

SOME OBSERVATIONS:

1 – KCB – CON: Middle 7 Lower colliery Dams, Conceptual Costing of Rehabilitation & Replacement Options. April 30th 2013

2 – Hatch Ltd. – CON: Cost Estimate Peer Review Final Report, for Colliery Dams Rehabilitation/Renewal. May 1st 2013

3 – KCB: Clarification in response to Hatch Peer Review. May 2nd 2013

4 – CON Report to Council: Re Colliery Dams, Cost of Alternatives to Removal – Susan Clift & Bill Sims

Not much in these reports jumped out at me.

1 – Schemes

5	Rehab.	\$14.5M - \$23.5M
2	Replace 1 or 2 dams	\$7.7M - \$8.5M
1	Removal	\$5.5M

Contingency allowance 39%

2 – 4.1: “However there remains a question whether faults believed to be present in the immediate vicinity of the Colliery Dams could be seismically active faults. This question would need careful consideration if a rehabilitation or replacement option were to be chosen.” Did I miss something? Where did this come from?

4 – Executive Summary

p. 1 “...ability to withstand a significant seismic event or extreme weather event. Climate change is increasing the severity and frequency of such events.” Is this true? The opposite may equally be so; we just don’t know how it will pan out. To be consistent, why then isn’t the City more concerned about rising sea water levels?

p. 7 Life Cycle Costs. I don’t remember life cycle costs being included in discussions about the conference centre or the new city hall annex (Service & Resource Centre), or any other city development. If we’d been told the truth in the first instance, it would never have passed the referendum. We could have fixed the old city annex for \$4M, but instead staff convinced council to build an earthquake resistant building for \$16M. Remember, the old building survived the 7.3, 1946 earthquake centered at forbidden Plateau. Totally inconsistent!

p. 1 & 2? Imminent Risk –could have been removed in September 2012 or even July 2012 (depending when the report was actually released) by de-watering the dam.

p. 10 “Removal & Replacement of the dam structures will be a loss of evidence of historical mining activity.” You lose either way, but the City doesn’t really care about its industrial history anyway. Being offered the lower spillway is a sap that probably will end up being destroyed anyway.

Juicy promises to developers!

p. 3 Study Results – “The concrete is unreinforced....” This may be true of the Middle Dam but tests were inconclusive for the Lower Dam because the cement is much thicker than the penetration of the equipment used (EBA 2010).

p. 2 BACKGROUND - As a result of recommendations in the 2003 Dam Safety Review, the City undertook a major assessment of these two dams. In October of 2010, staff informed Council” Why the 7 – 9 year delay?

p. 4 Risk “John Barsby Secondary School, Little Ferns Daycare and up to 340 residences and 1900 people impacted” 340 residences (x 1.2 or 2.2) yields 408 (day) and 748 (night) population. Allowing (650 + 100 +23 = 773) for Barsby, Daycare & travelers makes a total of 1181 population (day) & allowing (5 + 10 = 15) for Barsby and travellers makes 753 population (night). The 1900 figure is superfluous. There are (1900 less 1181) = 719 and (1900 less 753) = 1147 unaccounted for. They can't seem to get the population figure right.

p. 5 Emergency Planning – Why is it necessary to have a FOI to inform the public of risk. It's common sense, if true.

Doesn't Chris Grapel work for KCB now? Is he involved in their current study? How can the costs be so different by so many magnitudes from what he said for EBA in 2010 and KCB now?

p. 3 Modes of Failure – The terms ‘could’, not ‘would’ might better be used. Modelling is not that accurate. The results are still open to subjective conclusions.

p. 9 Assessing the alternatives – stop building in the flood zone!

p. 10 Removal & Re-naturalize the Chase River – Essentially, the fish need a big pool. If the two dams (#1 & #2 reservoirs) remain above site the of the former Colliery Lakes then in breach or flood situation much sediment and debris may come down the Chase River adding to the life cycle costs of Removal. With the other 3 dams still able to discharge into the Chase River it will never be re-naturalized safely. (they hold 154,000 cubic metres between them).

Did we go through this much investigation and analysis before building the annex?
No!

If the Chinese investors build the hotel downtown and we get tens of thousands of Chinese visitors in a year, they will want to see some attractions like the serenity of still water.

When the conference centre was being touted, the cost was said to be equivalent to a cup of coffee per month? (80,000 population, \$30M over 25 years?) Assuming a life cycle of 80 years and a population of say 90,000 people, two new dams at \$20.8 M works out to about one coffee every two weeks.