

Cost-sharing of the repair work – Hollow Glen dam

November 16, 2015

Agenda

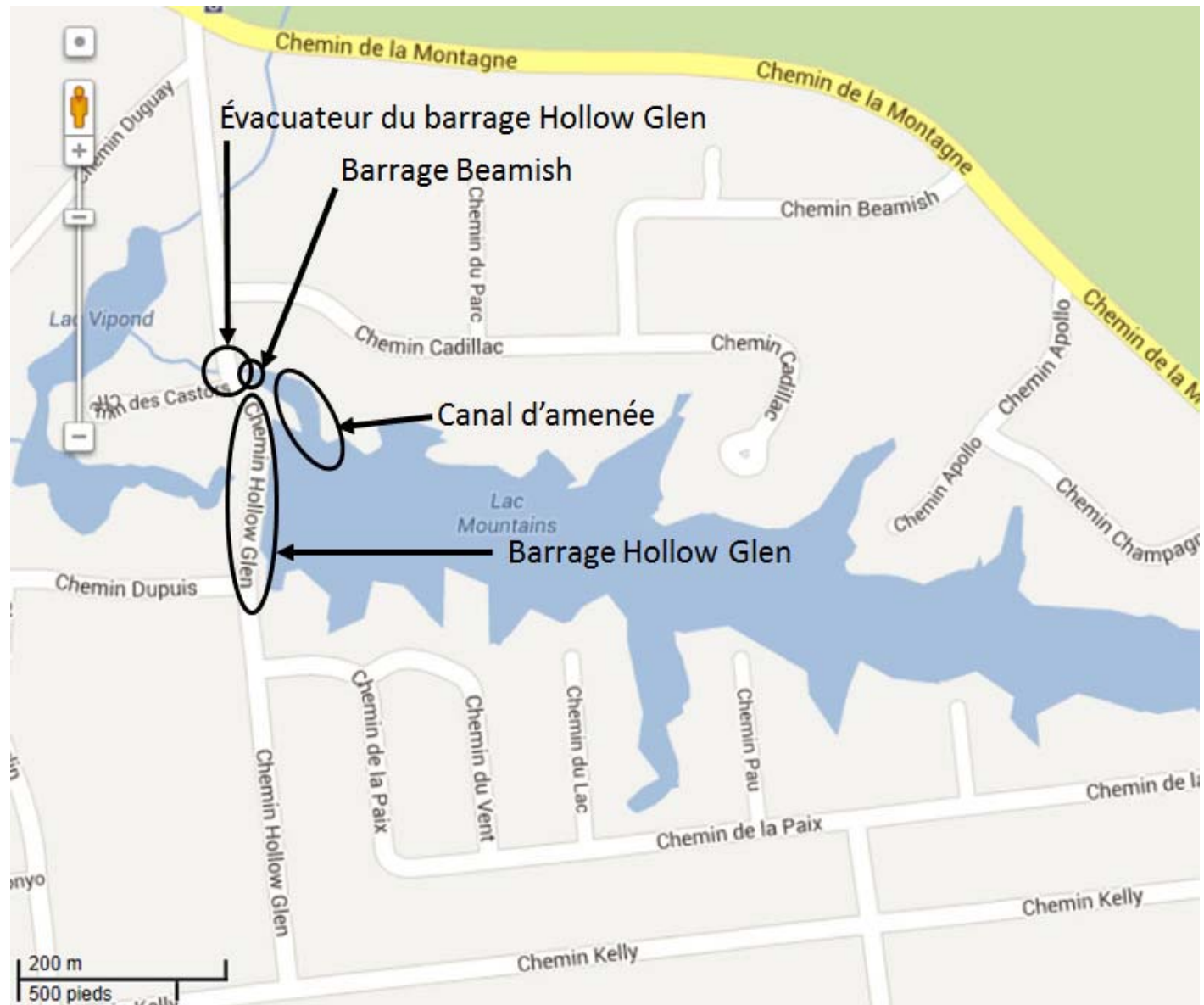
- Geographical context
- Brief overview
- Cost of the project
- Cost-sharing options
- Question and comments period
- Conclusion

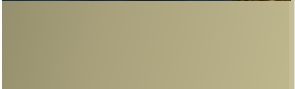




Geographical context

Geographical context





Brief overview of the project

Brief overview

1948 to 1960	Construction of the Hollow Glen dam – Mountains Lake is created
April 2002	Adoption of the « Loi sur la sécurité des barrages » (Dam Safety Act)
April 5, 2011	Hollow Glen dam is classified as an "official dam" by the Centre d'expertise hydrique du Québec (CEHQ). The dam is classified as a "high capacity dam".
June 23-24, 2011	Heavy rain storms

The Municipality must take action, otherwise the Government of Québec will intervene.

