

Floodplain Policies and Regulations

From the HSCA EPARC committee, January, 2024

The City of Calgary is inviting feedback on future floodplain policies and regulations through the January 29 to March 3 Calgary River Valleys Project (CRVP) engagement opportunities.

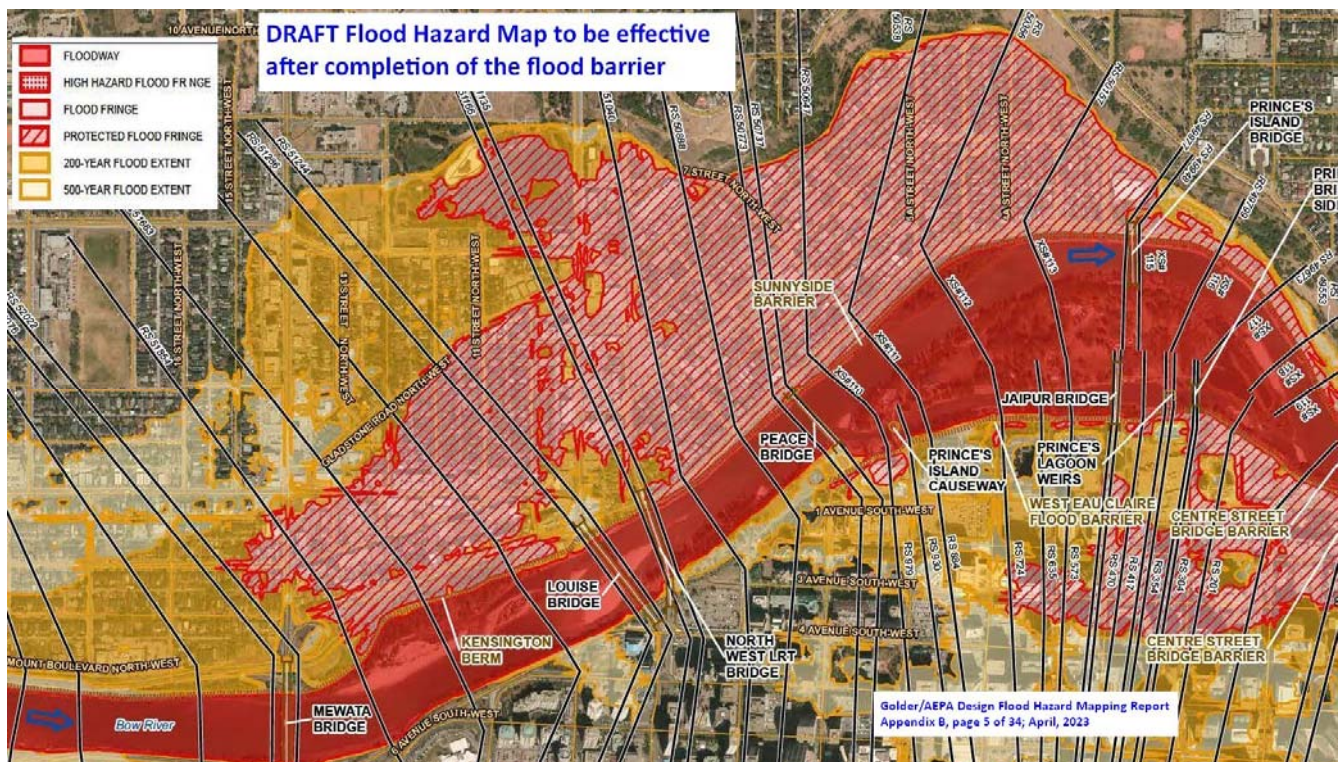
“Generally, floodplain planning aims to reduce the number of people living in flood impacted areas, especially areas where a higher risk of flooding remains” (CRVP website). This means restrictions to development in areas deemed to be at high risk of flooding.

The Government of Alberta recently released draft updated Flood Hazard Area maps reflecting the latest understanding of flood risk across Alberta, and a new approach to flood hazard area zones (https://floods.alberta.ca/?app_code=FI&mapType=Draft). All flood hazard area zones are defined with respect to a 1:100 flood, which is the provincial design flood standard.

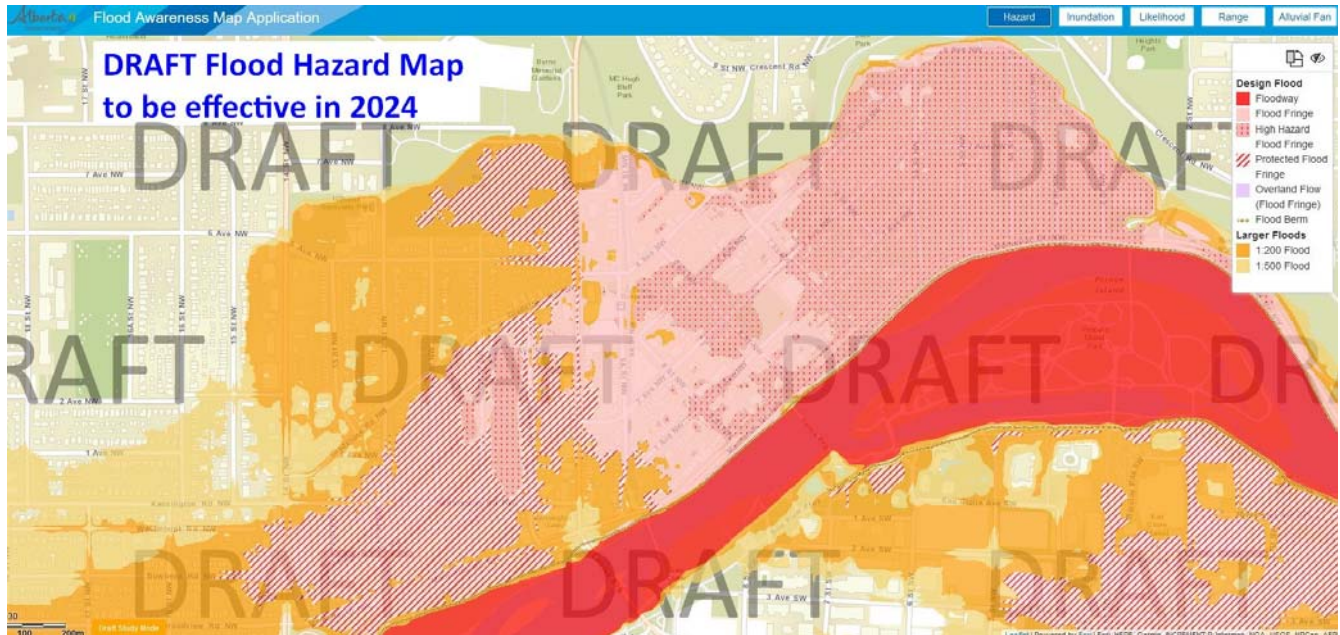
The Province has defined three degrees of Flood Fringe hazard area zones: High Hazard Flood Fringe, Flood Fringe and Protected Flood Fringe representing high, medium and low/no flood hazard respectively. It’s now up to the City to decide how to develop and regulate in these areas, which they are doing through the Calgary River Valleys Project. Another flood hazard area zone is the Floodway which is an area of extreme risk and development is for the most part prohibited in it.

