

MINUTES : HSCA – EPARC - Infrastructure Group

Tuesday October 4, 2016 from 7:00 – 9:00 PM HSCA.

Attendees: David B , Peggi M, Reg J, Brian C, Kerri T, Charlie L, Krista K, Pat J.

Attachment: 1. Thoughts on Advocacy by Charlie, 2. Meeting Handout-Engagement Session Strategy 3. HSCA EPARC Advocacy Notes, 4. Public Engagement - Flood Mitigation

(1) Welcome & Introductions – Charlie Lund (5 min)

(2) Discuss participation in the upcoming citizen engagement process – Charlie/All (45 min)

- Basically Berms and Dams
- Our collective position: reviewed Thoughts on advocacy –notes from Charlie. The result of the discussion is shown in the attachment “HSCA EPARC Advocacy Notes” – “Berms and Dams” section.
- The province dictates the river level of protection ie: 1/100.
- Flood mapping is not completely adopted but the new more accurate numbers are being used. When 2013 numbers were built into the calculations the final numbers were quite different. City Bylaw is using old #'s
- Nov 8- Frank Frigo will talk to Bow Basin storm management
- Issue: hard to improve Sunnyside but not Bowness- cost is much higher for Bowness. This suggests advocacy for Bowness protection to keep an equitable approach. Also hard to decide local mitigation vs upstream.
- Do not rely on building code to protect us. Some of our houses are over 100 yrs old.
- PLAN: each of us to register for workshops
- Attachment “Public Engagement - Flood Mitigation” may be distributed if helpful

(3) Advocacy for Infrastructure Funding – Status and plans – Charlie/All (45 min)

- “Pumps and Pipes”
- The City has 75 million remaining from the initial 100 million that was promised for flood mitigation.
- 2018 Cleanwater fund from the federal government could fund the upper plateau separation.
- The “Pumps and Pipes” positions were handed out with a request that revisions be made off-line. The final result is shown in the attachment “HSCA EPARC Advocacy Notes” – “Pumps and Pipes” section.
- Due to time constraints further discussion was deferred to the 2nd half of the Nov 8 meeting.

(4) Understanding Flood Insurance Options – Peggi (10 min)

- Insurers rely on Geomapping to determine insurance rates etc. Coverage varies by price and type of flood insurance.
- suggest that we create and file with Insurance Bureau of Canada . We need to update them on our true risk and update them on the improvements that have occurred to decrease our community’s risk.
- We should report our experience of Insurance brokers failing to provide us coverage. Once the IBC has our data they can help us advocate on our behalf.
- IBC is replacing Heather Mack – we will connect with her replacement

(5) Status of other items – discuss by exception only – Charlie/All (10 min)

- no discussion

(6) Date for next meeting: November 8, 2016 (5 min)

(7) Adjourn

Thoughts on Advocacy – Positions : HSCA – EPARC - Infrastructure Group

Tuesday October 4, 2016 from 7:00 – 9:00 PM in the Slate Room at HSCA.

Berms and Dams

1. Protecting Sunnyside is cheaper than buying out properties and converting to parkland
 - Buy-outs are the only option if the community cannot be made safe
 - Community assessed total market value (2016): \$929M
 - Plus City facilities, plus demolition, plus park development
2. Establish appropriate flood protection, likely in the 1:200 – 1:500 return rate range
 - Use survey of flood protection standards elsewhere as guidance
 - Note that 1:1,250 used for critical infrastructure in Netherlands
 - Consider combined effect of upstream mitigation and local barriers
 - Move Sunnyside into a low-medium risk category, so flood insurance becomes affordable
3. Design with reasonably foreseeable storms in the Bow basin, not storms centred on the Elbow or south.
4. Increase Sunnyside berm height to protection standard plus 0.5m freeboard
 - Compensate for provincially funded Prince's Island Park Causeway reinforcement
 - Further increase as required to balance any shortfall or delay in upstream mitigation
 - Address ground water contribution – install below grade barriers as required
 - An improved berm for Hillhurst Sunnyside has strong triple bottom line benefits
5. Remove obstructions to flow in the river channel
 - Eliminate rock bars before vegetation makes them barriers
6. Implement all practical Bow River upstream mitigation options.
 - Expedite Bow Valley Working Group process and implement recommendations
 - Support at least one new dam upstream of Calgary, but recognize that construction is likely decades in the future – economically sensible in-city barriers can be built quickly to complement.
 - Implement permanent management improvements at TransAlta's reservoirs
 - Enable rapid lowering of Ghost reservoir to balance flood, drought and recreational purposes
7. Build reliable, resilient flood mitigation
 - Building codes should reflect existing community and upstream flood protection
 - Non-structural measures must respect the character of existing communities and must be effective for all existing structures.
 - Note that it is City policy to increase density in inner city neighbourhoods, with recently relaxed rules for basement secondary suites.
8. Infrastructure must protect against reasonably foreseeable future floods, with affordable flood insurance to cover residual risk.
 - One measure of the adequacy of community flood mitigation is that flood insurance is available and affordable.

