

# Supporting Burlington's Flood Prevention Home Check-Up Program: Home Adaptation Assessment Program (HAAP)



**Presentation to :**  
Burlington Community and  
Corporate Services Committee

**Presented by:**  
Cheryl Evans  
Director, Home Adaptation  
Assessment Program (HAAP)  
University of Waterloo

[c8evans@uwaterloo.ca](mailto:c8evans@uwaterloo.ca)  
[Intactcentreclimateadaptation.ca](http://Intactcentreclimateadaptation.ca)

**INTACT CENTRE**  
ON CLIMATE ADAPTATION

CW-04-16 File no. 155-08-02 CCS July 11 2016

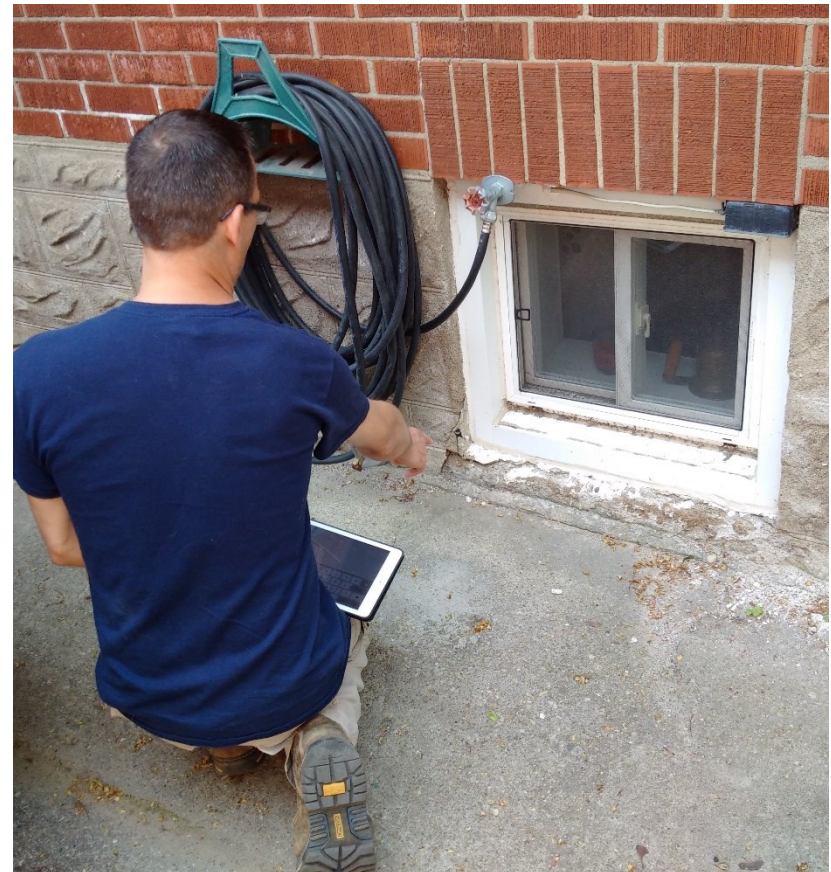
July 11, 2016



# AGENDA

1

1. Introducing the ICCA
2. Defining the challenge
3. Home Adaptation Assessment Program (HAAP):
  - What is it?
  - How does it work?
  - Phase 1: Burlington
  - Next steps



# INTACT CENTRE ON CLIMATE ADAPTATION (ICCA)



2

1. National applied research centre headquartered at the University of Waterloo
2. Launched in 2015 with a gift from Intact Financial Corporation
3. Focused on mobilizing practical and cost-effective solutions to help Canadians adapt to extreme weather events and climate change



