

BOWNESS FLOOD BARRIER COMMUNITY WORKING GROUP MEETING 16

Meeting 16 – July 20, 2020 – 7 to 9:30 p.m. Online via Microsoft Teams

Working Group Attendees

David Burton
Sydney Empson
Jacqui Esler
Jolene Moran
Patti Peck
Ralph Smith
Josie Stiles
Hank Vrielink
Jean Woeller

Working Group Resources

Tatianna Ducklow
Judy Hoad
Amy Stansky
Frances Welsh

Guests

Chuck Slack
Valerie Manica
Matt Williams

Apologies

Anne Campbell
Sheila Clayden
Mariel Higuerey
Jane Kahler
Rae McKenzie
Jeff Riedl

1. Barrier options methodology

O2 and KCB presented the methodology used to determine and assess the different overland flood barrier options. Discussion comments and questions included:

- Comments/questions about the road barrier option:
 - As the road Bow Crescent Road option is only a surface barrier and does not address groundwater movement, perhaps we should refer to this as an overland flood mitigation berm/wall.
 - Why is the entire road not build up for the Bow Crescent Road option? With the wall in the middle of the road, it will not enhance the experience of bicycles and walkers.
 - What is the issue with doing improvements to everyone's driveway for the Bow Crescent Road option?
 - In the event of groundwater flooding coming to surface on the north end of Bow Crescent Road, the elevated road would allow access for Bow Village Crescent and emergency access.
 - Would the jersey barrier along Bow Crescent Road be a concrete barrier that would stop traffic? Jersey barriers are concrete barriers used to separate lanes of traffic.
 - Right now, it is designed as a concrete wall. It would be designed to the needed height in each location, with the minimum height being 0.8m to avoid the risk of people driving up and over it.

- How do you access across an intersection with the wall on the road?
 - Design details are not complete. It could be a hole in the wall similar to the Eau Claire barrier where if it was getting close to flood discharge, The City would bring in bulkheads to close the opening.
- With the barrier down the road, if The City need to close the traffic points, does that not just take us back to the temporary barrier?
 - When presented to operations, their concern was they would not have the time and resources to do temporary deployment. While the options look to reduce temporary deployment, that does not mean there will not be places where that won't be necessary.
- When you introduced the road barrier, you said there was work still needed for cost benefit threshold, does The City have a threshold for this?
 - The City has no specific numbers yet, there are still internal discussions happening and all options will have to face a cost benefit threshold.
- It looks like people would have to drive all the way through Bow Village to exit their houses. The number one feedback from Main Streets Bowness is to build a walkable and bikeable community. This barrier wall does not deliver this. For north Bowness the road elevation would be the better option, with regrade of driveways
 - The idea of raising the road in the north end instead of a barrier is something that is being considered as part of the Road option
- Comments/questions about the erosion protection:
 - Various levels of government have considered erosion control, but it nothing has been done for the last 3-4 years. Will the project be done?
 - One of the factors that were included in the methodology and influenced the potential barrier alignment was the riverbank stabilization.
 - Is the barrier that is being considered on landowner property designed to also prevent erosion?
 - When homeowners indicated they wanted it, the option carried forward incorporated bank stabilization.
- Comments/questions about engagement:
 - What did O2 do if no site visit occurred or there was change of ownership in the riverfront properties?

- In some instances, the team tried to see the conditions from the adjacent properties that provided access. The team had to make some assumptions looking at the barrier types on the adjacent properties and at air photos for vegetation or structures.
 - Is there opportunity for homeowners to provide more feedback that wasn't gathered through the initial site visit? Or for people who did not have first site visit?
 - The City has provided opportunity for everyone to provide their feedback. The City has also reached out to new homeowners and to those who did not provide their input. Information about this was sent out as part of the riverfront communication.
 - Has O2 done similar projects of this scale? With this large number of property owners? How does this project measure up?
 - No, O2 has not taken on a project with this many homeowners before. However, O2 has had projects with this many stakeholders and of this scale and complexity. Complexity is not new to us, O2 worked on the Downtown Barrier for phase one and two.
 - How and when will the community be engaged / consulted on the road barrier option? There will be a much different set of stakeholders introduced and they should not be surprised.
 - To be determined.
- Comments/questions about groundwater:
 - The main concern during the homeowner meetings was what would the barrier do to protect properties from groundwater flooding. What are the impacts to their home when the river is flowing to 1,200 m³/s as it relates to groundwater?
 - That information will come with the groundwater study.
 - What is going to be taken to property owners in the community booklets? What O2 is showing, doesn't show any aspect of groundwater protection.
 - The community booklets will have groundwater information. We will discuss groundwater in our next Working Group meeting. Any mitigation options that address groundwater will be shared with the group during that presentation before it goes to the community.
 - Does groundwater come into play when talking about connectivity between lots, lots where the existing elevation is higher than barrier elevation?

- Groundwater modelling will look at how different river flows impact groundwater in the community. We will also look at potential impacts the surface barrier could have on groundwater and look at what happens if there is seepage or groundwater cut off by a continuous defence.
- Comments/questions about barrier design:
 - During the 1:1, riverfront resident meetings last year, an option was communicated to residents that this could be a glass barrier above a concrete base. This would allow resident access by removable panels.
 - The individual booklet will show the potential options for each property including the full wall, glass wall and details would be carried forward
 - Slide 9 has the technical parameters and what is acceptable to homeowners. Is this a 50/50 split?
 - These are not quantified factors. We show these as the two general considerations that need to be met, and be incorporated into the potential design.
 - What happens if you can't meet those two requirements - technical parameters and acceptable to homeowners? What is the path forward? And looking at groundwater protection?
 - The intent of what we are doing right now is a feasibility study. What is feasible and acceptable would be the outcome of this phase.
 - What does limited expandability mean?
 - No need for sandbags or other temporary measures
 - Were there minimum requirements the barrier options had to meet? How were those decided?
 - The City looks at what is feasible for project parameters. There are many variations and in the end over 45 options. We considered many different components to see which would move forward. We tried to go from the most exhaustive list and some variations did not meet the minimum technical requirements.
- Other comments/questions:
 - For some of the properties, particularly the ones that are close to the river, the barrier ends up being constructed in the floodway. That triggers regulatory approvals as well as impact on the elevation of the river upstream. Has that been factored into the options analysis?

