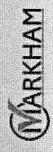
Attachment A

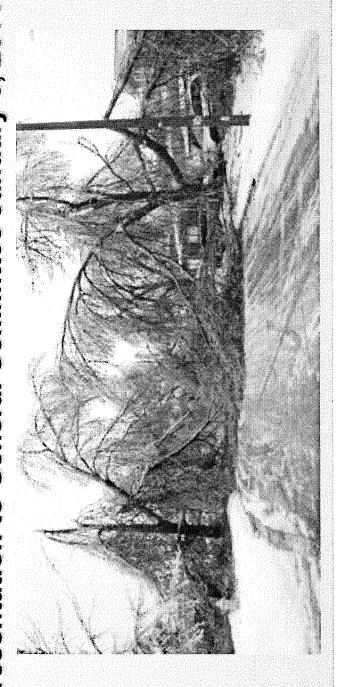
Ice Storm - December 2013

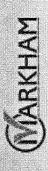


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Ice Storm - December 2013

Presentation to General Committee January 8, 2014





Emilding Mantham's Future Together Journey to Excellence

Purpose of Presentation

- ■Overview of ice storm
- DReport on activities of Emergency Operations Centre (EOC)
- □Departmental Reports:
- ☐ Fire Services, Operations, Waterworks, Waste Management
- ☐ Warming Centres
- ☐ Contact Centres
- ☐ Communications
- ■Financial Implications
- Lessons learned
- □ Recommendations



Entibling Marikham's Future Together Journey to Excellence

Overview - The Damage

2013 Ice Storm

Precipitation Ice Accumulation (Accretion) Power Outages In Markham Trees damaged Financial Implications	Freezing Rain from Dec. 20-22 20-25 mm* (approx. 1") Approx 17,200 customers at 11am Dec 22 Over 10,000
• Clean-up	\$2.6 to \$3.2M
 Recovery 	\$7 to \$10M

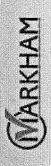
*Environment Canada Weather Summary Dec. 23, 2013



g Markham's Future Tegether Journey to Excellence

Environmental Implications

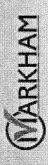
- 10,000+ trees damaged
- Reduction in natural infrastructure for storm water and air quality management (particulate and CO2)
- Reduction in habitat for various animal and insect species
- ☐ Energy
- Increased use of fossil fuels for heating, small generators and vehicle operation resulting in increased Greenhouse Gas (GHG) emissions



Building Markham's Future Tegether Journey to Excellence

Overview Dec. 22- Dec. 30 - The Work

シンシン	- DOO: 44- DOO:00	
EOC	47 staff rotating shifts	Approx 650 hrs
Warming Centres	16 staff rotating shifts	250.5 hrs
Trine	184 Suppression 9 Alarm room staff	228 phone call inquiries 371 responses 42 CO calls
Communications	3 staff for web updates/social media	235 tweets 50 Facebook posts 14 web updates, 13 media updates 19 council updates
Contact Centre	3-10 staff alternating shifts	5200 calls 676 Voice Mails returned 410 Emails answered Total hours 530
		Slide 5



Entiting Narkham's Future Together Journey to Excellence

Overview Dec. 22- Dec. 30 - The Work

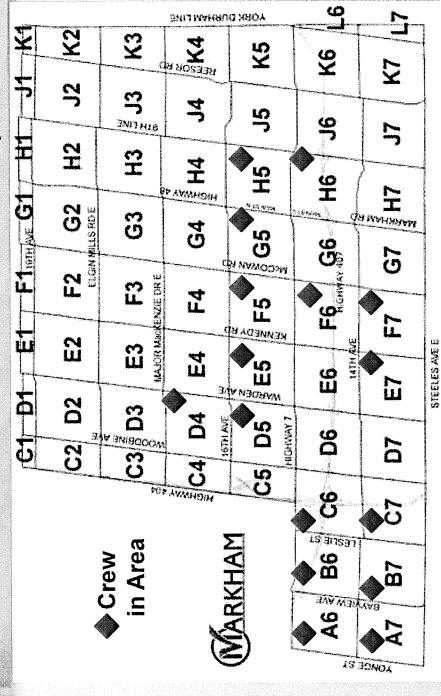
Walterworks /	7 Staff	77 hours
Operations – Roads S Operations – Parks S 1 1 2 2 8 3 8 8	28 staff on pre-set shift schedule 130 contractors - winter operations 24 - 30 staff available including one in-house forestry crew 3 - 12 forestry crews available on various dates and times	Provide 24/7 winter operations All available staff removing road, sidewalk and driveway obstructions Patrol roads to identify safety hazards Dec 25 th only day forestry crews not deployed – 3 crews on emergency standby
Bylaw	13 Officers	270 hours

Week of January 6-11, 2014



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Journey to Excellence





Imgi Marifdram's Future Together Journey to Excellence

Pre-storm Planning

Wednesday, Dec. 18

☐ Markham staff began monitoring weather reports

Thursday, Dec. 19

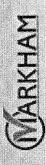
and resident emergency preparations (additional social media postings Friday, Dec. 20) Web update on winter storm preparations, social media postings on storm forecast

Friday, Dec. 20

☐ Acting CAO met with key senior staff: EOC roles and responsibilities, and schedule and plan for activation of EOC were established

Saturday, Dec. 21

Staff closely monitored the weather situation in Markham from the evening of Dec. 21 through early morning Dec. 22



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Emergency Operation Centre Activation

Sunday, Dec. 22

- □ 2:24am Fire staff conveyed information from PowerStream identifying significant power outages in York Region
- 9:46am Staff in place at the EOC; CAO Andy Taylor and Mayor Scarpitti were notified and arrived onsite later in the day
- 1 12:30pm EOC activated Level 1
- ☐ 1:23pm First report to Mayor and Council issued

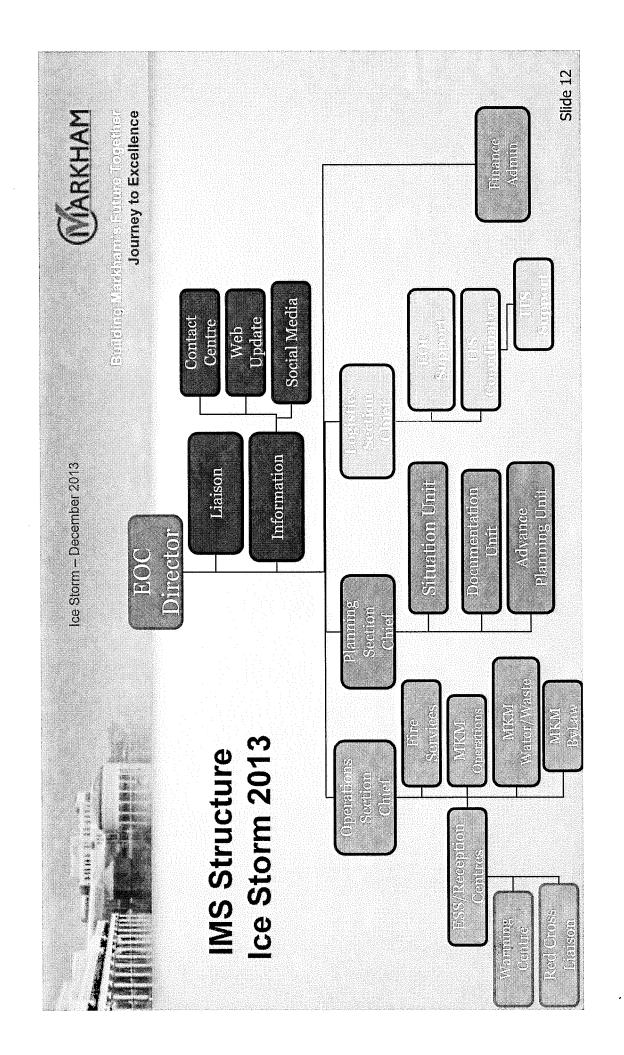


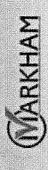
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Journey to Excellence

What is the Emergency Operations Centre?

