

Jean Woeller  
Chair Bowness Responsible Flood Mitigation Society (BRFM)  
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**Re: Requests to Committee on May 15, 2019**

May 21, 2019

To Councillor Ward Sutherland, Ward 1 and Chair, Utilities & Corporate Services  
By email to [EAWard1@calgary.ca](mailto:EAWard1@calgary.ca)

Dear Cllr. Sutherland

On behalf the residents of Bowness and members of BRFM thank you for giving us the opportunity to address you, as Chair and members of the committee for Utilities and Corporate Services on May 15, 2019.

In our presentations to committee, we made several requests and asked many questions to which we expect to receive a response. At your request, on May 17, I sent copies of these presentations to Timothy Rowe, in the City Clerk's Office ([committeeclerk@calgary.ca](mailto:committeeclerk@calgary.ca)).

This letter contains a summary of the requests we asked the committee to address to allow the committee to respond to a single document. The presentations contain additional detail if the information provided below is insufficient to respond or the Committee desires additional context. As well if the Committee would like the source material for any of the statements, we would be happy to provide these to you.

***Consultation / Engagement***

The City of Calgary has made two decisions on the Bowness barrier:

- to complete a conceptual design of the barrier to be built on private property, and
  - to move forward with a subsequent preliminary design
1. Given the Committee is now aware of how much consultation was performed with directly affected residents before decisions were made and its own documentation demonstrates direct engagement did not occur until well past the decision date, does this Committee believe the City fulfilled their own policy on consultation for this project, and specifically for the two decisions already made?
  2. We request the City change their consultation policy to explicitly require consulting of property owners for projects to be built on private lands, with clear questions on if projects should go forward, and results separated by those not actually affected, prior to decisions being made.
  3. Given that consent is a key component of funding and the Water Act, consent is highly likely to affect schedule to implement as well as cost. Our request is to direct Water Services to conduct a proper survey of the property owners to determine if they will consent to a barrier being constructed. And the results of this survey be given to Council. And then Council to consider if there should be any more costs borne by this project.
  4. The current individual property consultation form does not include a request to the homeowner to state a position on the barrier or even ask the property owner if they are all right with it. However, we understand the City is internally compiling this information, inferring it from

discussions with residents. We request the City be transparent and cease inferring support or non-support and instead ask the explicit question in writing.

5. We request the City review their groundwater, environmental and social costs studies & quantification, and perform them with the residents. And then allow the residents to review to ensure they are of the same weighting as those given to Elbow Park residents on the Elbow River.

### ***Equality and Fairness***

Given, the expert management panel on flood mitigation states “The Panel does not recommend – building permanent or temporary flood barriers directly along the shore of the Elbow River residential areas because of the challenges with private property.”

6. Why does the City believe the challenges are less in Bowness?
7. Despite this recommendation, why did the City approve the Flood Mitigation Measures Assessment (FMMA) without even consulting Bowness private property owners?
8. Bowness has the same challenges with private property and groundwater. Why does the FMMA recommend upstream mitigation for the Elbow River, and local barriers for the Bow River?
9. Why does the City believe Elbow River, Sunnyside and the Hippos at the zoon should receive better groundwater protection than Bowness Residents?
10. We request Bowness be afforded the same protection against groundwater as Elbow River Communities in a 1:200 year event (since SR-1 requires no barriers and SR-1 will prevent a 1:200 year flood).
11. As a primary stakeholder living on the Bow River, we request the same thorough upstream mitigation to 800 m<sup>3</sup>/sec to prevent groundwater flooding.

### ***Groundwater and Barrier Effectiveness***

In Dr. Tad Dabrowski's presentation he stated that the proposed scope of work is missing important components and this information was shared with the Bowness Barrier team in January 2019. BRFM has requested a meeting to discuss the planned groundwater study and is still waiting for a response to our meeting request.

For your convenience, we have enclosed the document that describes Dr. Dabrowski's review of the proposed scope of work.

12. We request that BRFM's groundwater expert meet with the City of Calgary's groundwater expert for a collaborative discussion of the study.
13. If the current groundwater study being conducted in Bowness confirms BRFM Society assertions about the magnitude of the groundwater flooding problem, will the City commit to either solving it or focussing with residents and the Province exclusively on the provision of upstream mitigation, affording us the same consideration as Elbow residents as recommended by the FMMA?
14. If the berm is breached (design is only 1:20 year naturalized flow rate), the result will be immediate high rate and volume flow into the adjacent properties, with high destructive potential. Will this not leave the City liable for future class action suits such as are currently being undertaken in Quebec?