Pumps and Pipes

9. Much of Sunnyside flooding is caused by water piped in.
10. The Hillhurst Sunnyside Community supports a rainfall design basis of 1:5 with river gates closed, down from the 1:50 usual standard for established communities and the 1:100 standard for new communities.
11. Implement Upper Plateau Storm Drainage Separation Project to keep large volumes of rain water off Sunnyside streets when the river is high.
 - Enables proper handling of upper plateau rainfall, without damaging Sunnyside.
 - “Shovel ready” project with initial engineering study estimate of \$37M
 - Identified as a “Potential Future ACRP Eligible Project”, but the value is more than ACRP is intended to support. This could be a good project for Federal Green Infrastructure funding.
 - One way or another need to find a way to fund and move this project forward ASAP.
12. Fully implement Hillhurst-Sunnyside Storm Water Pump Station Project to lift water over the berm when the river is high and the outfall gates are closed.
 - Consistent with designs for new communities – but no room in Sunnyside for storage basins
 - The four storm water pump stations are required at river levels of only 1:20 or below – these are “no regrets” projects regardless of any upstream mitigation.
 - These projects are “shovel ready” with an initial engineering study estimate of \$40M total
13. Support rebuilding of the Sunnyside Pump Station #2 (ongoing)
14. Support Sunnyside Pump Station #1 on the 2016 City of Calgary Alberta Community Resilience Program (ACRP) priority list.
15. Hillhurst Pump Stations #3 & #4 identified as “Potential Future ACRP Eligible Projects” or could be good projects for Federal Green Infrastructure funding.
 - Need to find funding to move these projects forward ASAP
16. Support rebuilding the Sunnyside Sanitary Lift Station (ongoing).

Calgary River Communities Action Group Mandate

(for information and reference only)

- CRCAG will continue to advocate for construction of large-scale flood mitigation infrastructure to provide the City of Calgary protection for at minimum a 1 in 200 year scale flood event on the Elbow River.
- CRCAG will continue to advocate for the Government of Alberta to immediately enter into a legal agreement with TransAlta Corporation to leverage existing infrastructure on the Bow River and its tributaries for flood mitigation purposes.
- CRCAG will advocate for construction of additional flood mitigation infrastructure on the Bow River to ensure protection for at minimum a 1 in 200 year scale flood event.
- CRCAG will participate in legal and regulatory proceedings as deemed necessary by the CRCAG Board in furtherance of advocating for particular flood mitigation infrastructure projects.
- CRCAG will continue to advocate against policy, legislative and regulatory changes that are prejudicial to and negatively impact property owners in flood impacted communities.

Meeting Handout : HSCA – EPARC - Infrastructure Group

Tuesday October 4, 2016 from 7:00 – 9:00 PM in the Slate Room at HSCA.

(A) The way the CAG process is developing the City seems intent on using a 1:100 Return Rate flood as the basis for future flood mitigation. I believe that this is inadequate as we have previously discussed. The most important effect is that (supposedly) only one mitigation project need be built to give this low level of protection. Either barriers (higher berm) or a new dam on the Bow – not both. The City seems to favour building only the new dam on the Bow and doing nothing with berms. This is in part because the dam will help Bowness while it's hard to see how berms could protect that community. I think that one advantage from the City perspective is that a new dam is decades away and nothing need be done in the meantime (ironically this solution means our Upper Plateau Separation and PS projects will be built much sooner than they otherwise might be – cold comfort).