Brief overview

September 12, 2011	Contract awarded to CIMA+ for a management plan of Mountains Lake
November 7, 2011	Contract awarded to SM ⁱ for professional services to put in place necessary measures for a high capacity dam.
November 7, 2011	Contract awarded to Genivar for regular inspections of the dam. <i>(required by the Loi sur la sécurité des barrages)</i>
Winter 2012	A second contract is awarded by the Municipality to SM ⁱ for an engineering evaluation.
Winter 2013	The Province confirms that the management of dams falls under the jurisdiction of the MRC, and that only the MRC can submit a borrowing by-law for the repairs.

Brief overview

March 4, 2013	Call for tenders for four technical and financial options for the repair work. Depending on the chosen option: plans and specifications
April 9, 2013	The Municipality signs an agreement with the MRC to manage this project.
April 16, 2013	The Municipal Council adopts a resolution recommending to the MRC to award the contract to CIMA+ for professional services for the conception and the oversight of the work.
April 18, 2013	The MRC awards the contract to CIMA+

Brief overview

The 4 options presented

Composantes	Option 1 Niveau d'opération de 103,0 m	Option 2 Niveau d'opération de 102,0 m	Option 3 Niveau d'opération de 101,0 m	Option 4 Démantèlement du barrage
1. Travaux dans le canal d'aménée (estacade, dragage et démolition barrage Beamish)	21 450 \$	21 450 \$	Non requis	Non requis
2. Nouvel évacuateur et/ou correction à l'évacuation existant et correction au canal d'évacuation	314 271 \$	256 471 \$	198 367 \$	335 348 \$
3. Contrôle des exfiltrations et stabilité du barrage	249 511 \$	217 684 \$	178 940 \$	Non requis
4. Divers (environnement, contrôle de l'eau)	52 807 \$	52 807 \$	134 268 \$	136 477 \$
5. Organisation du chantier (10%)	63 804 \$	54 841 \$	51 158 \$	47 183 \$
6. Contingence (15%)	105 276 \$	90 488 \$	84 410 \$	77 851 \$
TOTAL (Coûts de construction) :	807 119 \$	693 741 \$	647 142 \$	596 859 \$

Brief overview

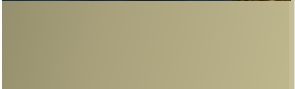
August 6, 2013	The Municipal Council adopts a resolution recommending to the MRC to select the first option (historical level of the lake: 103 m)
March 4, 2014	Call for tenders for the repair work
May 5, 2014	The Municipal Council adopts a resolution recommending to the MRC to award the contract to Charex.
15 may 2014	The MRC awards the contract to Charex (for the first option)
August 26, 2014	Beginning of the repair work
Spring 2015	End of work



Cost of the project

Cost of the project

- Two borrowing by-laws by the MRC-des-Collines:
 1. One for professional services
 2. One for the repair work
- The Municipality will have to pay all the costs of the project through a share paid to the MRC
- Total expenses by the MRC:
 1. \$146 000 – to be paid over 10 years
 2. \$1 052 000 – to be paid over 20 years



Cost-sharing options

Summary of Cost Hollow Glen Dam

	Construction	Professional Services
Total cost:	1 052 000 \$	146 000 \$
Interest rate:	2.49%	2.49%
Length of loan:	20 year	10 years
Annuity factor:	0.06409	0.1142
Annual debt service		
(Annuity factor x cost):	67 419\$	16 673 \$
Definite sector (Hollow Glen):	230	230
Waterfront property owners:	49	49
Municipality (waterfront lot)	1	1
Units to the population at large	3225	3225

Option 1

Annual debt service at 100% paid by the population at large,
according to evaluation