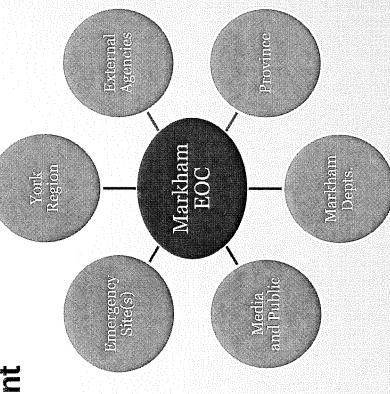
- □ Central facility
- ☐ Centre of operations for City staff during an emergency
- support and provision of additional resources required ☐ Responsible for the direction, control, coordination, during an emergency
- ☐ Strategic in nature





Heing Markham's Future Together Journey to Excellence

Emergency Management Interface in Markham



Slide 13



Stuffeling Mankham's Fefune Trogether Journey to Excellence

Operations - Markham Fire

- Dec. 21 the Alarm Room experienced an increase number of storm related calls.
- While the Contact Centre was closed Dec. 21 & 22, Alarm Room received 228 phone inquires (normal would be 15-20 calls)
- responded to 371 incidents Dec. 22 & 23, 144; Dec. 23-30, 227 Dec. 21 – 30: Markham Fire & Emergency Services (MFES) (double the average)
- 371 incidents including electrical wires down/arcing, trees down/on wires & fire alarms activated due to frozen sprinkler pipes

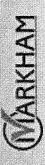


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Operations - Markham Fire cont'd

- □ 11 reported fires
- Responded to 42 Carbon Monoxide calls (double the 4-year average)
- No increase in motor vehicle collisions
- During the ice storm, travel time to emergency incidents increased due to road conditions and uncontrolled intersections
- □ Visited vulnerable areas, senior facilities, special needs housing and high rises





Eviliating Menditatin's Fitting Together Journey to Excellence

Operations Response – Forestry, Parks & Roads

Initial response – December 22

- ☐ 35 hired loaders immediately dispatched with most roads opened by 10pm
- In-house and contract forestry crews dispatched to deal with emergency tree safety issues - approximately 1500 work orders generated in first 24 hours
- ☐ Commenced procurement efforts to secure additional forestry crews

Prioritized work plan – December 23-present

- All in-house and available contracted forestry crews clearing overhanging limbs and obstructions on City road network
- Priority given to City's primary road network (school zones, transit routes, etc.), which was completed on Dec. 27



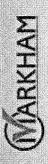
Suffering Markham's Future Together Journey to Excellence

Operations Response – Forestry, Parks & Roads

Roads Mapping - Dec. 27-29

- inventory of damaged trees on all City roads and manage data conversion and GIS Cross-commission staff team (Bylaw Enforcement and ITS) engaged to gather map production - completed Dec. 29
- Initially identified 6,000 damaged street trees (approximately 33% are ash trees)
- severity of tree damage; excellent tool utilized for priority work planning and resource Grid-based mapping and damage assessments allowed staff to identify location and deployment





Building Mankham's Future Together Journey to Excellence

Operations Response – Forestry, Parks & Roads

Parks Mapping – Jan. 9-24

- Handheld units to be deployed to record location and damage to park trees
- Park recovery plan (scope and financial impact) to be developed as soon as data collection and mapping completed

Response Plan – Anticipated completion 7-9 weeks

- Significantly greater number of damaged trees than originally reported
- 16 aerial crews addressing overhanging limbs, obstructions and removals with anticipated completion by Jan. 18
- 8 ground crews chipping and disposing of large tree debris
- Once all overhanging limbs and removals completed, Operations will transition aerial crews to ground crews, maintaining 24 crews until cleanup completed
- 6 Miller Waste units secured to collect and dispose of smaller tree debris each Monday

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Stiffeling Markhelm's Future Hogeliter Journey to Excellence

Operations Recovery – Forestry, Parks & Roads

Recovery Plan - Communications Updates

- ☐ Phase 1
- Weekly updates will be provided to Councillors on work completed to-date and work plans (by grid zone) for the following week
- Weekly updates will be posted on portal for residents

Removals and Replanting Plan – 2014-2016

- Undertake assessment of total trees lost within road allowances and parks
- Prepare update report and work plan to present to General Committee in Q2 2014
- Complete removals and stumping throughout remainder of 2014
- Identify locations and develop tree replacement plan for 2014-2016



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Operations Response - Technical Services

Private Property Tree Removals

Expedited Tree Permit Process for Emergency Tree Removals

- ☐ In the event a whole tree has failed as a result of the ice storm and its immediate clean up/removal is critical, then the resident should:
- take multiple photographs of the downed tree in situation; and
- submit an application along with the photographs (online application is easiest way);
- the resident may then proceed with the cleanup and the permit will be issued after the



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Operations Response - Technical Services

Private Property Tree Removals cont'd

Tree Permit Process for Trees Injured by the Ice Storm

- Trees under 20cm in diameter do not require a permit to remove
- The resident should retain an ISA (International Society of Arboriculture) certified Arborist to remove any broken, cracked or hanging branches still in the tree.
- their property now poses an unacceptable risk of whole tree failure, or is not biologically or If after the storm injury to the tree has been cleaned up, the resident believes the tree on aesthetically retainable, they should submit an application and it will be inspected/addressed as soon as possible.



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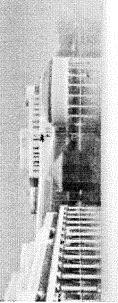
Operations Response – Technical Services

Private Tree Debris and Removal - Tree Debris Pick-up

- □ Residents should put all their tree debris twigs, branches and limbs only out on the curb as soon as possible so that the City can assess the amount of debris to be collected and continue the collection process
- □ It is the responsibility of the homeowner, or their contractor, to dispose of all debris from full private tree removals - the City will not pick up full private trees
- □ Residents may also take tree debris to York Region's

Bloomington Yard Waste Depot 1351 Bloomington Road

Richmond Hill, ON





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Operations - Water

☐ Reservoir water levels

- Noticeably low water levels at the Markham reservoir Monday morning Dec. 23 (pump interruptions from Toronto)
- Region corrected levels by afternoon of Dec. 23

□ Sewer pumping stations

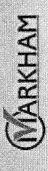
All sewer pumping stations were physically inspected by City staff to ensure normal operation

□ Emergency calls / follow up calls

Staff responded to 27 emergency calls; 17 were storm related

□ Staff response

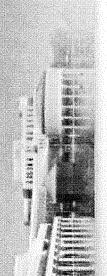
Anticipate follow up calls as residents return from extended vacations

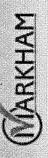


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Operations - Waste

- scheduled, in Thornhill Collection Areas A & B (between Yonge St. & Warden Ave. – east/west and Steeles Ave. & 19th Ave. – north/south) Material collection by Miller Waste commenced Tuesday, Dec. 24, as
- Low wires and blocked roads restricted access to a small percentage of streets
- Impacted residents were advised to bring material in until next scheduled collection day
- Miller provided special collection services on Monday, Dec. 30 for waste left out on inaccessible streets

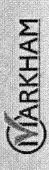




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Operations - Warming Centres

- ☐ Two "pet friendly" 24/7 Warming Centres, supervised by Recreation Staff, were mobilized quickly and well used
- Milliken Mills CC: Sunday December 22 Friday December 27
- Thornhill CC: Monday December 23 Sunday December 28
- City provided mats, food and refreshments.
- Red Cross provided cots and blankets
- All Community Centres were well used for technical connection, showers and warming
- Warming Centres answered calls from Tuesday, Dec. 24 at 7:00pm to
- Friday, Dec. 27 at 8:00am to ensure residents could speak directly with a staff
- person if they had a storm-related issue



Eutlding Mankham's Future Pogether Journey to Excellence

Warming Centre Usage

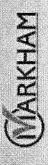
Dray Kes Thornhill CC Normal CC CC CC CC CC CC CC	Day Residents II CC Milliken Mills CC 35 36 20 20 10 10	Overnigh Thornhill CC 12 7 4	Owernight Residents nhill CC Milliken Mills CC 12 30 14 19 7 8 4 1 0 n/a
	9/4		n/a



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Information (Contact Centre)

- ☐ Contact Centre was opened Sun., Dec. 22 at 9:30 am and remained open 24 hours a day until Tues., Dec. 24
- Contact Centre staff continued to check messages once an hour, 24 hours a day, until reopening Fri., Dec. 27 ٥
- Following close of business on Dec. 27, as well as on Saturday, Dec. 28 and Sun., Dec. 29, staff continued to check voicemails once an hour, 24 hours a day.
- Contact Centre staff worked a total 530 hours Dec. 22-Dec.30 П

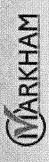


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Information (Contact Centre)

Phone Statistics	Time Frame	Ice Storm 2013
Sun., Dec. 22	9:30am -12:00am	777
Mon., Dec. 23	12:01am-12:00am	874
Tues., Dec. 24	12:00am -7:00pm	1,538
Fri., Dec. 27	8:00am- 5:00pm	948
Mon., Dec. 30	8:00am- 5:00pm	1,063
Total:		5,200

Slide 28



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Information (Contact Centre)

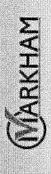
Ice Storm 2013
1,837
Operations road/streets not properly plowed/icy 345 road conditions
Waste Management missed garbage collection 81
32
29
Waterworks sewer backup/water infrastructure 24 check/locate
19
9
2
2,387