- Not done yet, but would do that if the project moves forward from the Feasibility phase. The City would have to do regulatory applications with Alberta Environment. This process is standard on every project, especially post 2013 flood, where the level of encroachment needs to be shown as acceptable for changing water levels.
 - At one of these one-on-ones, it was indicated that this construction could be done without bringing in heavy equipment. That it could be done with a little bobcat and wheelbarrows and no heavy equipment. When there is the follow up one-on-ones will you be able to speak to the scope and the constructability for either options?
 - We haven't gone to that level yet; we have to explore all the options. One option is to look at the minimal amount of equipment that could be used to do this. We will not have determined the exact level of construction at the next one-on-ones, that would be in later phases.
 - There have been calls from potential home buyers and those selling, indicating they don't want to buy a home where people will be in their backyard for two years.
 - These concerns have been identified in the Triple Bottom Line social impacts

2. Flood Modelling debrief

KCB walked the Working Group through the Executive Summary for the Hydrotechnical Assessment Report. Discussion questions and comments included:

- Will that option be included in the river barrier TBL Social Cost? Or have its own?
- Right now, TransAlta's operating agreement reduces the peak flow rate from 2013 and takes it down to 1,460 m³/s. The Executive Summary shows 1,420-ish m³/s. The TransAlta agreement is doing more than the flood barrier design. It is important to say what this study is not -this study does not include groundwater. The general public might miss that.
 - The intention of report was not to do Alberta Environment's mapping. The introduction talks about the study goals, but can call out what the study did not cover, and what will be part of other studies like the groundwater report.
- Associated Engineering report did a feasibility study. Is this new study preliminary engineering or feasibility?
- Did KCB use 1,230 m³/s flow rate in the report, or did you have the freedom to choose what flow rates to model with?

- The flood barrier design discharge was given at the onset of the project and the DBM has been part of that and will be shared with the public when study is published.
- Was the Bow River Working Group given a mandate to decide the flow rate? Where did 1,230 m³/s come from?
 - The rate came from advice to government in 2016.
- It feels like The City is commenting on what Alberta Environment is able to do for upstream mitigation. The City needs to give the province the credit and give them ways to increase storage. Most dams were built for power not for flood mitigation, The City seems to speak for the province, but not sure it has a place in this report E.g. 1st paragraph on page 4.
 - The City agreed that the discussion on previous studies seems out of place in that section of the report. The intent was to respond to the community's questions regarding the study by showing and addressing the design levels of service. The City would like the group's input on how to word this better.
- Advice to government report does not make a recommendation – says 800 m³/s is more difficult than 1,230 m³/s
- The Facilitator asked the Working Group to share any other feedback regarding how general public will interact with the study results via email.

3. Working Group discussion

- The group discussed if the notes from the June 22 discussion should be shared with the public on the Working Group's website. Members stated that the discussion on the social criteria TBL might be lost on people as notes represent only a summary of discussion in short form. Another member noted guests did not understand the process, and there was some frustration for how engagement is working during this COVID period.
 - Working Group decided to keep these notes internal and share with the public on the next steps of the TBL social criteria materials and discussion.
- Meeting 10 and meeting 13 notes – Facilitator will give the group opportunity for additional comments and feedback until August 6. If no additional comments are received, they will be approved and shared in the Working Group website
- Working Group member requested meetings to wrap up by 9 p.m., whether by implementing shorter agendas, having more frequent meetings, or starting a bit earlier (6 or 6:30 p.m. instead)

4. Engagement Update

The City provided an update on the engagement timeline. Items highlighted included notes about the presentations and topics to discuss, the community booklets have moved to late

August/early September. The City will continue to update the timeline and share any changes in the next Working Group meetings.

5. Other

The Working Group spoke about the various media pieces where both BRFM and Ward Sutherland were interviewed. Members expressed concerns about Ward Sutherland responding to media with survey results using different numbers in different interviews. At the time of the survey the Working Group was told the survey results were not part the decision-making process. Other comments included:

- BRFM member noted the survey numbers quoted, seem incorrect. 10000 residents did not receive the survey. Member recalled it was around 800 residents surveyed and less than 20% responded.
- BRFM mentioned during their interviews that studies were ongoing and said the studies would confirm that the barriers would not work. They felt pressure to let the community know that there are other perspectives for the barrier. BRFM launched a message campaign under limited budget, they were not targeting media.
- A working group member suggested people should go directly to the Cllr. with concerns, as working group should not be spending its time on this discussion.
- Facilitator highlighted that both sides, the Cllr. and BRFM, provided comments referencing inaccurate information.
- The City will contact Ward Sutherland to clarify the use of survey for the future. The survey was not intended to gauge level of support, but to be used as background information for the project team.

6. Unfinished Business

- Triple Bottom Line Follow-up.
- Discussion of “Why the Barrier?” letter.
- Tracking system for questions.
- Meeting 15 notes.
- Tad’s (guest) attendance to groundwater presentation and discussions.

7. Next Meeting – August 17 2020

- The City is looking to record the meetings for those that are unavailable to attend.
- Future Working Group Meetings:
 - September 14 (confirmed).
 - October 5 and 26 (proposed).
 - November TBD.