## Areas of Focus:

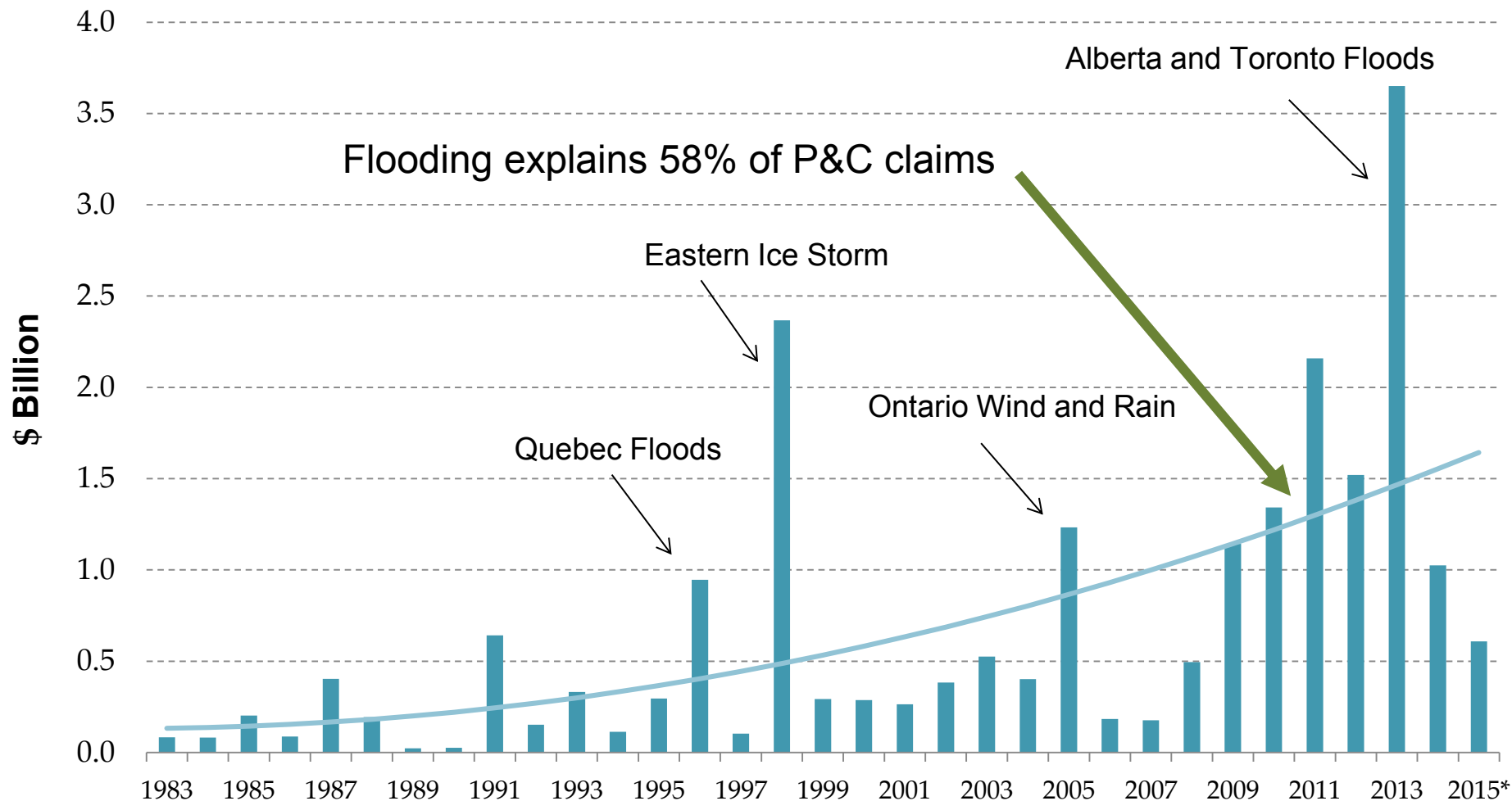
1. Home Adaptation Assessment Program (HAAP)
2. Natural Infrastructure Adaptation Program (NIAP)
3. Corporate-Specific Adaptation Program (CSAP)



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

# ESCALATING CATASTROPHIC INSURABLE LOSSES

3



# THE ICCA: OBJECTIVES

4

## **Challenge:**

Over the past decade, increases in the frequency and severity of extreme weather events has resulted in sharp rises in the costs associated with clean up of storm-related damage across the country

## **Goals:**

1. Change the national conversation about climate change to include climate adaptation
2. Help homeowners, businesses and communities to limit risk brought about by climate change and extreme weather events



## Home Adaptation Assessment Program (HAAP)

- Limits the potential for basement flooding
- Limits potential damage if flood occurs
- Based on best practices from flood risk mitigation programs across the globe

## Basement Flood Risk Pilot Results

- E.g. 450 assessments in Kitchener, Waterloo, Ontario and Calgary, Alberta (2012-2015, RAIN, Green Communities Canada)
- 2/3 participants acted upon key recommendations within 6 months
- ROI \$ 1:7 over 10 years