Building Markham's Future Together Journey to Excellence

Communications Environment

- Pre-storm communications important as early warning to residents
- Emergency communications needs to be timely, accurate and consistent
- Local media outlets limited and major media a challenge (Toronto centric)
- Tactics need to be flexible & responsive based on changing nature and severity of emergency (i.e. length/complication of the outages)
- Every emergency is different tactics need to respond accordingly
- New technologies present new communications opportunities
- Each emergency provides new learnings

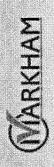


Suitting Markham's Future Tegether Journey to Excellence

Communications

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eNews					Slide 31
On-hold / After-hours Messaging			Warming Centres Open	Waste Collection Service Operationa	
Robo Call from Mayor					
Printed Public Notice				Hand delivered to homes by Bylaws, Fire & Waterworks staff	
Web Updates	2		2	2	
Media Interviews with Mayor			News Talk 1010 105.9 FM CP24	640 News 680 News CP24 105.9FM	640 News 680 News CP24
- Media Updates		7	2	2	
Date Tweets Face Council 1 book Updates 1		-	2	4	2
Face book Posts	2	° • ∞	က	7	
Tweets	2	20	8	50	2
Date	Dec. 19-21	Dec. 22	Dec. 23	Dec. 24	Dec. 25



Emphine Lendam's Forme Toosaher.
Journey to Excellence

Storm Response Metrics cont'd

(0) E	Tweets	Partic	Equinoil Traffica	Megle	Media	Web	Printed		Omshold / After- ho lirs	Simpline
		Si Sterije.			with Mayor		Notice	Mayor	Messaging	
Dec. 26	23	9	2			2				
Dec. 27	26	10	2					75,000	The second secon	-
Dec. 28	27	10	2			-				
Dec. 29	30	7	2	•					Standard Storm	
									Service Level	
Dec. 30	œ	0		V	640 News 680 News	<u> </u>				<u></u>
Dec. 31	17	2		· ·						
TOTAL	235	51	.	13	12	14	-	ta (Lando Para Para Panasana)		7
										Slide 32



Journey to Excellence

Communications

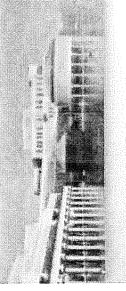
Storm Response Results

Twitter

- □ 392 new followers since Dec. 19; Total followers = 3347
- ☐ City ice storm tweets/re-tweets potentially reached 883,800 people

Facebook

- 46 new likes since Dec. 19: Total likes = 946
- ☐ City ice storm Facebook posts potentially reached 20,100 people
- Markham Facebook page received 63,500 impressions from 11,400 Facebook





Ice Storm - December 2013

Stillding Markham's Future Together Journey to Excellence

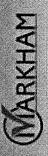
Financial Implications

The preliminary estimated costs associated with the ice storm are categorized into two phases:

A. Response

B. Recovery





Journey to Excellence

Financial Implications A. Response

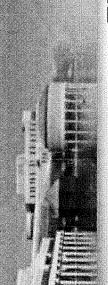
- 1. Emergency Forestry Crews
- 2 Existing Markham Crews
- □ Contracted Crews 24 crews in total for 7 to 9 weeks
- Weeks 1 to 3: 16 Aerial Crews to remove hazardous trees/tree limbs and 8 ground crews to remove tree debris on the roads/sidewalks
- Weeks 4 to 6 (may be extended to 9 weeks if required): 24 Ground Crews to continue removing tree debris on the roads/sidewalks σ.



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Financial Implications A. Response

- 2. Personnel Costs
- ☐ 1 Additional Supervisor to manage contracted crews for 7 to 9 weeks
- □ Overtime by existing union Staff and other personnel costs (Parks, Recreation, Fire, Contact Centre, Legislative Services)
- 3. Special Debris Collection Service Miller Waste
- Separate collection service to pick up tree branches, twigs and limbs on Mondays starting January 6th for at least 6 weeks
- 4. Other Costs (Loaders, Wood Chip Disposal and Equipment)



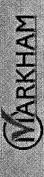


Financial Implications A. Response

Item# Item	Item	Details	\$ in millions	ons
1a.	1a. Contracted Aerial Crews	16 crews at 60 hours/week/crew for 3 weeks at average rate of \$236/hour/crew	0.7	
<u>(a</u>	Contracted Ground Crews	8 crews at 60 hours/week/crew for 3 weeks at average rate of \$231/hour/crew	0.3	
1 b.	Contracted Ground Crews	24 crews at 60 hours/week/crew for 4-6 weeks at average rate of \$219/hour/crew	1.3 to	1.9
7	Personnel	Additional supervisors 7-9 weeks, overtime & other personnel costs	0.1	
r)	Special Debris Collection	6 trucks at 10 hours per week for 7-9 weeks at \$210/hour/truck	0.1	
4.	4. Other	Loaders, Wood Chip Disposal & Equipment	0.1	
relimina	Preliminary Estimated Costs		2.6 to	3.2

Preliminary Estimated Clean Up Costs Ranges From \$2.6M to \$3.2M

Slide 37



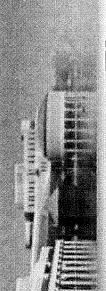
Financial Implications B. Recovery

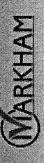
Stumping & Replanting of Damaged Trees and Removal & Replanting of Parks Trees

- ☐ Initial assessment estimates 10,000 trees are damaged
 - Lost is \$700/tree to \$1,000/tree
- ☐ Costs are approximately \$7.0M to \$10.0M

Preliminary Estimated Recovery Costs is \$7.0M to \$10.0M

Slide 38





Journey to Excellence

Financial Implications C. Cost Summary

Response

\$2.6M to \$3.2M

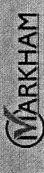
Recovery

\$9.6M to \$13.2M

\$7.0M to \$10.0M

Total

Preliminary Estimated Costs Ranges From \$9.6M to \$13.2M



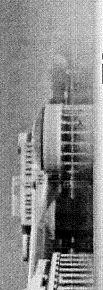
Financial Implications D. Funding

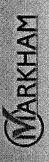
Preliminary estimated costs of \$9.6M to \$13.2M

Ash trees represent 33% of the damaged trees; hence 33% of the total costs (\$3.2M to \$4.4M) will be funded from the EAB program

Funding from the Trees for Tomorrow program for the next 7 years at \$0.12M/year totalling \$0.8M will be committed as a funding source

Remaining preliminary funding requirement of \$5.6M to \$8M





Financial Implications D. Funding

	\$ in millions	Suc
Estimated preliminary costs	9.6	13.2
Less: 33% EAB funding	(3.2) - (4.4)	(4.4)
Subtotal	6.4 -	8.8
Less: Trees for Tomorrow funding	(0.8) - (0.8)	(0.8)
Remaining preliminary funding requirement	5.6 - 8.0	8.0



Financial Implications D. Funding

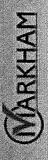
Remaining preliminary funding requirement of \$8M

Funding Source: Corporate Rate Stabilization Reserve

The purpose of the reserve is to maintain the City's cash flow, minimize need for short-term borrowing, fund urgent expenditure requirements, minimize changes in the property tax rate and to smooth out fluctuations due to one-time expenditures. Based on Government Finance Officer Association's (GFOA) recommended best practices, the reserve balance should be maintained at a level equivalent to 15% of the local tax revenues, \$18.7M based on 2013 local tax revenues

Current reserve balance is \$18.0M





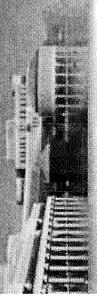
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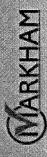
Financial Implications D. Funding

Impact to the Corporate Rate Stabilization Reserve

\$ in millions	18.0	(2.0)	16.0	(8.0)	8.0
	Reserve balance as of Nov. 2013	Projected 2013 Y/E deficit	Subtotal	Remaining ice storm costs	Projected reserve balance

Based on a 0.5% tax rate increase/year, it will take 5 years to replenish the reserve. To achieve 15% of local tax revenues (\$18.7M), the reserve requires \$10.7M.





Ontario Disaster Relief Assistance Program

The Ontario Disaster Relief Assistance Program (ODRAP) is intended to assist those whose essential property has been extensively damaged as a result of a sudden, unexpected natural disaster.