It is important that we look realistically at the flood risk faced by our community and not be seduced by the “rose coloured” glasses approach designed to minimize or postpone indefinitely flood mitigation investment. Perhaps a strategy that tackles the problem from an interesting angle and not head on would be the best approach.

We can, should and will discuss our position and strategy at the meeting to be held next week, October 4. Anticipating your agreement with the above I think we need strong community and committee participation at the upcoming public engagement sessions. All these sessions are listed below.

Pop Up Displays (general information about the project and promotion of workshops and public information sessions)

Wednesday October 12, 11:00am-2:00pm, Bow River Pathway Eau Claire

Thursday October 13, 11:00am-2:00pm, The Core Shopping Centre

Saturday October 15, 2:00pm-5:00pm, Elbow River Pathway at Stanley Park

Registered Workshops (Facilitated workshops)

Please note that registration for the workshops will not open until October 3.

Tuesday October 18, 6:00pm-8:30pm Hillhurst-Sunnyside Community Centre

Thursday October 20, 6:00pm-8:30pm Riverbend Community Association

Saturday October 22, 9:30am-12pm Bowness High School

Monday October 24, 6:00pm-8:30pm Cliff-Bungalow/Mission Community Association

Thursday October 27, 6:00pm-8:30pm Southern Alberta Pioneers Building (Rideau Park)

Tuesday November 1, 6:00pm-8:30pm Alexandra Centre Society, Inglewood

Public Information Sessions (drop-in sessions)

Thursday November 3, 6:00pm-8:30pm at Riverbend Community Association

Saturday November 5, 9:30am-12:00pm at Queen Elizabeth High School

Online registration for the workshops will start October 3rd at <http://engage.calgary.ca/flood>

(B) The 2016 Alberta Community Resilience Program (ACRP) Calgary Application List and Report was approved unanimously by City Council on Monday September 26. The application was due in Edmonton September 30. It appears almost certain that Sunnyside Pump Station #1 will be funded for 2017!

As part of the report a table of Potential Future ACRP Eligible Projects was provided to Council. This list includes Upper Plateau Separation and Pump Stations #3 & #4. This list should be support for our advocacy with Provincial and Federal governments.

I have been told that Druh Farrell asked some questions of Administration along the lines of working with other levels of government with a view to obtaining funding for the Upper Plateau Separation Project, amongst others. She was not 100% happy with the answers and will be meeting with City Administration next month to try to progress the issue. There is recorded video that you might want to try to watch. Here is the link to the video, and item 11.4 is discussed near the end before they go in camera.

<http://agendaminutes.calgary.ca/sirepub/mtgviewer.aspx?meetid=2078&doctype=AGENDA>

HSCA EPARC Advocacy Notes 2016-10-18 : To Guide Advocacy of the Infrastructure Group

Berms and Dams

1. Protecting Sunnyside is cheaper than buying out properties and converting to parkland
 - Must buy out all properties or no properties for a given community (Sunnyside)
 - Buy-outs are the only option if the community cannot be made safe
 - Sunnyside assessed total market value (2016): \$929M
 - Plus City facilities, plus demolition, plus park development
2. Establish appropriate flood protection, likely in the 1:200 – 1:500 return rate range
 - Use survey of flood protection standards elsewhere as guidance
 - Note that 1:1,250 used for critical infrastructure in Netherlands
 - Consider combined effect of upstream mitigation and local barriers
 - Move Sunnyside into a low-medium risk category, so flood insurance becomes affordable
3. Design with reasonably foreseeable storms in the Bow basin, not storms centred on the Elbow or south.
4. Increase Sunnyside berm height to protection standard plus 0.5m freeboard
 - Compensate for provincially funded Prince's Island Park Causeway reinforcement
 - Further increase as required to balance any shortfall or delay in upstream mitigation
 - Address ground water contribution – install below grade barriers as required
 - An improved berm for Hillhurst Sunnyside has strong triple bottom line benefits
 - Consider berms for all river communities and build where economic while waiting for upstream dams.
 - Average annual avoided flood costs of \$12M/y for Sunnyside provides strong incentive to build now.
 - Berms must protect to the same standard on both sides of the river (eg. if expensive downtown condos will be protected to 1:200 then the mixed Sunnyside neighbourhood across the river must be 1:200).
5. Remove obstructions to flow in the river channel
 - Eliminate rock bars before vegetation makes them barriers
6. Implement all practical Bow River upstream mitigation options.
 - Expedite Bow Valley Working Group process and implement recommendations
 - Support at least one new dam upstream of Calgary, but recognize that construction is likely decades in the future – economically sensible in-city barriers can be built quickly to complement.
 - Implement permanent management improvements at TransAlta's reservoirs
 - Enable rapid lowering of Ghost reservoir to balance flood, drought and recreational purposes
7. Build reliable, resilient flood mitigation – do not depend on ineffective bylaw/code changes
 - Building codes should reflect existing community and upstream flood protection
 - Non-structural measures must respect the character of existing communities and must be effective for all existing structures.
 - Note that it is City policy to increase density in inner city neighbourhoods, one example being the recently relaxed rules for basement secondary suites.
8. Infrastructure must protect against reasonably foreseeable future floods, with affordable flood insurance to cover residual risk.
 - One measure of the adequacy of community flood mitigation is that flood insurance is available and affordable.

