City of Peterborough

FLOOD 2004

Presented by:

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City Of Peterborough
The Event

Significant rainfall on July 14 & 15, 2004 leading to city-wide flooding
July 14 & 15th rainfall
Inches per 1/2 hour intervals
July 14 & 15th rainfall
Accumulation per 1/2 hr intervals

[Graph showing rainfall accumulation per half-hour intervals from 1:30 PM to 8:30 AM, with rainfall amounts in inches.]
The Damage

Damage from the flood affected virtually every part of the city
The Cost

Five + years after the flood, the true ultimate cost to the City taxpayers is still unknown. Estimates range from $50 million to $100 million or higher.

The Flood Reduction Master Plan, prepared shortly after the flood suggests 10 – 20 years for completion of recommended flood reduction projects.
The Aftermath

Picking up the flood related garbage and debris was a major undertaking. At one point Public Works coordinated 80 Toronto garbage packer trucks and 90 tractor trailer dump trucks.

Approximately 12,500 metric tonnes were placed in the landfill from July 16th to the 27th. The normal amount for that time period is generally 3000 metric tonnes.
The Aftermath

Sewage Treatment Plant

Normal flows for that period are approximately 1.3 million gallons per day.

July 15 the Sewage Treatment Plant recorded a peak flow of 7 million gallons!
Actions Taken

Commissioned a Flood Specialty Engineering firm (UMA – now AECOM) to prepare the Flood Reduction Master Plan (FRMP)

Adoption of the FRMP in its entirety was approved by Council

FRMP is the blueprint for our present and future flood reduction projects
Progress

City divided into 8 distinct watershed areas
Progress

Of the 8 distinct watershed areas:

Environmental Assessments completed on seven of the eight

Final contract to be awarded this year
Other City-Wide Studies

- Storm & Sanitary System Survey
- Smoke & Dye Testing
- Soil & Groundwater Inventory
- CCTV Inspection Of Pipes
- Sewer Flow Rate & Rainfall Survey
- Detailed Sanitary Sewer Environmental Assessment
Key Initiative

In 2005, Council approved funds for a Backwater Valve Subsidy Program

Budget assigned to the program was $1 million plus.
BWV Subsidy Program

Subsidized BWV installation to maximum $800

Subsidized foundation drain disconnection from sanitary sewer system & sump pit installation to maximum $800

If both done together, maximum subsidy increased to $1800
BWV Subsidy Program

Program still available to residents

Spent about $525,000 to date

This program was aimed directly at residents affected by the 2002 and/or 2004 flood

Partnered with the local Insurance Brokers Association to promote the program (brochure)
Lessons Learned

Communication can always be better
Electronic data makes everything easier
Your Emergency Preparedness Plan is not as good as you think
Keep great records from the start
Keep the media up to date
Funding source – sanitary & storm
Lessons Learned

Hire experts where needed

Do not forget that normal business must continue

Accept that the recovery will take a long time

Be open and truthful with the public

Keep the need in front of Council well after the event starts to fade from mind
More Information?

- [www.peterborough.ca](http://www.peterborough.ca)
  - City Hall
  - Chief Administrative Officer
  - Flood Reduction Program
  - Or type in “Flood” in the search box

- Email dward@peterborough.ca