ODRAP contains:

☐ Public component: Financial assistance may be provided by the province to affected municipalities for disaster response and recovery

damage public infrastructure to pre-disaster condition, when the cost of the restoration The program provides financial assistance within the declared disaster area to restore exceeds the financial capacity of the affected municipality and community at large. ODRAP is not a substitute for adequate insurance coverage and does not provide full cost recovery

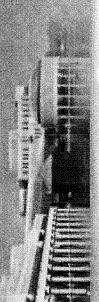
Slide 44

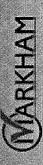


Request for a Disaster Declaration

Some examples of "Disaster Areas" not declared by the Province Vaughan tornado in 2009 Markham flood in 2005

Some examples of "Disaster Areas" declared by the Province Ottawa/Quebec ice storm in 1998 Peterborough flood in 2004 Goderich tornado in 2011



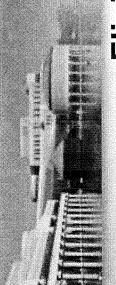


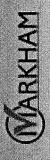
Request for a Disaster Declaration

assistance of ODRAP and forward it to the Minister of Municipal Affairs and Housing within 14 Municipal Council must adopt a resolution requesting a disaster declaration for the public working days of the onset of the disaster (by January 14, 2014). As well, a municipal disaster information report, containing an estimate of damage losses, must be submitted

Resolution

Municipal Affairs and Housing to declare the City of Markham a disaster area for the purposes of has experienced substantial damage to municipal property and infrastructure and has reported "That the City of Markham recently experienced an ice storm from December 21/22, 2013 and losses of public damage, the Council of the City of Markham hereby requests the Minister of





Eligible Public Losses and Costs

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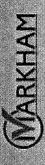
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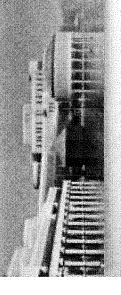
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Ineligible Public Losses and Costs

Examples of ineligible public losses and costs under ODRAP:

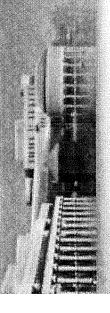
- □ Regular salary;
- Insurance deductibles;
- Municipal equipment costs (other than as described on the previous slide);
- Additional costs to repair or improve structures of infrastructure beyond predisaster condition; and
- Lost revenues.





Lessons Learned

- The City's Emergency Operations Centre & Incident Management System worked well.
- Making "pet friendly" Warming Centres available quickly during a winter weather event worked well. α
- Strong liaison relationships with external agencies are critical in emergencies.
- Miller works yard requires uninterrupted power source.
- Early deployment of loaders was most effective and timely use of resource to open road network. ΓĊ.
- Review EOC Council liaison for future extreme weather events/emergencies (to disseminate & receive information) 6



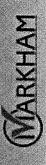


Journey to Excellence

Lessons Learned

- Timely & accurate communication of information to the public is critical.
- Impact of traffic signals being out was minimized due to lower holiday traffic volumes.
- Traditional forms of communication are insufficient during an extended and wide-spread power outage. တ
- Public education needed to teach residents how they can make their private property more resilient.
- Locating vulnerable residents is difficult.
- 12. Improve linkages with community and faith groups.
- efforts (precise location(s) of power outages/number of homes impacted, etc). Accurate Data/Analytics is critical to informing the City's emergency response

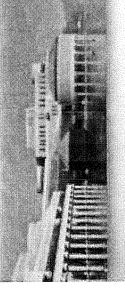




Recommendations

Emergency Operations Centre (EOC)

- located at PowerStream EOC during major & prolonged outages Discuss with PowerStream possibility of having City staff person
- Formalize liaison function with partner agencies (e.g. York Region, York Regional Police & utilities) ٨i
- Train additional City staff in EOC operations & create expanded roster of staff available over extended periods ന്





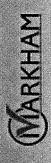
Recommendations

Environmental:

Review opportunities to improve community resiliency:

- Continue working with neighbouring municipalities on extreme weather and climate change adaptation
- Review how Markham District Energy's Combined Heat and Power (CHP) could supply power to their service areas and City assets
- Evaluate permanent, full back-up power for strategic City assets
- Understand how PowerStream's smart-grid initiatives could increase energy resiliency in extreme weather



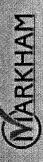


Recommendations

Communications:

- Deliver further public education on emergency preparedness
- Acquire Contact Centre software to allow for remote call answer
- Investigate feasibility of public notification software for use in future weather events/emergencies
- Use mobile roadside signs, City vehicles & signage at major retail outlets (bulletin boards) to deliver key information to residents 4.





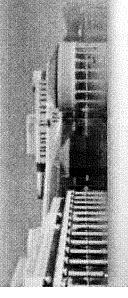
Recommendations

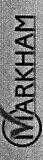
Communications cont'd:

- Utilize electronic information boards at City facilities across the community and investigate centralized control of programming . ئ
- Evaluate installation of electronic information boards at City Fire Stations ဖ

Community Outreach:

information generated by the City (e.g. ratepayers' associations, faith Reach vulnerable residents by establishing a formal network of community groups and organizations to share/extend reach of groups, Mayor's youth task force, youth councils)





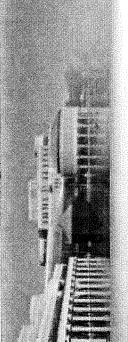
Recommendations

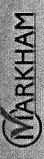
Operations: Restoring the Tree Canopy

Staff report back in April 2014 with an update on Ice Storm Recovery recommendations to reduce future tree loss due to extreme weather efforts, including an overall urban forestry plan to address storm impacts on the City's tree canopy, and further analysis and

Proactive Strategies for Protecting Continuity of Hydro Service

Staff explore with PowerStream the feasibility, costs and funding sources associated with burying major feeder power lines in Markham





Recommendations

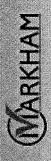
Resources

protocols and enter into additional agreements for assistance during Expand the scope of City's current reciprocal aid agreements or extreme weather events or other times of need

Technology

Implement the planned relocation of the Data Centre from Civic Centre to 8100 Warden Ave for uninterrupted power



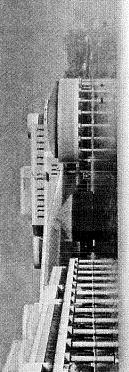


Discussion



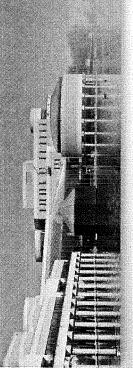
Ice Storm Response & Recovery April 28, 2014 Plan Update

Presentation to General Committee



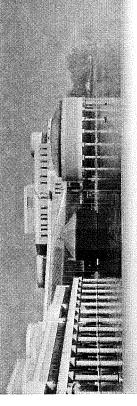
Agenda

- Status of on going Ice Storm Clean Up Efforts
- City Owned Road Allowances
- Parks, Facilities and Cemeteries
- Watercourses and Natural Areas
- ➤ Tree Removals and Stumping Program
- ➤ Tree Replanting
- ▼Communications



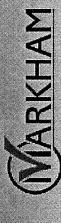
Ice Storm Cleanup Efforts Road Allowances

- Crews have completed boulevard tree cleanup and two rounds of debris collection and disposal
- Tree removals ongoing with anticipated completion by May 16
- Estimated total of 1,200 boulevard trees removed
- Homeowners instructed to move all tree debris to boulevard by April 11, 2014
- Crews will complete one more round of boulevard cleanup commencing April 14
- Homeowners responsible for disposal of private tree debris not collected through this final round. Smaller branches may be collected through City's yard waste collection program
- Estimated cost of boulevard cleanup efforts to date \$2.7M



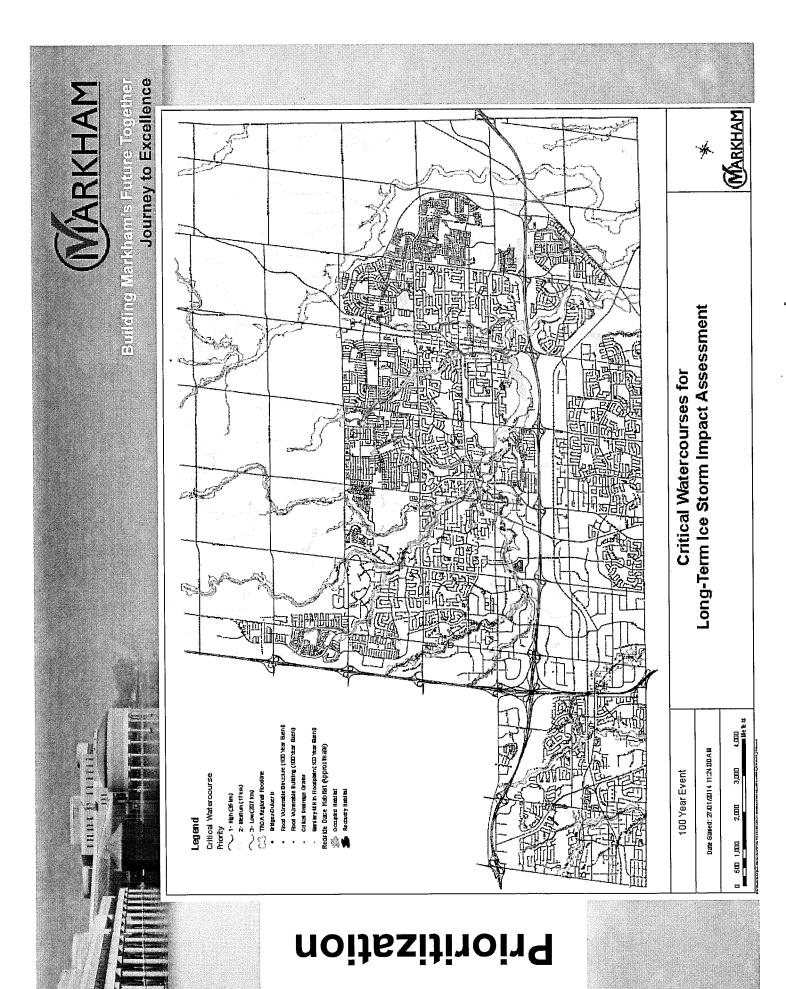
Parks, Facilities & Cemeteries Ice Storm Cleanup Efforts