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Pumps and Pipes

9. Much of Sunnyside flooding is caused by water piped in from the upper plateau (Banff Trail etc)
10. The Hillhurst Sunnyside Community supports a rainfall design basis of 1:5 with river gates closed, down from the 1:50 usual standard for established communities and the 1:100 standard for new communities.
 - The 1:5 standard is a balance of protection and cost, considering the type of weather systems likely when the river gates must be closed.
11. Implement Upper Plateau Storm Drainage Separation Project to keep large volumes of rain water off Sunnyside streets when the river is high.
 - Enables proper handling of upper plateau rainfall, without damaging Sunnyside.
 - “Shovel ready” project with initial engineering study estimate of \$37M
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13. Support rebuilding of the Sunnyside Pump Station #2 (which is already ongoing)
14. Support Sunnyside Pump Station #1 on the 2016 City of Calgary Alberta Community Resilience Program (ACRP) priority list (already on the list).
15. Build Hillhurst Pump Stations #3 & #4 – they are identified as “Potential Future ACRP Eligible Projects” or could be good projects for Federal Green Infrastructure funding.
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Public Engagement – Flood Mitigation : Supported by HSCA – EPARC - Infrastructure Group

The Infrastructure Group of the Emergency Preparedness and Response Committee (EPARC) of the Hillhurst Sunnyside Community Association (HSCA) has agreed that strong community participation is desirable at the upcoming City of Calgary public engagement sessions for flood mitigation. All these sessions are listed below. The most important sessions are the Registered Workshops. Anyone may attend any workshop, but Hillhurst and Sunnyside residents are asked to attend the October 18 session at HSCA as a first choice, if possible. More information may be found at <http://engage.calgary.ca/flood>

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Saturday October 15, 2:00pm-5:00pm, Elbow River Pathway at Stanley Park

Registered Workshops (Facilitated workshops). Click below to register, or call 403-254-0544, ext. 216. Participation is required for the full 2½ hours of each session. Focus of these sessions will be “Berms and Dams”.
Tuesday October 18, 6:00pm-8:30pm Hillhurst-Sunnyside Community Centre [Click to Register](#)
Thursday October 20, 6:00pm-8:30pm Riverbend Community Association [Click to Register](#)
Saturday October 22, 9:30am-12:00pm Bowness High School [Click to Register](#)
Monday October 24, 6:00pm-8:30pm Cliff-Bungalow/Mission Community Association [Click to Register](#)
Thursday October 27, 6:00pm-8:30pm Southern Alberta Pioneers Building (Rideau Park) [Click to Register](#)
Tuesday November 1, 6:00pm-8:30pm Alexandra Centre Society, Inglewood [Click to Register](#)

Public Information Sessions (drop-in sessions)
Thursday November 3, 6:00pm-8:30pm at Riverbend Community Association
Saturday November 5, 9:30am-12:00pm at Queen Elizabeth High School

If you are unable to attend any of the “in person” events above you can provide your feedback online from October 17 to November 8, 2016. <http://engage.calgary.ca/flood>

The companion Document “HSCA EPARC Advocacy Notes 2016-10-18” lists the positions taken by the Infrastructure Group on both the “Berms and Dams” and “Pumps and Pipes” aspects of Hillhurst Sunnyside Flood Mitigation.