

**BOWNESS FLOOD BARRIER
COMMUNITY WORKING GROUP MEETING 22
November 16, 2020 – 7 to 9 p.m.
Online Meeting – Microsoft Teams**

Working Group

Attendees

David Burton
Sydney Empson
Jane Kahler
Jolene Moran
Patti Peck
Josie Stiles
Hank Vrielink
Jean Woeller

Apologies

Anne Campbell
Sheila Clayden
Jacqui Esler
Rae McKenzie
Jeff Riedl
Ralph Smith

Guests

Andy Hughes
Valerie Manica
Matt Williams

Working Group

Resources

Gabriela Gonzalez
Mariel Higuerey
Judy Hoad
Amy Stansky
Frances Welsh

Meeting Notes

1. Communication Update

The City's Project Manager presented a communications update. This was presented as a 3-step process: read the booklet, participate in a Q&A session, complete the TBL survey. Discussion, comments and questions about this included:

- Bowness Responsible Flood Mitigation (BRFM) Society met with Inglewood residents in January of 2018. BRFM spoke with several residents (Riverside residents with a barrier in their yard). They talked about groundwater/basement flooding and the amount of pumping they had to do—disagreement with page 1 statement.
- BRFM Working Group member disagreed that Inglewood flood barriers proved effective in 2013. The member heard info to the contrary. In 2013 during the flood, overland flooding occurred on 9th Avenue which shut down traffic through Inglewood.
 - o The City has heard that the barriers were effective. If the working group member could provide more info, it would be helpful.
- What role do the Working Group members have in reviewing the booklet? Line by line review or different role? It would have been better to receive this booklet before the meeting. Group keeps asking to receive materials before meetings. Why was this not shared earlier last week?
- Why does flood mitigation have to be a multi-level approach?

- What does the property level flood protection encompass? Add clarity on what the current property level measures are.
- Is it property 'level' or property 'owner'? Perhaps this is where it is clarified what an individual property owners' responsibility is (i.e., pump, electrical, etc.).
- In the community level column: "The City is studying whether a permanent flood barrier..." be consistent with the next paragraph.
- Property level column: make it clear that it's going ahead.
- There have been changes made to the development process – how do we augment that to ensure that development is sustainable.
- We don't know what other levels of government are thinking about
- Since 2018 engagement: 100+ individual meetings, 200+ door-knocking visits, etc.
- Flood modelling study – Bowness today. Correct to Bow Village instead of Bow Crescent.
- "flooding several homes" which homes? Was that based on the study?
 - referred to Amy/Frances
- The booklet is focused on overland flooding. No focus on groundwater flooding. The booklet underplays groundwater flooding. Lead with groundwater because it's a significant concern for the community. Looking at how the flood barrier will impact groundwater.
- Talk about what the individual can do. Many property owners have implemented Property level mitigation in the design and construction of their homes. This has been done to reflect a maximum controlled release rate in Calgary of 800 m³/sec. With the new flood mitigation strategy with community barriers to allow increased release rates to 1230m³/sec, these property level mitigation measures are inadequate.
- You have a stated estimate for the number of homes at risk for overland flooding. How many at risk for groundwater flooding, as this was mentioned as a risk in this section? Perhaps you could state this estimate as well. For example, homes on the south side of Bow Crescent, not overland flooded, had basements full of water at the west end of Bow Crescent.
- Bow Crescent did not flood in 2005. The picture is not representative of the flooding. It's damaging to local real estate values.
 - The hydrograph shows the 1 in 200-year attenuated situation. Will take it back to KCB to make sure the hydrograph matches with what has happened in the past.
- Working Group member disagreed with the number of \$480-530K average annual damage benefits for Bowness. Have asked for some examples of property damage reduction and have not seen this.
- Mitigation: bold or highlight the heading of "what is the best way to prevent basement flooding?"

- Add headings for the provincial and individual levels to maintain themes
- Will the Working Group have an opportunity to comment on the FAQ answers later this week? Not just tonight?
- Is it possible to read the booklet on our own time? We want to read it before it goes out to the community.
- The booklet is not ready for prime time. Do you really want our feedback, or are you just checking the engagement box? We are not being given a chance to provide input. This is a farce.
- Why didn't we see it earlier? What is driving the urgency? What is driving the schedule? The timelines seem very limiting to allow us to review this info. Why the tight timelines? Is it possible to postpone the public meeting?
- The booklet is biased; it's not balanced. Houses in Bowness designed with property-level mitigation. Suggestion to include a Bowness Responsible Flood Mitigation Society page in the booklet with a link.
- There is value in sharing with the community what has been happening, such as the studies' results. The document speaks to the working group, and I'm disappointed we didn't have a chance to review the booklet in advance
- Break out a groundwater discussion so that it's not missed. Need more groundwater info on the booklet, including technical information. Recognition that there is a dissenting voice in the community
- Map where groundwater comes to the surface (figure 5.6 from groundwater study) that shows the elevation of groundwater with the barrier in place – add a link to the study

NOTE: after discussion, The City explained they would be holding an internal meeting with Management the following day and would bring the booklet review request to them. Working Group feedback is valuable to inform the next revision of the booklet. The City and the Working Group won't agree on everything, and it is crucial to get the booklet and information to the community. The booklet aims to present the information factually. There is still time to make some changes, and additional information can always be added to the project website once it goes to print.