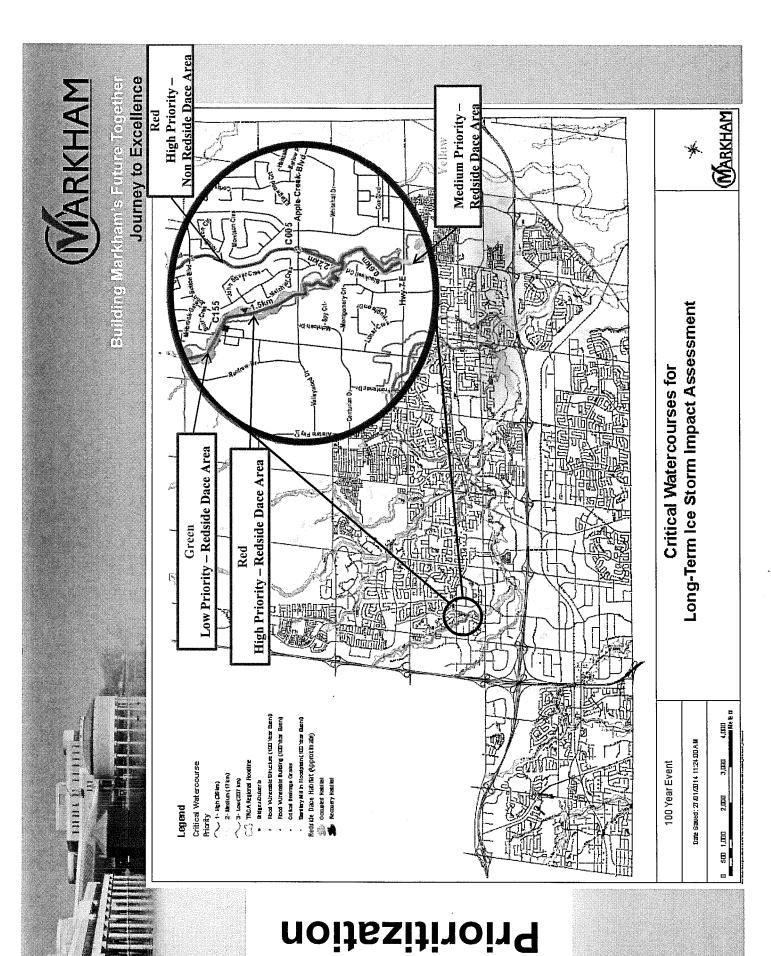
- City staff are completing damage assessments in parks with most significant tree damage
- Currently 8 contracted crews deployed to complete City wide park cleanup efforts
- Cleanup efforts ongoing to be completed by Aug 31
- Tree cleanup in cemeteries completed in early March
- Community Centres and surrounding parks completed in March, anticipate completion of remaining facilities by April 30
- Estimated cost for park, facility and cemetery cleanup efforts is



Watercourse Assessment and Approval Ice Storm Cleanup Efforts

- Stantec Consultant was retained in January 2014 to complete an assessment of the impact of the December 2013 ice storm on our watercourses.
- Cost of the assessment is \$87,545.
- For efficiency, watercourses were initially prioritized as
- □High priority areas (Red) immediate cleanup is required ☐Medium priority areas () — cleanup A.S.A.P. is required
- ULow priority areas (Green) lowest risk and immediate action not required

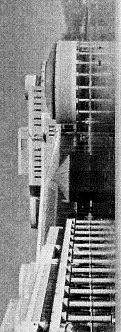








- High priority areas were selected based on:
- ☐ Age of development/infrastructure (e.g. Unionville vs. Cornell)
- □ Tree density in the flood plain
- ☐ Flood prone areas (based on historical records, service calls. etc.)
- □ Shape and hydraulic setup of the watercourse including downstream bridges/culverts
- The prioritization and data collection methods were discussed Authority (TRCA) and Ministry of Natural Resources (MNR) with, and approved by the Toronto Region Conservation prior to commencement of the data collection.
- Ten (10) critical watercourse crossings were identified for immediate cleanup.



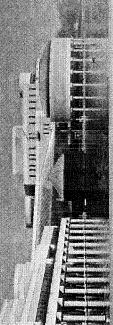


Watercourse Assessment and Approval **Ice Storm Cleanup Efforts**

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- ☐ Staff met with the TRCA and the MNR to determine the project scope
- TRCA & MNR approvals for the 10 critical culverts were received expeditiously (late February)
- □ Thornhill Area TRCA & MNR approvals were received in a reasonably short time (early March)
- ☐ High priority (Red) areas Approved by TRCA. MNR provided partial approval (approx. 75%) and continues its review and approval
- completed and provided to the TRCA and MNR on March 14th. No approval □ Medium priority () and Low priority (Green) areas – Assessment has been received to date
- ☐ Due to legislated requirements, we cannot proceed with cleanup efforts of the remaining areas until approved by TRCA & MNR- lower risks areas

Journey to Excellence



Watercourse Assessment and Approval Ice Storm Cleanup Efforts

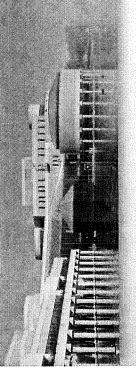
- MNR extended debris removal deadline from March 31 to April 15.
- No debris removal between April 15 June 1 (fisheries window).
- · Completed high priority areas
- areas to commence after July 1, subject to TRCA and MNR Additional removal work for the Medium and Low priority approvals.
- Estimated cost for the watercourse debris removal program -\$600,000



Journey to Excellence

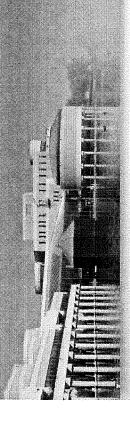
Ice Storm Cleanup Efforts Watercourses

- watercourses. All work must fall within the following parameters as set out by the 4 contracted crews deployed mid-March to commence cleanup efforts in
- ☐ Only trees and debris that may potentially interfere with flood flows, or pose a risk to infrastructure (e.g. culverts), public safety or public property will be removed;
- Debris accumulation is the result of recent flooding or storm events, or there is no accumulation of sediment behind the debris;
- Vehicular or construction equipment access and operation will be restricted to existing roadways, or formal trails of sufficient width to accommodate access;
- Only small hand-tools and small machinery (i.e. chainsaws) will be used in natural areas;
- Access to the bed and banks will be on foot only to facilitate cutting and collection as
- Root structures within the banks will remain in place and no grubbing of the banks will occur;
- The flow of water within the watercourses will remain uninterrupted at all times;
- Debris will be removed from the site; and
- All of the works, including the removal of trees from the site, will be completed by April 15, 2014 or between July 1 and September 15, 2014.



Tree Removal & Stumping Program

- Completion of remaining tree removals by August 31
- Tender for boulevard stump removals has closed with bid submissions under review and evaluation
- Contract split into 4 areas across the City. Contractors required to complete stump removals in bid areas by September 30
- Stump removals in parks to be completed by City staff
- Estimated start date May 15



Risk Management – Tree Health Assessment

Benefits of a tree risk strategy include:

- It provides a systematic approach to identifying high risk trees and initiates their timely removal or corrective treatment
- A greater degree of management efficiency and flexibility
- Lower frequency and severity of accidents, injury and damage
- Fewer and less expensive claims and legal expenses
- Healthier and longer-lived trees maximizes tree benefits
- Fewer trees removed annually enhancing maintenance of tree cover
- Reduced liability / increased environmental and social benefits



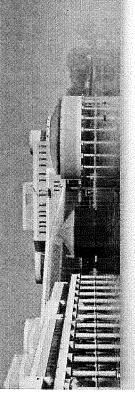
Risk Management – Tree Health Assessment

Cost to implement program

- Preliminary estimate for consultant to undertake City wide risk assessment - \$600,000
- Estimated cost to undertake in-house
- ☐ 7 tough book laptop computers \$35,000

□ 7 – 115 day staff (graduate arborists) including salary and benefits - \$145,000

- tough pook laptop computers \$33,000
 4 rental vehicles for 6 month period \$25,000
- Total estimated in-house cost \$205,000



Replanting Strategy

- Street tree removal inventory to be completed by May 31. Park tree removal inventory to be completed by July 31
- Staff will engage Consultant to undertake a tree replacement strategy including:
- biodiversity, healthy growth through soil testing, and the streetscape □ Comprehensive street by street replanting plan which ensures considerations.
- Preferred 60 mm diameter trees for boulevards.
- Urban Forest Replanting plan which presents several options based on tree availability and costs.



