## Welcome to the Floodplain Mapping Project

Public Information Centre #1

May 17, 2016



#### **Project Purpose**

To update the floodplain mapping for part of Laurel Creek and Clair Creek

#### **Project Partners**

City of Waterloo, Grand River Conservation Authority and the consulting team of Stantec







#### **Project Area**

This area is unique because it is a designated **Special Policy Area**. A Special Policy Area is an area that has historically existed in the floodplain where the Province, City and Grand River Conservation Authority agree to relax flood proofing and technical requirements and accept a higher level of risk. This Special Policy Area has been in place since 1990.

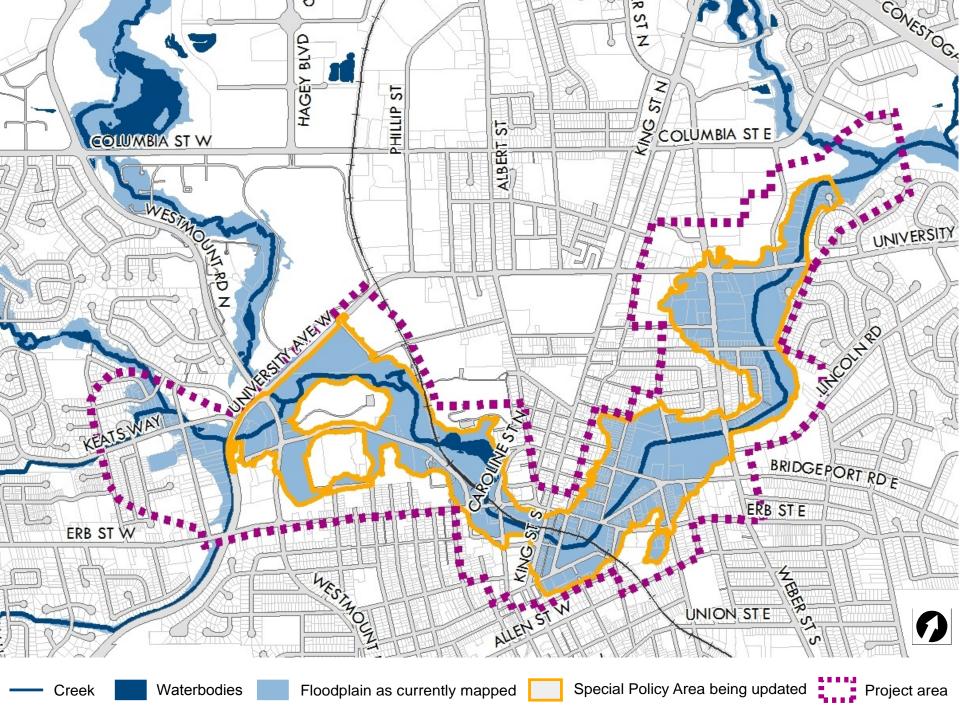


Special Policy Area definition: "means an area within a community that has historically existed in the flood plain and where site-specific policies, approved by both the Ministers of Natural Resources and Municipal Affairs and Housing, are intended to provide for the continued viability of existing uses (which are generally on a small scale) and address the significant social and economic hardships to the community that would result from strict adherence to provincial policies concerning development. The criteria and procedures for approval are established by the Province.

A Special Policy Area is not intended to allow for new or intensified development and site alteration, if a community has feasible opportunities for development outside the flood plain".

Provincial Policy Statement, 2014





#### Why is an update needed?

The existing floodplain mapping dates back to 1986. Updated mapping will be more accurate because it will use sophisticated technology and software. More accurate mapping will allow us to better manage flood risk and to have more certainty about development.

Updating the floodplain mapping is the first phase of this project. The second phase will involve reviewing the Special Policy Area boundary and policies.

Both the updated mapping, boundary and policy review that will follow may impact what development can take place.









# 2010 storm Laurel Creek Uptown Waterloo













## Regulatory Floodplain

- Computer models and information from actual storm events are used to help define the limit of the Regulatory floodplain based on provincial guidelines.
- For the area being updated through this project, the mapping standard that is used is the Hurricane Hazel storm event. Hurricane Hazel was a storm that hit the Toronto area in October 1954 that had over 11 inches of rain 48 hours. Bridges, streets and homes were washed out and 81 people were killed.







## **Policies and Regulations**

#### **Provincial**

The Provincial Policy Statement generally prohibits development in floodplains. In Special Policy Areas, limited development is permitted to keep the vibrancy of the community.

#### City

The City has policies in its Official Plan that outline what development can happen in the floodplain. Floodplains are also being incorporated into the new Zoning By-law.

#### **Grand River Conservation Authority (GRCA)**

The GRCA regulates development in the floodplain. Their permission is required before you start most activities in the floodplain and other areas they regulate. GRCA policies outline what is not allowed and what may be permitted through the permitting process.













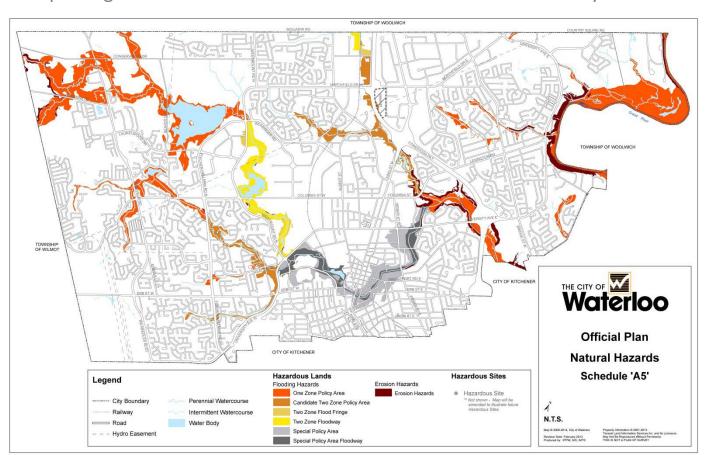
#### Floodplains Across the City

Based on Provincial policy, floodplains are divided into three categories:

**One Zone Policy Area** – This is the most restrictive category and it captures most of the floodplain areas in the City. In these areas, new development is generally prohibited.

**Two Zone Policy Area** – This category is somewhat permissive. The floodplain is divided in two parts: floodway and flood fringe. New development is generally prohibited in the floodway. Some development, with conditions, is permitted in the flood fringe. The flood fringe is the outer portion of the floodplain where the depth and speed of flood water is less than the floodway, therefore posing less of a threat to people and property.

**Special Policy Area** – This is the most permissive category. Special Policy Areas are an approach to floodplain management where the GRCA, municipality and Province agree to relax provincial flood proofing and technical standards and accept a higher level of risk than in the One Zone or Two Zone Policy Areas.



## **Project Timelines**

## Spring 2016

- PIC #1
- Data collection

#### Summer 2016

 Modelling and fieldwork

## Early Fall 2016

- PIC #2
- Draft report and mapping

#### Late 2016

- PIC #3
- Final report and mapping









## **Project Outcomes**



- Updated
   mapping that
   may affect what
   you can do on
   your property
- 2. Updated
  mapping to be
  used in Special
  Policy Area
  boundary and
  policy review







## How to Stay Informed

floodplain@waterloo.ca waterloo.ca/floodplain

Sign up to get project updates

