Update on the July 2012 Flooding

Mill Woods

Community Consultation

May 7, 2013

THE CITY OF Edmonton

Today's Meeting

1. Share additional information on engineering findings concerning last July's storm
2. Discuss various options under consideration regarding flood improvement projects for this area
3. Discuss the benefits and impact of these various options, and the general timing
4. Outline next steps
5. Answer questions/get your input and feedback

After Today's Meeting

1. Summarize and share meeting input
2. Consider community input in work ahead
3. Report on progress and keep you informed
4. Return to the community to present recommendations and get your feedback

Please hold questions until after presentation

How did we get here?

- Major flooding occurred in July 2012
- Flood prevention becomes City's top priority
- Commitment to reduce flood risk and improve public awareness on drainage issues
- At risk neighbourhoods in Mill Woods & southwest Edmonton identified

July 2012 Storms

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

Date	Rainfall	Duration	Area	Category
July 12	50 mm	90 minutes	south Edmonton	E6
July 14-15	85 to 105 mm	30 hour	southeast and west Edmonton	E3
July 17-18	30 mm	30 minutes	south Edmonton	E5
July 23	20 to 25 mm	30 minutes	south and west Edmonton	E5

- Area south and west of the city received as much as 240 mm of rain, compared to 90 mm historical total 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)
- 5,700 total calls received by 311 and 1,200 reported flooded basements in the City

What has been our Plan of Action?

Action plan with four key goals:

- Find the main causes of the July 2012 flooding
- Review any previously constructed and proposed upgrades in the on-going 2006 Flood Prevention Program
- Develop viable solutions and obtain funding from City Council to reduce the risk of flooding in the future
- Engage and work with the affected communities to implement the solutions

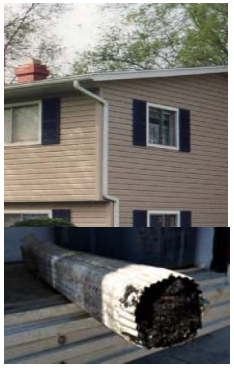
July 2012 Reported Flooded Basements

Mill Woods Area

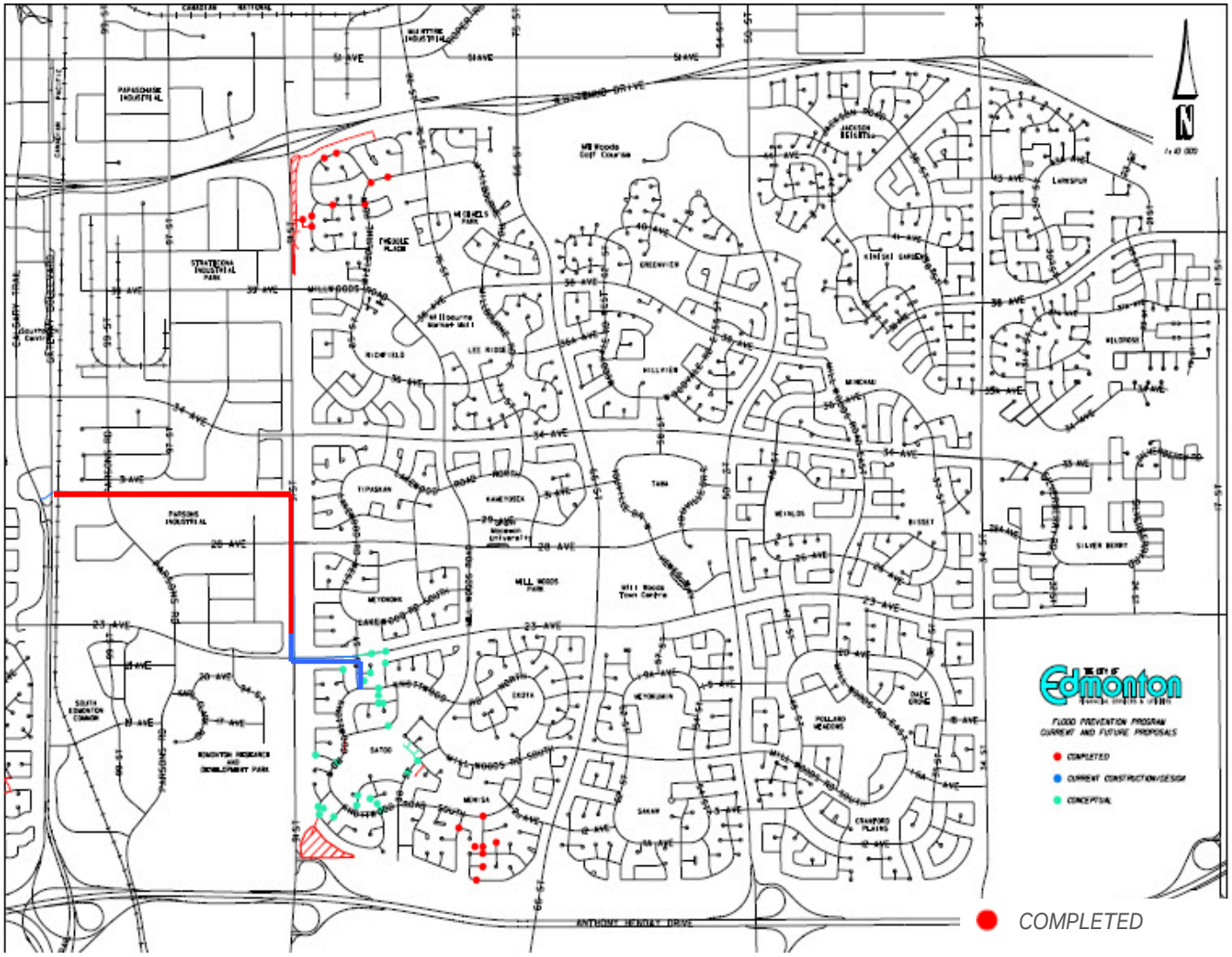
- July 12 storm event was unusually severe
- 336 confirmed flooded basements
- From 193 Survey Responses
  - 75% Reported Sanitary Backups
  - 25% Reported stormwater entering basements from the street
  - 84% reported stormwater ponding on the street