Replanting Strategy

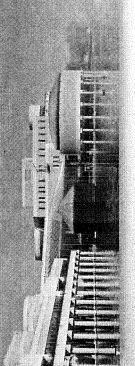
- 2014 Replanting Plan
- Commitment to residents to plant approximately 300 trees in spring 2014 to replace boulevard trees removed in 2013
- Spring ice storm replanting efforts will be focused on 'back-lot' roads such as Denison and Bullock - estimate 300 trees
- □ Fall replanting efforts focused on parks areas
- replacements with highest priority given to streets that 2015 program will focus on ice storm/EAB street tree suffered greatest damage.



ing Markham's Future Together Journey to Excellence

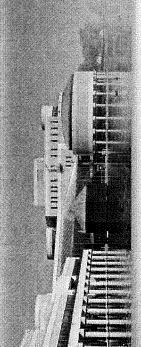
Financial Implications

- Response Cleanup Efforts
- □ Road Allowances anticipate total \$2.7M to complete cleanup to mid-May
- □ Parks, Facilities & Cemeteries anticipate total \$1.5M to complete. Cleanup ongoing to be completed this summer.
- Balance of cleanup to be completed between July 1 and September 30 ■ Watercourses – total budget \$0.6M. Approximately 50% spent to date.
- Recovery Strategy
- ☐ Removals and stumping initial estimate/contract award approximately
- □ Risk Management in-house tree assessment approximately \$0.2M
- □ Replanting Estimate approximately 5000 trees at \$400 \$500/tree for total estimated cost of \$2.0 to \$2.5M.
- □ Total estimated cost of storm response and recovery in the range of \$7.5 to



Ontario Ice Storm Assistance Program Program Timeline

- May 2014 Polesco of Drogram Guide
- May 2014 Release of Program Guidelines.
- Detailed guidelines, instructions, expression of interest forms and claim forms will be distributed to municipalities
- June 16, 2014 Deadline for Expression of Interest Submissions
- Submit an expression of interest with evidence to support ice damage and estimates of ice storm costs incremental to regular budgets.
- Confirm that authority is delegated to the treasurer to submit claims on behalf of the municipality
- June 22, 2014 Expenses can be incurred up to June 22, 2014 to be considered eligible (that is 6 months after the ice storm)
- August 31, 2014 deadline for Claim Submission
- supported with complete and detailed documentation including copies of All claims must be verified and signed by the municipal treasurer and invoices, overtime sheets and other materials.



Building Markham's Future Together Journey to Excellence

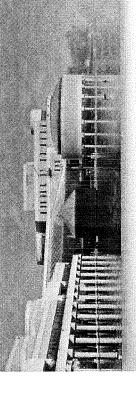
Overview of Eligible and Ineligible Costs

Eligible Costs

- Incremental costs of immediate emergency response, such as setting up warming centres.
 - Clean-up of debris including fallen trees and broken branches on roads, sidewalks and frequently travelled routes to protect public health and safety.
 - Incremental costs incurred to provide the essential services, equipment, material and labour required to sustain the operability of public infrastructure.
- Incremental costs of staff for overtime work and for temporary contract staff to manage ice storm response and clean-up.
- Repairs or replacement to pre-disaster condition of municipal and conservation authority infrastructure and related equipment damaged as a result of the ice storm.
 - / Incremental costs of appraising and estimating

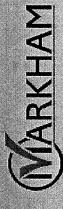
Ineligible Costs

- * Regular public sector salaries.
- Normal operating expenses, including maintenance budgets of those involved in the response.
- * Emergency service costs related to routine incident management functions, as opposed to incremental costs of responding to broader disaster consequences.
- * Tree replacement or tree canopy restoration.
- Costs of restoring or replacing items that were insured or insurable. Under the program,
 "insurable" means that insurance coverage for a specific hazard for the municipality or conservation authority was available in the area at reasonable cost.
- Loss of income, wages, profits and/or revenue, loss of opportunity or inconvenience.
- Costs incurred by local electricity distribution companies



Next Steps / Recommendations

- Complete road tree debris cleanup efforts May 16
- Complete tree removals and cleanup in parks and watercourses September 2014
- Update inventory of tree removals for roads and parks July 2014
- Complete City wide stump removal program December 2014
- Tree replanting strategy for roads and parks to be completed by August 31
- estimated cost of \$205,000 to be completed by December 2014 Undertake in-house tree risk management assessment at an
- Continue to implement communication plan



Building Markham's Future Together Journey to Excellence

Attachment C

RESOLUTION OF MARKHAM CITY COUNCIL – JANUARY 14, 2014

REQUEST A DISASTER DECLARATION FOR THE PUBLIC ASSISTANCE OF ONTARIO DISASTER RELIEF ASSISTANCE PROGRAM (7.0 & 5.7)

Whereas the City of Markham recently experienced a severe ice storm from December 21-22, 2013, the weather effects of which continued until late December 2013; and,

Whereas the City and thousands of its residents have experienced substantial damage to municipal and private property and infrastructure which will have a long term financial impact; and,

Whereas other municipalities in the Greater Toronto Area ("GTA") similarly experienced the effects of the severe ice storm on municipal property and infrastructure;

Now therefore be it resolved:

- 1) That the staff report dated January 14, 2014 entitled "Request a Disaster Declaration for the Public Assistance of the Ontario Disaster Relief Assistance Program (ODRAP)" be received; and,
- 2) That Markham Council request the Minister of Municipal Affairs and Housing ("MMAH") to declare the City of Markham a "disaster area" for the purposes of the Ontario Disaster Relief Assistance Program (ODRAP); and,
- 3) That the Provincial Government be requested to provide special funding related to the severe ice storm from sources other than ODRAP in an effort to reduce the financial impact of the ice storm on a number of Greater Toronto Area municipalities including Markham and its residents; and,
- 4) That the Federal Government be requested to provide special funding related to the severe ice storm in an effort to reduce the financial impact of the ice storm on a number of Greater Toronto Area municipalities including Markham and its residents; and further,
- 5) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Carried

Kimberley Kitteringham

City Clerk

Corporation of the City of Markham

Attachment 'D'



Report to: Council Report Date: January 14, 2014

SUBJECT:

Request a Disaster Declaration for the Public Assistance of Ontario

Disaster Relief Assistance Program

PREPARED BY:

Andrea Tang, Manager of Financial Planning

RECOMMENDATION:

Whereas the City of Markham recently experienced a severe ice storm from December 21-22, 2013, the effects of which continued until late December 2013; and,

Whereas the City has experienced substantial damage to municipal property and infrastructure; and,

Whereas other municipalities in the Greater Toronto Area ("GTA") similarly experienced the effects of the severe ice storm on municipal property and infrastructure;

Now therefore be it resolved:

- 1) That the staff report dated January 14, 2014 entitled "Request a Disaster Declaration for the Public Assistance of the Ontario Disaster Relief Assistance Program (ODRAP)" be received; and,
- 2) That Markham Council request the Minister of Municipal Affairs and Housing ("MMAH") to declare the City of Markham a "disaster area" for the purposes of the Ontario Disaster Relief Assistance Program (ODRAP); and,
- 3) That the Province consider providing funding related to the severe ice storm costs from sources other than ODRAP given the extent and magnitude of the damage experienced in the City of Markham; and further,
- 4) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

To obtain Council approval to make a request to MMAH to declare the City of Markham a "disaster area" for the purposes of ODRAP.

BACKGROUND:

The City of Markham endured an extreme winter storm from December 21-22, 2013. Staff monitored the weather situation closely beginning December 18, 2013, and Markham's Emergency Operation Centre was activated on December 22, 2013.

Freezing rain and ice pellets led to ice accumulation of approximately 1 inch, resulting in power outages due to fallen trees and tree limbs onto the overhead power lines. At the peak of the power outage period, as many as 17,200 Markham PowerStream customers were without power. Residents were displaced from their homes, or stayed in their homes in uncomfortable circumstances. Businesses were impacted from the disruptions, in some cases were rendered in-operable due to power outage.

