

# FLOODED HOMES EVEN WITH THE PROPOSED BOWNESS BARRIER

The City of Calgary, in deciding to conceptualize a flood barrier in Bowness, hired an external consultant (Associated Engineering) to evaluate the barrier for different flooding scenarios. Of particular interest in the report completed by the consultant, are two different Barrier Concepts. One concept has the barrier extend to bedrock deep below the surface. This design prevents flooding of residents by not allowing water to go under the barrier, and is being implemented in Sunnyside. However, the cost of this solution was very high for Bowness as the gravel layer in Bowness is very deep. The second concept is a barrier, which minimally goes below surface. This design allows for water to go under the barrier and flood properties. The City has currently indicated the latter design fulfills their requirements for a barrier in Bowness.

Associated Engineering created visual maps of this second concept in order to show who would be flooded with the barrier in place (by water travelling underneath), and who would not be flooded with the barrier and compare these two groups to who would be flooded by overland flooding without the barrier (dashed line). These visual maps were done for different river levels. The two maps below show who still gets flooded with a barrier in place and the city releasing water at the planned rate during flooding events.



In areas such as Elbow Park and Sunnyside, the City has decided to afford those communities with ground water protection by virtue of an upstream reservoir or barriers to bedrock. The residents of Bowness should be granted the same equality of protection for overland flooding, groundwater flooding, and water management to ensure water is not trapped in the streets or in our basements. '

For more information check our website at [www.bownessrfm.ca](http://www.bownessrfm.ca) and become a member of our society. For an explanation on groundwater by a local geoscientist professor visit [www.youtube.com/watch?v=I3I5PolKGIg](http://www.youtube.com/watch?v=I3I5PolKGIg)



*Groundwater Flooding in South Bowness with Barrier*



*Groundwater Flooding in North Bowness with Barrier*

Even though the maps show a small number of homes which are not anticipated to be flooded, the report warns this assessment is based on homes which have basements less than 8 feet below ground, have walls which are waterproof below ground, and contain a sump pump. If your home does not meet these assumptions, you are at risk. As well the report warns the ground water may rise to the surface in some locations, and then travel overland. It is clear that Associated Engineering expects extensive flooding from underneath the barrier in Bowness even with the barrier in place.

These are the views expressed by members of the BRFM and may not reflect the perspective of all residents for more information please visit the City of Calgary website and call the BRFM.

A promotional poster for the "19th Annual Amateur Bowmont Park Photo Contest". The background is a soft-focus photograph of a black and white chickadee perched on a branch. On the left is a yellow camera icon with a target symbol. On the right, the text reads: "19th ANNUAL AMATEUR BOWMONT PARK PHOTO CONTEST", "Deadline: Oct 11, 2019", and "ljknight1947@gmail.com". At the bottom, it says "Best of Show 📷 Rose Koltes 'Curious Chickadee'", "CATEGORIES", and "Scenic • Floral • Wildlife • Environmental Issues • Park Users".