What Contributed to the Flooding?

- Water flow exceeded capacity of storm sewer systems
- Surface flooding in trapped low areas inundated the sanitary system, causing sanitary sewer lines to be filled beyond capacity
- Plugging of catch basins with hail and debris
- Lot grading issues and missing downspout extensions
- Malfunction of backwater valves
- Extra flows from weeping tiles
- Absence of overland drainage



What Flood Prevention Projects are in Mill Woods?

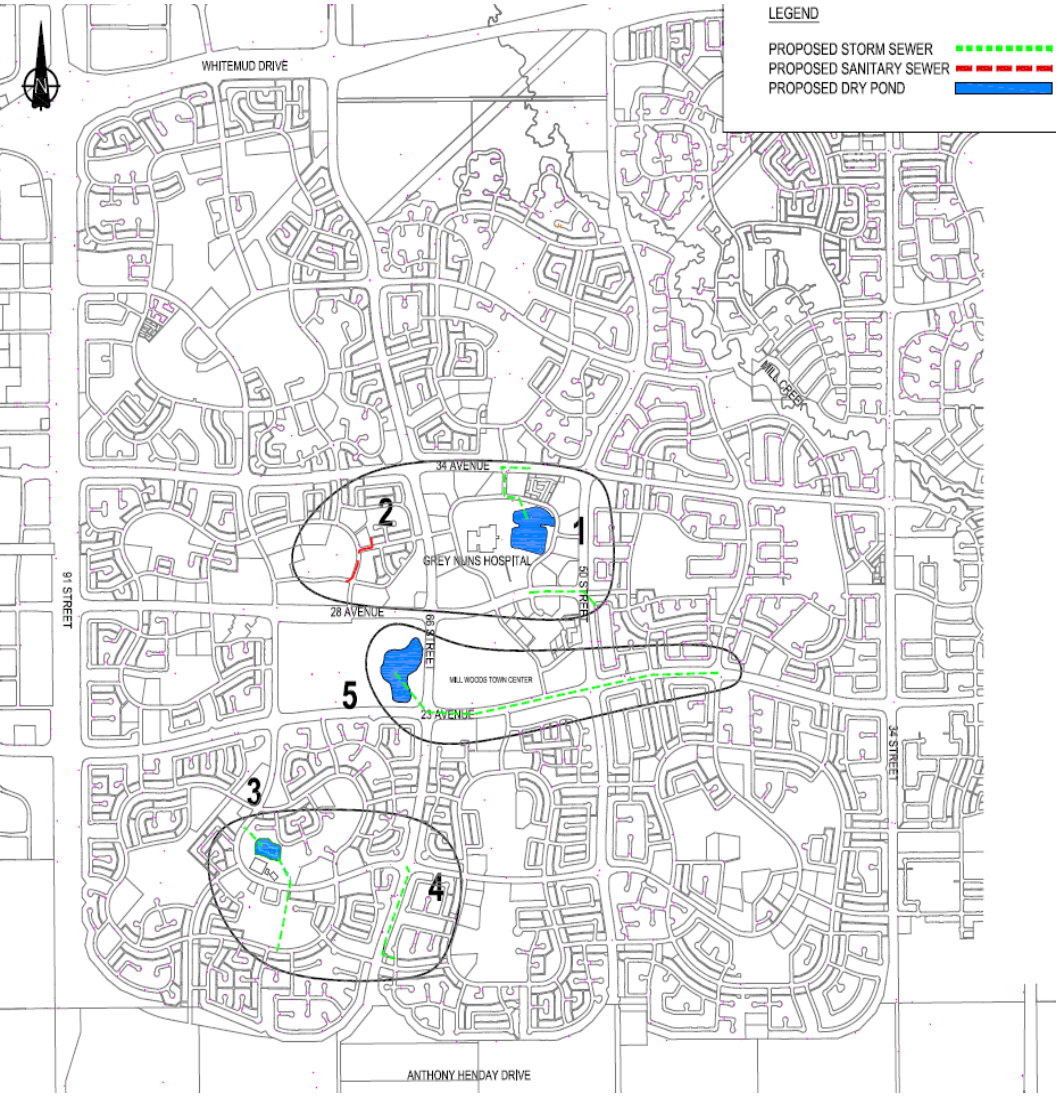


Mill Woods Flood Prevention Program

Total investment: $50M

- COMPLETED
- UNDER CONSTRUCTION
- FUTURE

Preliminary System Upgrades



1. Tawa Dry Pond
   - Hillview Conveyance Upgrade
   - Weinlos Conveyance Upgrade
2. Kameyosek Sanitary Upgrade
3. Ekota Dry Pond/Menisa Conveyance Upgrade
4. Sakaw Overflow Upgrade
5. 23rd Avenue Trunk Upgrade/Meyokumin Pond Expansion

