in the City of Burlington. If you are not the registered homeowner you may participate if you get written permission from the homeowner.

#### 21. Can I have a Home Flood Protection Assessment if I am not in a designated neighbourhood?

The Home Flood Protection Assessments are exclusively available to single-detached homes in Burlington, Ontario.

Priority will be given to homes located in designated neighbourhoods. Assessment requests outside of designated neighbourhoods will be placed on a waiting list. It is anticipated that all requests within Burlington will be accommodated by the end of 2017.



## 22. What will be the cost of the Home Flood Protection Assessment for homeowners?

Home Flood Protection Assessments are available for a subsidized fee of \$125 thanks to funding support provided by the City of Burlington.

## 23. Why should I pay for an Assessment?

The frequency and severity of flooding is on the rise in Canada. The average cost of restoring a flooded basement in the Greater Toronto Area is \$40,000 (Insurance Bureau of Canada, 2017). Paying \$125 for a trusted, unbiased service that assesses flood risks, identifies top actions to reduce risk and provides follow-up support to take action is the most cost-effective and efficient way for a homeowner to invest in flood prevention.

## 24. When and how can I register for a Home Flood Protection Assessment?

Interested participants can register for the Home Flood Protection Program online at [www.homefloodprotect.ca](http://www.homefloodprotect.ca) or over the phone with a customer service representative beginning in June 2017.

Further details about all designated neighbourhoods and how to register for a Home Flood Protection Assessment will be announced to the media this summer. Information will also be posted on the ICCA website at [www.intactcentreclimateadaptation.ca](http://www.intactcentreclimateadaptation.ca) and shared through our Facebook page [@HomeFloodProtect](https://www.facebook.com/HomeFloodProtect) and our Twitter feed [@ICCA\\_Canada](https://twitter.com/ICCA_Canada).

## Assessment Details

### 25. What does the Home Flood Protection Assessment involve?

In roughly 60-90 minutes, a trained Flood Protection Assessor from the award-winning consulting firm AET Group works with the homeowner to complete a 50-point visual assessment of potential sources of water entry into the home. A confidential, easy to read report identifies top ranked action to:

- ✓ Reduce sewer and overland flood risks
- ✓ Reduce moisture levels that cause mold and mildew growth
- ✓ Reduce damage risks to contents and valuables
- ✓ Wisely manage water onsite
- ✓ Understand risks as they relate to insurance coverage

A live customer service helpline, personal follow-up from the Assessor, and seasonal maintenance reminders provide additional support to homeowners as they work to protect their homes from future flooding events.

## 26. How are flood risks at the house assessed?

Flood risks are assessed by examining the physical condition of a variety of features inside and outside the home, as well as by completing a preventative maintenance questionnaire with the homeowner. In order to complete this work, the Assessor uses the following tools: a standardized preventative maintenance questionnaire, a standardized home assessment scoring system, a moisture meter, humidity gage, camera, and measuring tape. Collected information is entered into an electronic form (on a tablet) that assigns a general category of performance or preventative maintenance activity ranging from “good, intermediate or poor/ needs further investigation.”

## 27. What does the assessment report include/ exclude?

The report includes an easy to read summary of items that receive a “poor/ needs further investigation score”, a record of all gathered information, and additional resources to help the homeowner take action to reduce risk.

The assessed features and preventative maintenance activities that score a “poor or needs further investigation” grade are listed in a summary page of items that lists the type of flood risk they represent, their condition and high level opportunities for the homeowner to further explore to take action to reduce flood risk. Links to practical how-to resources from reputable sources are included in the report, as well as links to local subsidy programs and tips for selecting qualified contractors and questions to ask insurers to make sure that you have the water-damage related coverage you need.



Beyond summarizing the report findings related to assessed items that received a score of “poor/ needs further investigation”, the report does not formally state a prioritized approach for addressing deficiencies. It is up to the Homeowner to decide which actions they will take and in what order.

In order to ensure program impartiality the report does not recommend specific contractors, suppliers or products. The report also does not provide in-depth drawings or tailored step-by-step instructions to complete projects at the home to address deficiencies.

## 28. What assessment follow-up support is available to the homeowner?

After the on-site visit is complete, an electronic copy of the report is available typically within 48 hours. Requested hard copy reports should arrive at the participant’s home within 1 week. Questions that homeowners have about the reports can be accommodated with a short email follow-up or up to a 15-minute phone follow-up with the Assessor. Additional online resources are available through the website at [www.HomeFloodProtect.ca](http://www.HomeFloodProtect.ca). Additional assistance may be provided by the customer service email at [jdurrer@aet98.com](mailto:jdurrer@aet98.com) and/or [jwebster@aet98.com](mailto:jwebster@aet98.com) or at phone 1-877-876-9235.

## Protecting Private Information

### 29. Who has access to my Home Flood Protection Assessment report?

Assessment Reports are available exclusively to registered Homeowners and are not shared with funders or program partners. Assessment Reports are made available to Homeowners through a secure database with access provided only to those who enter a valid user name and password. Printed reports, when requested, are sent via Canada Post directly to the participating homeowner or their official designate.

The only Home Flood Protection Assessment team members that have strictly confidential access to individual assessment reports are: the AET Home Flood Protection Assessor assigned to the individual household, the Home Flood Protection Assessment Quality Assurance Manager, AET’s Home Flood Protection Assessment Customer Service Staff and the University of Waterloo’s Director of the



Home Flood Protection Program. Confidential access to this information is granted exclusively to register and assist Homeowners and to ensure program quality assurance.

30. Can my information be used to contribute to the Home Flood Protection Assessment Study carried out by the University of Waterloo?

Yes, the completion of a separate *OPTIONAL and VOLUNTARY* document entitled “Home Flood Protection Study Waiver Form” is required to participate in this study. All information shared will be stripped of its personal identifying information (address, contact information) and will be analyzed in aggregate at a community-wide scale *ONLY* to share the results of the work with funders and partners. Information is stored in an encrypted, secure, online database.

31. Can I share my Home Flood Protection Program Report with others?

The Home Flood Protection Program Reports are the property of individual homeowners. Contents may be shared with others at the discretion of the homeowner.