July 2012 Flooding Update

Mill Woods
Community Consultation
October 1, 2012
Today’s Meeting

1. Share preliminary results on July storm and flooding information collected to date
2. Report on the status of current Mill Woods flood improvement projects
3. Explain Homeowner’s Flood Proofing Program, subsidies, and potential Provincial Disaster Assistance Fund
4. Outline next steps
5. Answer questions/get input and feedback
After Today’s Meeting

1. Summarize and share meeting input
2. Consider community input in work ahead
3. Report on progress of current projects
4. Keep communities informed as studies are completed and improvement options developed
5. Return to the community to present and discuss findings/options in Spring 2013

Please hold questions until after presentation
July 2012 Storms

• 4 extreme storm events: localized, intense, short duration

<table>
<thead>
<tr>
<th>Date</th>
<th>Rainfall</th>
<th>Duration</th>
<th>Area</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 12</td>
<td>50 mm</td>
<td>90 minutes</td>
<td>south Edmonton</td>
<td>E6</td>
</tr>
<tr>
<td>July 14-15</td>
<td>85 to 105 mm</td>
<td>30 hour</td>
<td>southeast and west Edmonton</td>
<td>E3</td>
</tr>
<tr>
<td>July 17-18</td>
<td>30 mm</td>
<td>30 minutes</td>
<td>south Edmonton</td>
<td>E5</td>
</tr>
<tr>
<td>July 23</td>
<td>20 to 25 mm</td>
<td>30 minutes</td>
<td>south and west Edmonton</td>
<td>E5</td>
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• Area south and west of the city received as much as 240 mm of rain, compared to 90 mm average for July

• The July 12 storm resulted in more than 2.4 million cubic metres of rainfall in the area (2 ½ Commonwealth Stadium)
Impact of Storms
July 12 to August 31, 2012

- 4982 total calls received by 311
- 1752 reported basement flooding
- 502 in Mill Woods
Drainage Response

• Responded to calls to 311

• Conducted field investigations and preliminary assessments

• Emergency repair works
  ✓ Catch basins and manholes
  ✓ Sewer main ruptures and blockage removals
  ✓ Park trail and bridge abutment repair/slope stabilization
Preliminary Assessment Findings

• Localized, intense and short duration storms
  - Heavy rain, hail and strong winds
  - Can occur with little prior notice
  - Can cover several neighbourhoods - not necessarily whole city
  - Flooding on roads and underpasses
  - Water in basement can come from window wells, doors, seepage, sewer backups

• Mill Wood’s reported basement flooding breakdown (approximately):
  - 30% Sanitary backup
  - 10% Private property issues (e.g. seepage, sump pumps, lot grading)
  - 60% Undetermined causes
Preliminary Assessment Findings

- Existing Mill Woods Double Barrel Trunk Sewers surcharged and backed up local sewer systems in Mill Woods

- Flooding clustered around the lower lying areas in the neighbourhoods
Flood Prevention Program - city wide

- July 2004, city experienced extreme storm resulting in 4,500 flooded homes
- City Council approved $146M Flood Prevention Program in 2006
- Complete projects in 31 Neighbourhoods by 2020
- The program includes:
  - Upgrading existing sewers and building new sewers
  - Installation of new storm water management facilities where possible
- Progress
  - 12 neighbourhoods are completed
  - 10 neighbourhoods are on-going and to be completed by 2014.
  - Total expenditure to date is $105M
What's been done in Mill Woods

Mill Woods Flood Prevention Program

Total investment: $50M
Mill Woods Double Barrel Tunnel Upgrade Project

Depth range from 16 to 34m
Next Steps

• Further evaluation and assessments
  - Explore additional local area improvement opportunities in Mill Woods
• Develop options and costing

• An Expanded Flood Protection Program will be developed and recommended to the City Council for approval.
Floodproof
Flood Prevention Program
Consists of ...

- Home Check up Program
  - free to all residents
  - single and multi family program

- Website information -
  www.edmonton.ca/floodprevention

- Print materials - Homeowner’s Guide to Flood Prevention, Flood Prevention tips for Homeowners etc.
Also ...

- Community presentations - sump pumps and backflow valves (NAIT)

- Backflow valve reimbursement program

- Follow-up in neighbourhoods where flood prevention sewer upgrades are done
Provincial Disaster Relief Fund

- The City of Edmonton has applied to the Alberta Emergency Management Agency for a Disaster Recovery Program for flooding events that occurred between July 12th to 23rd 2012.

- If the application is approved, homeowners affected by the flooding will be able to apply to the Province for disaster financial assistance for uninsurable losses.

- At that time, the citizens can register for assistance and the Province will verify the eligibility of their claims.

- [http://aema.alberta.ca/disaster-recovery-programs.cfm](http://aema.alberta.ca/disaster-recovery-programs.cfm)