Despite the extreme weather conditions, Markham Forestry crews and PowerStream crews worked around the clock to mitigate and restore the situation. Markham Forestry crews were deployed to assist PowerStream in clearing trees that were blocking road access, as well to deal with emergency tree safety issues. It is estimated that approximately 10,000 trees were damaged during the storm.

Preliminary estimated response and recovery costs ranges from \$9.6M to \$13.2M. Further updates regarding the total costs of the ice storm will be presented to General Committee on a regular basis.

A comprehensive presentation from City Staff and PowerStream Staff was made to General Committee on January 8, 2014 (Appendices A and B).

DISCUSSION:

The Province of Ontario administers ODRAP. The purpose of the program is to assist those whose essential property has been extensively damaged as a result of a sudden, unexpected natural disaster.

The Program contains a public component that offers financial assistance to affected municipalities for disaster response and recovery. The Program provides financial assistance within the declared disaster area to restore damaged public infrastructure to pre-disaster condition, when the cost of the restoration exceeds the financial capacity of the affected municipality and community at large.

In order to be eligible for ODRAP, the MMAH must make a declaration of a disaster area. To make a request, Markham Council must adopt a resolution requesting a disaster declaration for public assistance and forward this resolution to the MMAH within 14 working days from the date of the disaster. Staff has received confirmation from MMAH that a request from the City is required by January 14, 2014.

The public component of ODRAP provides assistance to municipalities when damage is so extensive that it exceeds the capacity of the affected area to manage. Municipalities within the declared disaster area may receive repayment and/or reimbursements of up to 100 percent of the eligible costs for uninsured municipal damage associated with the disaster.

Examples of eligible losses and costs under the public component include:

Clearing and	removal o	of debris	and	wreckage,	including	removal	of trees	and	limbs	if
public safety	is endange	ered;								

Page 3

	Overtime for employees and those hired for disaster for regular employees deployed for disaster response Incremental administrative costs related to disaster response Activation of the municipal emergency operations confunctional owned equipment costs or equipment rent Emergency communication; Repair and restoration to pre-disaster condition infrastructure); and Evacuation and shelter of people and animals, included	e/relief efforts; elief committee; entre; eal costs; of uninsured facilities (e.g. parks) ling incremental expenses.		
_	ar salaries, insurance deductibles, equipment costs and ODRAP.	l lost revenues are not eligible costs		
disaste within	dition to the municipal Council resolution, municipal reference information report containing at least a preliminar 14 working days of the disaster. Additional updates accurate damage assessment information becomes available.	y estimate of public damage losses can be submitted to the MMAH as		
FINANCIAL CONSIDERATIONS: The preliminary estimated costs associated with the ice storm ranges from \$9.6M to \$13.2M, which includes costs incurred-to-date and estimated future recovery expenses. Response costs are estimated between \$2.6M to \$3.2M, and recovery costs are estimated between \$7.0M to \$10.0M. These costs are preliminary estimates and are subject to change. Further updates regarding the total costs of the ice storm will be presented to General Committee on a regular basis.				
	AN RESOURCES CONSIDERATIONS: oplicable.			
ALIGNMENT WITH STRATEGIC PRIORITIES: Not applicable.				
BUSINESS UNITS CONSULTED AND AFFECTED: Not applicable.				
RECO	OMMENDED			
BY:		Trinela Cane, Commissioner, Corporate Services		

ATTACHMENTS:

Appendix A: "Ice Storm – December 2013" presentation by City of Markham Appendix B: "City of Markham Ice Storm 2013" Presentation by PowerStream

Ontario Ice Storm Assistance Program

MAY 2014 PROGRAM UPDATE

Ontario is helping municipalities and conservation authorities affected by the December 2013 ice storm by implementing the Ice Storm Assistance Program. Eligible response and recovery costs must be clearly linked to the ice storm, be incremental to standard operating budgets and incurred to protect public health and safety or to secure access to public roads, sidewalks or frequently travelled routes.

PLEASE NOTE SOME UPDATED TIMELINES

Deadline for Expression of Interest (June 16, 2014)

- All claimants must submit an expression of interest with evidence to support ice damage and estimates of eligible costs.
- If a request for assistance was made previously under the Ontario Disaster Relief Assistance Program (ODRAP), the claimant is still required to submit an expression of interest with supporting evidence and an up-to-date estimate of eligible costs.
- As part of the expression of interest, municipalities are requested to confirm that authority is delegated to the municipal treasurer, chief administrative officer or equivalent senior staff person to submit and attest to the accuracy of the costs claimed.
- Please retain documentation of the delegation on file for audit purposes.

Target Date for Incurring Eligible Program Costs (June 22, 2014)

- Response and recovery costs should be incurred by June 22, 2014, six months after the storm.
- Due to the long winter, late spring thaw and a shortage of skilled labour in some areas, the Ministry will consider costs that are incurred after June 22, 2014 on a case-by-case basis. Applicants will need to demonstrate that the recovery work could not be completed within the six-month time frame and that work is demonstrably linked to the December 2013 ice storm.
- The longer the time between the disaster event and the recovery work, the more difficult it may be to establish a causal link to the ice storm event. Establishing a link between the damage suffered and the December 2013 ice storm will also become especially difficult if another extreme weather event occurs before work is completed.

Release of Program Guidelines and Claim Forms (Summer 2014)

- Detailed program guidelines and claim forms will be distributed to municipalities and conservation authorities to prepare full claims in summer 2014.
- Technical assistance will be available to address claimant questions on claims preparation.

Deadline for Claim Submissions (October 31, 2014)

- Full claims must be supported by detailed documentation such as copies of damage reports, invoices, time sheets demonstrating paid overtime, proof of payment and proof that work was completed. Supporting documentation requirements will be explained in the program guidelines.
- All claims must be verified and signed by the the individual with the appropriate delegation of authority.



NEXT STEPS FOR SUBMITTING AN EXPRESSION OF INTEREST

- Fill in the form provided and submit it by June 16, 2014.
- Ensure that the municipality passes a council resolution seeking provincial assistance for the ice storm. If an ODRAP resolution was already passed, it will be accepted for this program and a new resolution is not required. Municipalities that want to apply, but have not passed a resolution, must pass a council resolution before seeking funding under the Ice Storm Assistance Program and submit that resolution with the expression of interest.
- Ensure that the municipal council has delegated authority to the municipal treasurer, chief administrative officer or equivalent senior staff person to submit claims on behalf of the municipality.
- Maintain detailed documentation to prove eligible costs, including tracking ice storm costs separately from normal operating costs in your financial system.
- Please retain all documentation on ice storm costs including invoices and detailed time sheets, and ensure that
 documents are marked as ice storm-related. Ensure that you keep original files to avoid future problems at the
 audit stage.

ELIGIBLE AND INELIGIBLE COSTS

The list below provides examples of types of eligible and ineligible costs under the Ice Storm Assistance Program. The list is not exhaustive. When preparing detailed claims, all applicants should refer to the program guidelines that will be available in summer 2014 for more detailed information.

Eligible Costs Ineligible Costs ✓ Incremental costs of immediate emergency Regular public sector salaries, even for those staff response, such as setting up warming centres. assigned to ice storm work during regular hours, ✓ Clean-up of debris including fallen trees and broken are not considered incremental to standard branches on roads, sidewalks and frequently operating budgets. travelled routes to protect public health and safety. > Normal operating expenses, including ✓ Making safe (including removal of trees and tree maintenance budgets of those involved in the limbs) any public infrastructure and public response. facilities, including beaches, zoos and parks, which Recovery costs for work other than to protect constitute a threat to public safety. public health and safety or secure access to public ✓ Incremental costs incurred to provide the essential roads, sidewalks or frequently travelled routes. services, equipment, material and labour required to Emergency service costs related to routine sustain the operability of public infrastructure. incident management functions, as opposed to ✓ Incremental costs of staff for overtime work on ice incremental costs of responding to broader storm response and recovery. disaster consequences. ✓ Backfilling contracts where temporary staff was Tree replacement or tree canopy restoration. required to perform the work of staff who were **x** Costs of restoring or replacing insured items. deployed to ice storm work. Loss of income, wages, profits and/or revenue, ✓ Repairs or replacement to pre-disaster condition of loss of opportunity or inconvenience. municipal and conservation authority infrastructure **x** Costs incurred by local electricity distribution and equipment damaged as a result of the ice storm. companies. Incremental costs of appraising and estimating damage.