### **Tree Census and Environment**

15. We request members of committee come to Bowness and walk the proposed barrier alignment to see for yourself what is at stake (more than 5100 trees and shrubs likely to be removed, lost wildlife habitat, increased flow rates creating erosion, etc.).
16. We request The City complete the Biophysical Impact Assessment (BIA) before the preliminary design alignment is completed so that areas on environmental or archaeological significance can be protected.
17. We request the City give BRFM the opportunity to review and provide input to the design of any BIA studies.
18. We request the City allow BRFM to have input to the BIA report before it is submitted to the Province who will decide on the requirement for an Environmental Impact Assessment.

### **Upstream Mitigation Solutions**

19. We request the City partner with BRFM to advocate for an upstream solution that
  - a. provides the required protection that limits flow rates in Calgary to 800 m<sup>3</sup>/sec
  - b. provides flood and drought protection
  - c. is part of a routinely operated system, not only once every 20 years
  - d. provides for economic growth through value adding infrastructure.
20. After Preliminary Engineering, we request the suspension of the Bowness barrier project (and all flood mitigation projects on the Bow River) until the upstream mitigation solution is identified, approved and the operating protocol has been confirmed; this will determine what residual mitigation is required in Calgary.
21. We request the City understand the influence of groundwater in Bowness before determining the barrier design.

### **Information Accuracy and Clarity**

The Deputy Minister of Alberta Environment & Parks have the position that *"it is premature to include this option [Bowness flood barrier] in the current multi level approach"*. The FMMA also states *"if a new Bow Reservoir is not built, fortification of the Bow River by barriers is not desirable, as it would require higher barriers with large footprints along the length of the Bow River within Calgary, resulting in impacts to the community"*.

22. We request the committee direct Water Services to wait until such time as the reservoir is committed to, prior to designing a barrier

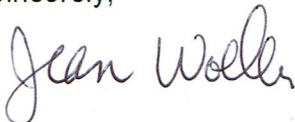
The Alberta Community Resiliency Program (ACRP) has a requirement that *"The applicant must also own or obtain legal consent to access the lands upon which the project is constructed."* The City indicates, *"The Bowness barrier is considered an eligible project under ACRP, but funding has not yet been approved."*

23. We request the committee direct Water Services to not state the project is eligible for funding as the requirement for consent is not yet met and the Deputy Minister's letter position is still valid. A more accurate statement would be, *"it may be eligible for funding in the future."*
24. We request the City directly answer questions from residents. For example, if asked *"how great is our risk to flood again"* the response should be *"With the current TransAlta agreement in place, the risk is 5%"*, not the answer that was actually received in the *"what we heard report"*: *"It's true that Calgary has had several decades without a flood event, however, with a changing and warming climate, extreme rainfall and floods are expected to happen more frequently."*

25. We request the committee direct the City to recalculate the Benefit Cost Ratios (BCRs) with the addition of excluded costs.
26. We request the committee direct the City to recalculate all BCRs using Land Compensation Board (LCB) order 457 (Inglewood barrier case) as the compensation standard. When we took the most conservative reading of the LCB order and ran it for Bowness, we arrived at \$20 M. This is 60% more than what the City has budgeted (\$13M)
27. We request the City rerun the BCR with the actual main floor flood elevations for the affected properties instead of using assumptions that artificially inflate main floor damages.
28. We request the City rerun the BCR based on historical design variance based on the Inglewood experience (20% more barrier than straight line to accommodate property owners choice of path and mix of berm vs. wall).
29. We would like the City to explain why the City chose to not to include historically known costs, not base estimates on previous designs, and not base land costs on the most relevant LCB ruling.
30. The City just recently rezoned portions of Bowness, which were either flooded in 2013 or are in the flood mapping zone to a higher density. All flood reports state a desire to reduce flood damage. Why would the City then change the zoning to increase the density, resulting in increased damages? Or at a minimum,, why wouldn't the City ensure there is no development below the 1:100 year level?
31. We request the Committee direct the Planning department to not allow non-waterproof basements for new developments in the flood zone.
32. We request the Committee advise Council to not allow zoning changes to higher densities in the flood zone, or if they do, to not allow non-waterproof developments below the 1:100 year level.

We look forward to receiving your response.

Sincerely,



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cc: Francois Bouchart, Director of Water Resources – Planning ([francois.bouchart@calgary.ca](mailto:francois.bouchart@calgary.ca))

Attachment: BRFM Hydrogeological / Geotechnical Study Scope Review (BRFM-200-HSR-2019 v1.0)