North Mill Woods Improvements

Benefits homes in Hillview, Weinlos and Kameyosek

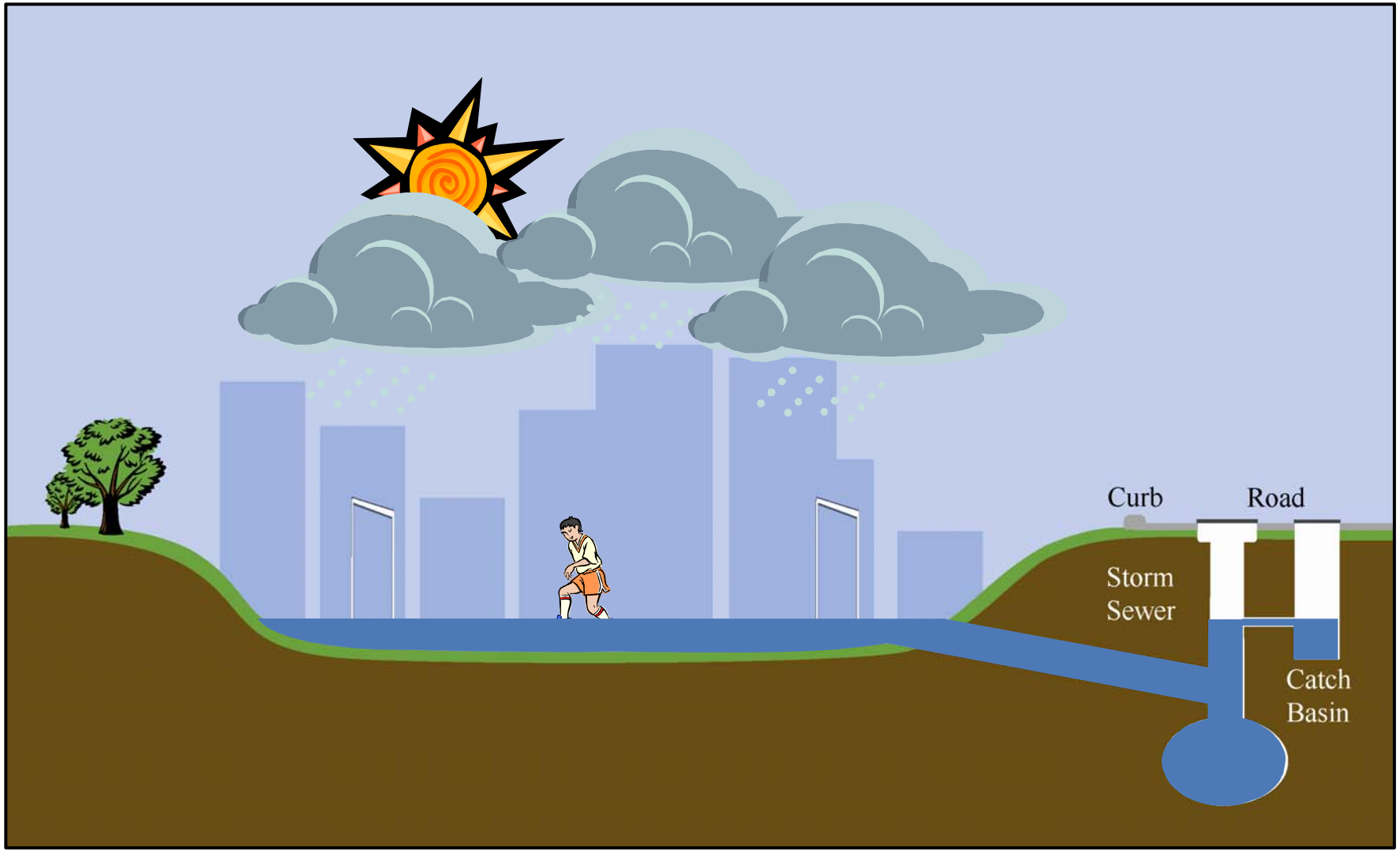
South Mill Woods Improvements

Benefits homes in Satoo, Ekota, Menisa, Sakaw and Meyokumin

23rd Ave Trunk Upgrade & Meyokumin Pond Expansion

Benefits homes throughout southeast Mill Woods

How Dry Ponds in Tawa & Ekota will Work

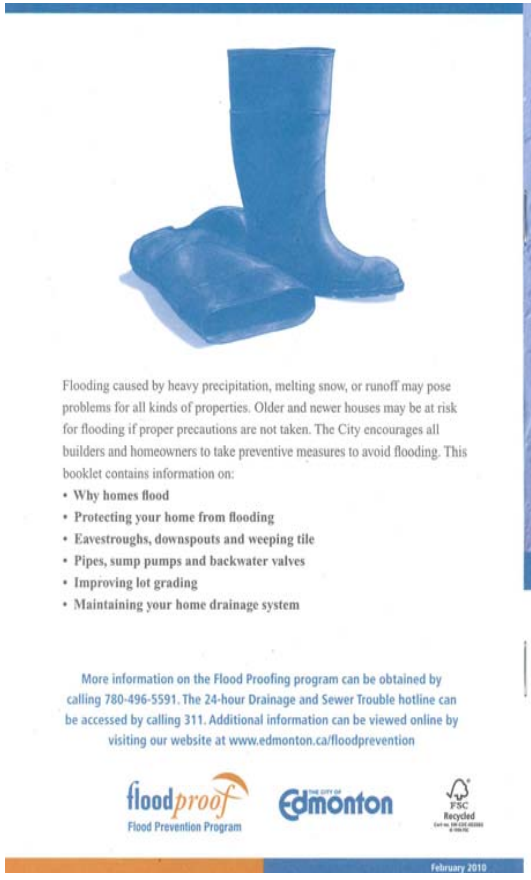


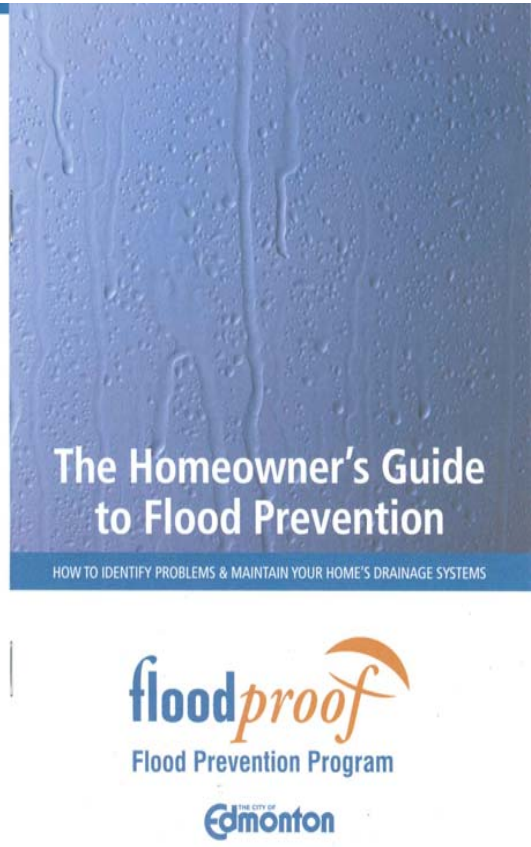
What are the benefits of these improvements?

- Less pooling of water on the surface
- Reduced risk of sanitary backups and basement flooding
- Less property damage
- Savings of time, money and inconvenience

Recommendations for Homeowners

- Install and routinely check backwater prevention valve
- Improve lot grading to get surface water away from property
- Install/maintain adequate eavestroughs
- Channel downspout water to proper place
- Check foundations for cracks and leaks
- Flood Prevention Checkup Program (for advice call: 780-944 – 7777)





Next Steps

- Continue the engineering assessments to refine and prioritize the identified upgrades and estimate construction costs and impacts

- Consult and work with stakeholders on the use of the identified land parcels for stormwater management dry ponds

- Develop an Expanded Flood Prevention Program and present to City Council for funding approval in the Fall

- Consult/inform communities and others on design and construction progress

Discussion and Feedback

Clarifying Questions?

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Issues, comments, concerns?

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Additional information needs?