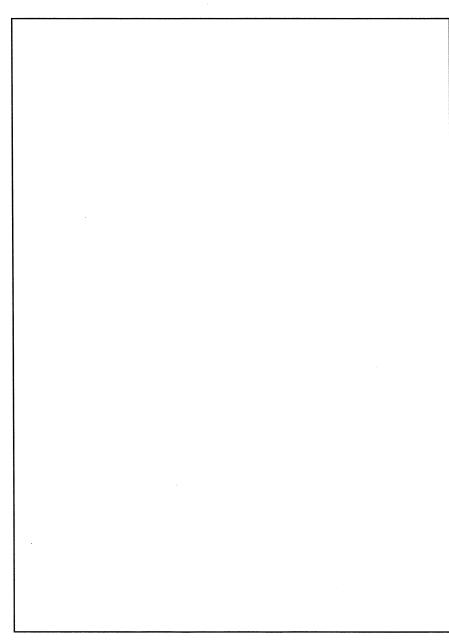
If you have questions on the Ice Storm Assistance Program, please e-mail <u>icestorm.program@ontario.ca</u> or contact your local <u>Municipal Services Office</u>.

2.0 Evidence of Damage from the Ice Storm

To be eligible to submit a claim to the Ice Storm Assistance Program, evidence of damage caused by ice must be included with this expression of interest. Evidence may include, but is not limited to:

- Reports or assessments from staff experts or external service providers detailing the nature and location of damage (e.g., arborist assessments, engineering reports).
- Staff reports to council detailing storm impacts.
- Photos of damage captioned with locations and dates.
- Weather reports or data.
- Maps of power outages caused by ice.
- Media coverage confirming ice damage.

Please list the reports or other evidence that you are submitting with this expression of interest as evidence that your municipality or conservation authority sustained ice damage. You may send separate electronic attachments, provide hyper-links to on-line information or mail in hard copy files of your evidence by June 16, 2014.



1.0 Claimant Information	
Legal Name of Municipality or Conservation Authority:	
Mailing Address City, Town or Village Province Postal Code	
Name of Primary Contact:	
Telephone:	
E-mail:	
Name of Secondary Contact:	
Telephone:	
E-mail:	
Resolution (municipal applican	ts only)
A resolution from municipal counci interest.	to pursue ice storm assistance must be attached to this expression of
	nitted a council resolution requesting assistance under the Ontario Disaster do not need a new resolution. Please re-submit the ODRAP resolution with
Confirm that a resolution is included with this expression of interest.	○ YES ○ NO
Delegation of Authority (munic	ipal applicants only)
Please indicate whether authority has been delegated to the municipal treasurer, chief administrative officer or equivalent senior staff person to submit claims on behalf of the municipality.	YES, authority has been delegated NO, authority has not been delegated
If authority has <u>not</u> been delegated to the municipal treasurer, chief administrative officer or equivalent senior staff person, please indicate who will submit the full claim on behalf of your municipality.	

This expression of interest will be reviewed to determine whether your municipality or conservation authority is eligible to submit a claim for assistance under the Ice Storm Assistance Program.

All applicants must fill in and submit this expression of interest with evidence to support ice damage and estimates of ice storm costs incremental to regular budgets by **June 16**, **2014**.

Please see the instructions on the following page and the accompanying program update information sheet for more guidance on the program and on submitting this expression of interest.

Attestation

Once the expression of interest is filled out, the individual with the appropriate delegation of authority (e.g., the municipal treasurer, chief administrative officer, chief financial officer or equivalent senior staff person) must complete the attestation.

I have reviewed this expression of interest and the supporting material and can verify that the attached estimates accurately reflect eligible response and recovery costs related to the December 21-22, 2013 ice storm.

Signatory Information

Legal Name of Municipality or Conservation Authority:		
Name of Signatory:		•
Position Title:		•
Original Signature:	scan it to submit with the rest of the expression of interest.	



Instructions

- 1. Please fill out all sections on this expression of interest.
- 2. Ensure that you include an up-to-date estimate of eligible ice damage costs that are incremental to your regular budget. You have the option to either fill out the excel sheet titled *Estimate of Eligible Ice Storm Costs* that is included with this expression of interest OR attach your own breakdown of costs.
- 3. Clearly label and include evidence of ice damage with your expression of interest.

You may submit your evidence:

- As electronic attachments (PDF format is preferred). If there are many files, please organize the attachments into compressed zip folders.
- By providing hyper-links to on-line information in the text box in Section 2. Please ensure that all hyper-links are active.
- By providing hard copy files of your evidence. All hard copy material should be delivered to the address noted at the bottom of this page.

If you are submitting your evidence as electronic attachments, please ensure that you number and organize your files in the same order as you list them in Section 2. For example, if you list an engineering report as the first evidence item, your PDF file should be saved as "1.Engineering_Report_Name". If you list a newspaper article as the second evidence item, then the file should be saved as "2.Newspaper_Article_Name".

Similarly, if you are submitting your evidence in hard copy, please ensure that you include tabs organized in the same order as you list the evidence in Section 2.

- 4. Include a resolution from municipal council to pursue ice storm assistance (municipal applicants only).
- 5. Ensure that all documented estimates of ice damage are <u>not</u> covered by insurance.
- 6. Submit this expression of interest by **June 16, 2014**. Please e-mail the completed application and supporting documentation to **icestorm.program@ontario.ca**.

Applicants wishing to submit supporting documentation in hard copy, please ensure delivery of materials by June 16, 2014 to:

Ice Storm Assistance Program Municipal Programs and Education Branch Ministry of Municipal Affairs and Housing 777 Bay Street, 16th Floor Toronto, ON M5G 2E5

Was any of the damage caused by the December 2013 ice storm covered by an insurance policy? Have you made a claim or received reimbursement from your insurance company or any other source for costs resulting from the December 2013 ice storm? YES NO NO

Have you received any revenue as a result of the ice storm (e.g., through fundraising initiatives or donations, or by selling debris such as wood or wood chips)? O YES

O NO

If you answered YES to any of the above questions, be prepared to provide detail in your full claim submission on the nature of support or revenue your municipality or conservation authority received as a result of the ice storm.

4.0 Cost Estimates

Please provide an up-to-date estimate of eligible program costs that your municipality or conservation authority incurred, or plans to incur, as a result of the December 2013 ice storm.

You have the option to either fill out the excel sheet titled *Estimate of Eligible Ice Storm Costs* that is included as an appendix with this expression of interest OR to attach your own breakdown of costs.

For additional guidance on progran	n terms, please see the section 5.0 Key Terms o	of this expression of interest.
Total Estimated Eligible Costs		•

5.0 Key Terms

Words in italics are defined.

Emergency response: activities associated with delivering immediate post-storm emergency services as a result of the ice storm, including opening shelters and emergency warming centres, providing essential services, equipment, materials and labour to sustain public infrastructure in the immediate aftermath of the ice storm.

Recovery: activities associated with making public infrastructure and public facilities safe or accessible, including hazard abatement, removing hazardous tree limbs and repairing or restoring municipal infrastructure to its pre-disaster condition.

Incremental costs: costs directly caused by the ice storm that are beyond regular costs.

Goods and services costs: *incremental* costs incurred for purchases of goods or services related to the ice storm. These could include costs of procuring necessary external service providers or for incremental costs of goods (e.g., road salt) needed to deal with ice storm damage.

Claimant-owned equipment: *incremental* costs incurred for running and operating claimant's equipment to deal with ice storm damage (e.g., fuel, lubricant).

Employee costs: costs incurred either for *overtime* of regular employees as a result of deployment on ice storm response and recovery; the costs of *temporary staff* on contracts for ice storm work; or, for *backfilling*.

Overtime: actual, reasonable expenses for regular staff assigned to ice storm related work during the disaster and recovery period. Overtime is allowable if the overtime is paid out and not taken as leave in lieu of pay.

Backfilling: is the process by which the duties of a regular employee are assigned to a temporary employee to allow the regular employee to handle responsibilities specific to the ice storm.

Temporary staff: costs associated with additional temporary staff hired for ice storm related work.



4.0 Cost Estimates Appendix: Estimate of Eligible Ice Storm Costs

This section is part of the expression of interest application. Please provide an up-to-date estimate of eligible program costs that your municipality or conservation authority incurred, or plans to incur, as a result of the December 2013 ice storm.

You have the option to either fill out this excel sheet OR to attach your own breakdown of eligible costs.

	RESPONSE COSTS	
	Category of Costs	Estimated Amount (\$)
1	Goods and Services	
2	Employee Costs	
3	Claimant-Owned Equipment	
4	Other (please describe below)	
	Subtotal of Response Costs	\$ -
	RECOVERY COSTS	
	Category of Costs	Estimated Amount (\$)
1	Goods and Services	
	Employee Costs	
	Claimant-Owned Equipment	
4	Other (please describe below)	
<u></u>	Subtotal of Recovery Costs	\$
	TOTAL ESTIMATED COSTS	\$
	Other Response Costs include:	
	•	
	, and the second se	
	Other Recovery Costs include:	
	To disable the endate has subtain	
	Indicate the date by which you expect	
	to have incurred all of the costs	
	outlined above:	