For Hillhurst Sunnyside there is Good News and Bad News in the draft maps.

First the good news: When the Sunnyside Flood Barrier is complete all of Hillhurst and Sunnyside will be classified as either low risk Protected Flood Fringe or not at flood risk in a 1:100 flood. No part of our communities will be in the high flood hazard classifications of Floodway nor High Hazard Flood Fringe. No areas will be in the medium risk Flood Fringe either. Therefore one would expect that no floodplain development restrictions would apply to Hillhurst Sunnyside. This must be confirmed through the CRVP engagement process. Here is a map showing the eventual flood hazard classifications:



Now for the bad news: Until the Sunnyside Flood Barrier is complete much of Sunnyside and even part of Hillhurst will be classified as high risk High Hazard Flood Fringe. Still more of Sunnyside will be included in the medium risk Flood Fringe classification. These classifications could lead to development restrictions in the affected areas, depending on when the Sunnyside Flood Barrier is completed and whether the City is willing to look beyond the present and base their planning decisions on the Flood Hazard Map to be effective after the completion of the flood barrier. Without these considerations the development restrictions applicable to High Hazard Flood Fringe could be as severe as “no new development”. The “official” date for completion of the Sunnyside Flood Barrier is the end of 2025, although there have been recent signals from the City that this schedule might slip, perhaps significantly. Here is a map showing the draft updated Flood Hazard Areas expected to be finalized later in 2024:



Unfortunately there is still more bad news regarding basement development restrictions. From the CRVP website: *"(...) many riverside communities in Calgary may experience basement flooding when heavy rain or higher river levels cause changes in the groundwater table. As part of the Calgary River Valleys Project public engagement on floodplain policies and regulations, we'll use our technical understanding of river conditions to explore the potential for property-level regulations to better manage this risk".*

and

"Basements (including living areas or secondary suites) are vulnerable to flooding because underground spaces can quickly fill with water, risking life or personal safety and property damage. During river flood events, basements can be flooded by overland floodwater, or high groundwater that enters the basement through cracks and drains."

Prohibition of new basement bedrooms and basement secondary suites would represent a significant restriction for many property owners.

It is believed that proposed basement development restrictions are not fully evolved so much is not yet known. There is some doubt as to whether there would be any areas in Hillhurst Sunnyside that would be affected. In 2013 most of the basement flooding here was because of river water backing through sanitary sewers, and overland flooding entering basement windows. These problems have been or will be solved by the Sunnyside Sanitary Lift Station rebuild, the Upper Plateau Separation Project and the Sunnyside Flood Barrier. The remaining basement flooding caused by groundwater seepage is more complicated, in fact it is so complicated and technically challenging that there is some doubt as to the City's ability to define it adequately to support policies and

regulations. Furthermore, there is doubt that groundwater seepage could fill a basement quickly enough to be a risk to life or personal safety.

The Calgary River Valleys Project has a web page with information: <https://www.calgary.ca/water/flooding/calgary-river-valleys-project.html> . To obtain more information and have your say please attend one of the five CRVP public engagement sessions, or participate in online engagement.

Two Virtual Sessions:

(1) January 31 (6 – 7 p.m.)

and

(2) February 13 (6 – 7 p.m.)

Visit <https://www.calgary.ca/water/flooding/calgary-river-valleys-project.html> to register for a virtual session.

Three In-person "drop-in" Sessions:

(1) Bridgeland Community Association (917 Centre Ave NE)

Feb. 21 5 – 8 p.m.

and

(2) Parkhill/Stanley Park Community Association (4013 Stanley Rd SW)

Feb. 27 6 – 9 p.m.

and

(3) Montgomery Community Association (5003 16 Avenue NW)

March 1 5 - 8 p.m.

Access to the online survey will be through <https://www.calgary.ca/water/flooding/calgary-river-valleys-project.html> (not active at time of writing but should be open January 29 to March 3).

The Calgary River Valleys Project is about much more than flood hazards. Read all about the Nature, Recreation & Access, Culture and Building & Development aspects of the CRVP on their website <https://www.calgary.ca/water/flooding/calgary-river-valleys-project.html> . Hillhurst and Sunnyside are river valley communities so most aspects of the CRVP will be of interest to our community.