Individual booklet:

The individual booklet will be going to the 75 owners that were identified for a barrier. The other Riverfront property owners not identified for a barrier will receive a letter of explanation along with the Community booklet.

- Consider increasing the text size

- Surprised that the booklet doesn't talk about groundwater. Suggestion: add groundwater information specific to each property. Either provide groundwater information or reference it.
- The figure for groundwater coming to the surface is not correct. City to confirm.
- "Localized pockets of groundwater that can be addressed by pumping wells" should read "groundwater to the surface"
- Include an explanation of alignment. Make the barrier to scale on page 5
- Residents will want to discuss access during one-on-ones – owner river access, protection from public access and access for City maintenance
- Residents will want to know how will the barrier benefit or impact them and the community/the greater good
- What is the construction surface zone of disturbance here? In metres? Residents want to know how this will tie into the neighbouring property and how construction traffic will traverse the property. It would also be of interest to residents to know what equipment would be required and how they would access the work area.
- What we heard section – residents had the impression that you would meet again.
- Suggestion that trees be marked differently for easier reading. Remove the trees from the after image.
- Removing trees decreases privacy. If you have to remove some trees, then look at other tree options. How will you answer questions about the ins to your neighbour's properties and the loss of vegetation?
- Bowness Responsible Flood Mitigation Society estimated loss of 3500 trees along the Associated Engineering alignment. That was with a very straight as an arrow barrier. Residents want to know how the barrier will protect them, not necessarily the trees.
 - o The option in the booklet (more zig-zag) is not creating more disturbance.
- Owner - her basement floor elevation is at 1063.37m AMSL. The modelled groundwater level at 790 m³/sec (2005 flood) is at 1063.55m. It is reasonable that --- sump pump will address this problem, and here the home will suffer no damage. The Modelled groundwater elevation at 1230 m³/sec with the barrier is 1064.7m, and without the barrier, this increases to 1064.85m. This is determined by interpolating between MW-08 and MW-09 wells in the groundwater report. It would be good to convey this information to the resident as the conclusion is that she suffers no damage at 800 m³/sec but will incur a total loss of her basement development at 1230 c with or without the barrier.
 - o The effectiveness of the barrier is for overland flooding, not for groundwater.
- The KCB groundwater report indicates that there will be substantial groundwater flooding damage at 1230 m³/sec without groundwater cut-off and groundwater

mitigation. Why is this not included in this book? Residents will want to know "so with the barrier, what will be my flood damages with the river peak flow rate 1230m³/sec? - groundwater and/or overland.

- o It was never the project's intention to address groundwater.
- This is not balanced. You are cherry-picking from the studies to support The City case for a flood barrier.
- Perhaps there should be a section in the booklet titled, "What if I Don't Want the Barrier? What are my options?"
- How can we move to the design phase if this is not resolved?
- Residents want to know what the costs will be to each property. "I will not sign up for a project that will offer no benefits. The environmental impacts are too great."
- Working Group member indicated most basements will be flooded, these include those basements on Bow Water Crescent. Even though they don't have a barrier on their property, it should be explained to them for their location what the difference will be for basement flooding with and without the barrier.
- Can The City provide elevations for residents (main floor and basement level) before the one-on-one meeting? The City should provide this rather than Bowness Responsible Flood Mitigation Society or the property owner.
- Working Group member feels there is no benefit to the barrier for people with first floors above the 1230 m³/s elevation or 1:100 elevation. The damage and recovery costs are identical with a barrier or with no barrier.
- When will the groundwater study be public?
 - o Date to be determined
- Working Group member available all week to review community booklet with someone from The City through Zoom if the problem is sharing it via email
 - o The Project Manager will share with Management about sharing the booklet and get back to the group.
- Why are tiger dams not being considered? Can that be answered in the booklet?

2. Other comments and questions

- To what extent is The City carrying forward any of the groundwater isolation barriers to the recommendations and TBL evaluation?
- The benefits discussed in the Cost-Benefit meeting do not align with groundwater – would like to bring it back to the Working Group for discussion.
- Is there a report that comes with the Cost Damage model? Is there a debrief for that? The details of those numbers and how they were derived are very important. Is that something we will need to FOIP?

- Do we get just one chance during the groundwater debrief to meet with Advisian?
- BRFM technical expert would prefer to receive the final groundwater report before he expends effort in his professional review. He would also like to see field data as a professional reviewer.
- What has changed between the groundwater report v1 and v2?
 - The version numbers are The City's internal review process. Advisian has also reviewed V2.

3. TBL Update

TBL Social Criteria evaluation will not be part of the booklet. It will be available on the Engage website. The City will schedule the Environmental, Economic and Social Criteria discussion for an upcoming meeting.

4. Working Group

- Unanswered questions from the meeting notes will be entered into the tracker.

5. Next Meeting – November 30, 2020