Distribution to the taxpayers (\$)	Total tax base	Average taxable unit	Tax burden of the taxpayer / year
84 092\$	1 304 709 700\$	414 713\$	26.73\$

Option 2

Annual debt service at 100% paid by the population at large, **by unit**

Distribution to the taxpayers (\$)	Total tax base	Number taxable units (excluding vacant lots)	Tax burden of the taxpayer / year
84 092\$	1 304 709 700\$	3225	26.08\$

Option 3

Annual service debt at 25% paid by the waterfront property owners (49 properties + municipal land paid by the population at large) and 75% to the population at large

	Distribution to the taxpayers (\$)	Number of properties	Total frontage in meters	Average frontage in meters	Tax burden / Average frontage/ year	Tax burden / frontage meter / year
22.92%	6 425\$ 1/3	49	4 798	104.24\$	139.58\$	1.34\$
	Distribution to the taxpayers (\$)	Number of properties	Area of the land	Average area in square meters	Tax burden /Average area/ year	Tax burden / Area / land / year
	6 425\$ 1/3	49	225 981	4611.86	131.11\$	0.0284\$
	Distribution to the taxpayers (\$)	Number of properties	Total reassessment	Average reassessment	Tax burden / Average reassessment / year	Tax burden/ 100\$ reassessment / year
	6 425\$ 1/3	49	17 096 800\$	414 713 \$	155.84\$	0.0376\$

Total Average: 426.53\$ / waterfront property owners



Option 3 (continued)

Annual debt service at 75% paid by the population at large

	Distribution to the taxpayers (\$)	Total tax base (without waterfront property owners)	Average taxable unit	Tax burden /Average taxable unit / year	Tax burden/ 100\$ reassessment / year
2.08%*	1 749\$	1 287 612 900\$	414 713\$	0.56\$	0.000136\$
75%	63 069\$	1 287 612 900\$	414 713\$	20.31\$	0.004898\$

Total : **20.87\$** to the population at large

*Municipal land



Option 4

Annual service debt at 50% paid by the waterfront property owners (49 properties + municipal land paid by the population at large) and 50% to the population at large

	Distribution to the taxpayers (\$)		Number of properties	Total frontage in meters	Average frontage in meters	Tax burden / Average frontage/ year	Tax burden / frontage meter / year
47.92%	13 432\$	1/3	49	4 798	104.24\$	291.83\$	2.80\$
40 297 \$	Distribution to the taxpayers (\$)		Number of properties	Area of the land	Average area in square meters	Tax burden /Average area/ year	Tax burden / Area / land / year
	13 432\$	1/3	49	225 981	4611.86	274.13\$	0.0594\$
	Distribution to the taxpayers (\$)		Number of properties	Total reassessment	Average reassessment	Tax burden / Average reassessment / year	Tax burden/ 100\$ reassessment / year
	13 432\$	1/3	49	17 096 800\$	414 713 \$	325.82\$	0.0786\$

Total Average: 891.78\$ / waterfront property owner



Option 4 (continued)

Annual debt service at 50% paid by the population at large

	Distribution to the taxpayers (\$)	Total tax base (without waterfront property owners)	Average taxable unit	Tax burden / Average taxable unit / year	Tax burden/ 100\$ reassessment / year
2.08%*	1 749\$	1 287 612 900\$	414 713\$	0.56\$	0.000136\$
50%	42 046\$	1 287 612 900\$	414 713\$	13.54\$	0.004898\$

Total : **14.10\$** to the population at large

*Municipal land



Option 5

Annual service debt at 67% paid by the waterfront property owners (49 properties + municipal land paid by the population at large) and 33% to the population at large

	Distribution to the taxpayers (\$)	Number of properties	Total frontage in meters	Average frontage in meters	Tax burden / Average frontage/ year	Tax burden / frontage meter / year
64.92%	18 198 \$ 1/3	49	4 798	104.24\$	395.35\$	3.79\$
54 593 \$	Distribution to the taxpayers (\$)	Number of properties	Area of the land	Average area in square meters	Tax burden /Average area/ year	Tax burden / Area / land / year
	18 198 \$ 1/3	49	225 981	4611.86	371.38\$	0.0805\$
Distribution to the taxpayers (\$)	Number of properties	Total reassessment	Average reassessment	Tax burden / Average reassessment / year	Tax burden/ 100\$ reassessment / year	
18 198 \$ 1/3	49	17 096 800\$	414 713 \$	441.41\$	0.1064\$	

