Attachment 3: TRCA's Flood Infrastructure State of Repair

Table 1

Dams								
Dame Name	Consequence Rating Score ¹	Probability of Failure/Structure Condition – Normal Conditions ²	Risk Rating - Normal Condition ³	Probability of Failure – Extreme Flood Conditions ⁴	Risk Rating – Extreme Flood Conditions ⁵	Probability of Failure – Extreme Seismic Condition ⁶	Risk Rating – Extreme Seismic Condition ⁷	
G. Ross Lord Dam	5	1	5	2	10	1	5	
Claireville Dam	5	1	5	3	15	2	10	
Stouffville Dam	5	2	10	3	15	2	10	
Milne Dam	5	2	10	4	20	2	10	
Palgrave Dam	5	3	15	5	25	2	10	
Black Creek Dam	2	1	2	1	2	1	2	
Secord Dam	2	4	8	5	10	3	10	
Osler Dam	2	5	10	5	10	5	10	
Glen Haffy Dam West	1	2	3	3	3	3	3	
Glen Haffy Dam East	1	2	3	3	3	3	3	
Glen Haffy Extension Upper Dam	2	5	10	5	10	5	10	
Glen Haffy Extension Lower Dam	2	5	10	5	10	5	10	

1. Consequence Rating Score – expected damage should the dam fail based on risk to life, property and the environment. See Table 2 in the report.

2. Probability of Failure/Structure Condition Score - based the dam's ability to withstand typical floods and normal loading conditions. See Table 1 in the report.

3. Risk Rating - Normal Conditions. This is the Consequence Rating Score multiplied by the Probability of Failure/Structure Condition Score. See Table 3 in the report.

4. Probability of Failure – Extreme Flood Conditions. This is based on the dam's ability to safely pass extreme floods.

5. Risk Rating – Extreme Floods. This is the Consequence Rating Score multiplied by Probability of Failure score. See Table 3 in the report.

6. Probability of Failure – Extreme Seismic Condition. The is based on the dam's ability to withstand an extreme earthquake.

7. Risk Rating – Extreme Seismic Event. This is the Consequence Rating Score multiplied by the Probability of Failure score. See Table 3 in the report.

Table 2

Flood Control Channels								
Channel Name	Consequence Rating Score ¹	Probability of Failure/Structure Condition – Normal Conditions ²	Risk Rating - Normal Condition ³					
Yonge/York Mills Channel	4	1	4					
Woodbridge Channel	3	1	3					
Stouffville Channel	3	4	12					
Black Creek Channel	4	1	4					
Scarlett Channel	4	1	4					
Brampton Channel	4	1	4					
Sheppard Channel	3	2	6					
Mimico Malton Channel	4	1	4					
Oak Ridges	4	1	4					

1. Consequence Rating Score – expected damage should the channel fail based on risk to life, property and the environment. See Table 2 in the report.

2. Probability of Failure/Structure Condition Score – based the channel's ability to withstand typical floods and normal loading conditions. See Table 1 in the report.

3. Risk Rating – Normal Conditions. This is the Consequence Rating Score multiplied by the Probability of Failure/Structure Condition Score. See Table 3 in the report.

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Table 3

Dikes								
Dike Name	Consequence Rating Score ¹	Probability of Failure/Structure Condition – Normal Conditions ²	Risk Rating - Normal Condition ³					
Pickering Dike	4	4	16					
Ajax Dike	4	4	16					
Bolton Dike	4	1	4					
Etobicoke Dike	4	1	4					
West Don Flood Protection Landform	5	1	5					
Tyndall Flood Wall	3	1	3					

Consequence Rating Score – expected damage should the dike fail based on risk to life, property, and the environment. See Table 2 in the report.
Probability of Failure/Structure Condition Score – based the dike's ability to withstand typical floods and normal loading conditions. See Table 1 in the report.

3. Risk Rating – Normal Conditions. This is the Consequence Rating Score multiplied by the Probability of Failure/Structure Condition Score. See Table 3 in the report.