## Educating Homeowners

- Integrates additional key messages from municipalities and insurance companies



## Shared Funding Model

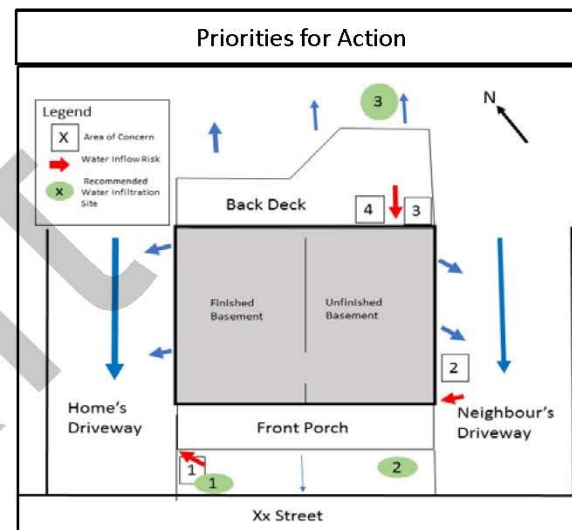
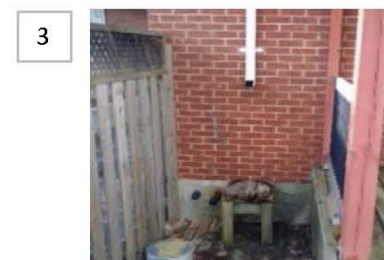
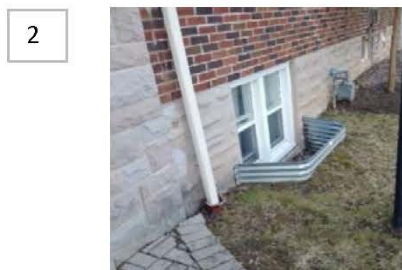
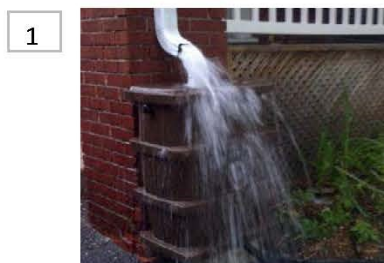
- \$275 per home shared by homeowner, government and insurance companies
- Average \$125 cost to home owner

## Technical Aspects of Assessment

- Pre-screening survey
- Certified HAAP Assessor with home owner
- 1-1.5 hours inside and outside home
- Review 50 points of potential water entry
- Report
  - Prioritized action list
  - Web Resources
  - Customer helpline
- Follow-up surveys and on-site visits at 6 and 12 months



## Priorities for Action Outside Your Home



| Priority | Challenge   | Recommendations   | Resources   |
|----------|---|---|---|
| 1 (I)    | Rain barrel is overflowing at foundation, causing dampness in basement  | Remove rain barrel, extend downspout with big-O pipe, direct water to front corner rain garden            | <a href="#">How to Build a Rain Garden</a>                |
| 2 (I)    | Downspout connected directly to weeping tile, older weeping tiles causing increased risk of infiltration                        | Disconnect downspout, cap drain, extend downspout and direct to front lawn, consider infiltration gallery | <a href="#">Subsidy Program Infiltration Gallery Info</a> |
| 3 (I)    | Abandoned rain barrel, eavestrough dumping water at foundation, poor grading directing water to home, high risk of infiltration | Re-attach downspout and extend with big-O below deck and onto rear lawn                                   | <a href="#">Downspout Installation Guide</a>              |
| 4 (I)    | Rear corner eaves trough damaged and overflowing, directing water to foundation   | Repair eaves trough and clean out all eavestroughs monthly except during winter                           | <a href="#">Eavestrough Repair Resources</a>              |



## **Builds Community Capacity for Basement Flood Prevention**

- Free website access for community
  - Fact sheets
  - Videos
  - Case studies
- Builds network of residential champions and business champions
- Training local HAAP Assessors and municipal staff

## **Collaborating with Local Government**

- Municipality provides infrastructure risk context, partnered promotions and subsidy resources
- HAAP supports and enhances existing flood risk mitigation programs

## **Collaborating with Community**

- Community provides communications planning and promotions support
- HAAP develops unique, targeted neighbourhood approaches

# HAAP PROGRAM ROLLOUT

## Phase 1: HAAP in Burlington, Ontario

### **1A: 500 homes (August-Nov 2016)**

- Presently seeking \$50,000 support from Burlington

### **1B: 3,500 homes (April-Nov 2017)**

- Seeking funding sources in future

## Phase 2: HAAP in 4 Regions of Canada

- Apply HAAP (2017/2018) to 1,000 homes in each of 4 Canadian Regions (BC, QC, AB, NS)

## Phase 3: National Rollout

- National level implementation (2019/2020)