Total Average: 1208.14\$/ waterfront property owner



Option 5 (continued)

Annual debt service at 33% paid by the population at large

	Distribution to the taxpayers (\$)	Total tax base (without waterfront property owners)	Average taxable unit	Tax burden / Average taxable unit / year	Tax burden / 100\$ reassessment / year
2.08%*	1 749\$	1 287 612 900\$	414 713\$	0.56\$	0.000136\$
33%	27 750\$	1 287 612 900\$	414 713\$	8.94\$	0.004898\$

Total : **9.50\$** to the population at large

*Municipal land



Option 6

Annual service debt paid at 35% by the waterfront property owners, 15% by definite sector and 50% to the population at large

	Distribution to the taxpayers (\$)	Total tax base	Average taxable unit	Tax burden/ year	Tax burden/ 100\$ reassessment / year	Tax burden / unit
35%	29 432\$	17 096 800\$	Next table			
15%	12 614\$	54 934 800\$	414 713\$	95.22\$	0.022961\$	54.84\$
50%	42 046\$	1 232 678 100\$	414 713\$	14.15\$	0.003411\$	14.27\$

Option 6 (continued)

Annual service debt at 35% paid by the waterfront property owners
(49 properties + municipal land paid by the population at large)

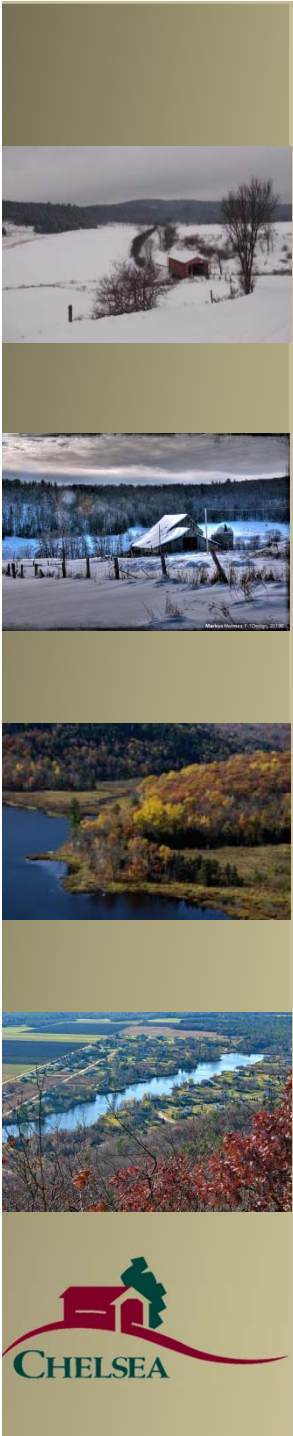
35%

Distribution to the taxpayers (\$)	Number of properties	Total frontage in meters	Average frontage in meters	Tax burden / Average frontage/ year	Tax burden / frontage meter / year
9 811\$ 1/3	49	4 798	104.24\$	213.15\$	2.04\$
Distribution to the taxpayers (\$)	Number of properties	Area of the land	Average area in square meters	Tax burden /Average area/ year	Tax burden / Area / land / year
9 811\$ 1/3	49	225 981	4611.86	200.22\$	0.0434\$
Distribution to the taxpayers (\$)	Number of properties	Total reassessment	Average reassessment	Tax burden / Average reassessment / year	Tax burden/ 100\$ reassessment / year
9 811\$ 1/3	49	17 096 800\$	414 713 \$	237.98\$	0.0574\$

Total Average: **451.13\$** / waterfront property owner



QUESTION PERIOD



Procedure

- When you are at the microphone, please:
- *state your name*
- *identify your ward*
- *respect the 2 minute time limit*

Please note that this evening is not a debate. Council is here to listen to your comments.

To make additional comments, please write info@chelsea.ca before Friday, November 20th.

Thank You!

Thank you!

Questions: 819 827-1124

info@chelsea.ca

