



Environmental Appeal Board

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June 30, 2015
Via Email

APPEAL FILE: 2015-WAT-004

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Ministry of Justice
Legal Services Branch
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Attention: Pamela Manhas & Rolf Warburton

Attention: Reece Harding and Michael Moll

Re: *Water Act* Appeal - City of Nanaimo v. April 29, 2015 Order of the Comptroller of Water Rights regarding CWL C061424 & C061423 Colliery Dams (specifically, Middle Chase River Dam and Lower Chase River Dam)

Attached is the Board's preliminary decision on the above noted appeals. The decision will also be available on the Board's website: www.eab.gov.bc.ca.

Yours truly,

Alan Andison, Chair
Environmental Appeal Board

Att.

cc: The Honourable Steve Thomson
Minister of Forests, Lands and Natural Resources



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DECISION NO. 2015-WAT-004(a)

In the matter of an appeal under section 92 of the *Water Act*, R.S.B.C. 1996, c. 483.

BETWEEN:	City of Nanaimo	APPLICANT
AND:	Comptroller of Water Rights	RESPONDENT
BEFORE:	A Panel of the Environmental Appeal Board Alan Andison, Chair	
DATE:	Conducted by way of written submissions concluding on June 24, 2015	
APPEARING:	For the Applicant:	Reece Harding, Counsel Michael Moll, Counsel
	For the Respondent:	Pamela Manhas, Counsel Rolf Warburton, Counsel

STAY DECISION

APPLICATION

[1] On April 29, 2015, Glen Davidson the Comptroller of Water Rights (the "Comptroller") issued an order to the City of Nanaimo (the "City") pursuant to sections 87 and 88 of the *Water Act* (the "Order"). The Order requires the City to "correct the potential safety hazard" created by two dams: the Middle Chase River Dam (the "Middle Dam") and the Lower Chase River Dam (the "Lower Dam"). The Order was issued in response to the City's alleged failure to meet the requirements of section 7.1 of the *British Columbia Dam Safety Regulation*, B.C. Reg. 44/2000, as amended. Section 7.1 states:

Potential safety hazard at a dam

7.1 If

- (a) an inspection or test under section 5,
- (b) a dam safety review,
- (c) monitoring, under section 11, the instrumentation installed at a dam, or
- (d) any other inspection, test or review carried out with respect to a dam

reveals a potential safety hazard to which section 8 [hazardous conditions at a dam] does not apply, a dam owner must prepare a plan that identifies and prioritizes any actions required to correct the potential safety hazard and, in

accordance with section 4, if applicable, must implement the plan in a timely manner based on the priorities identified in the plan.

[2] On May 22, 2015, the City appealed the Order to the Board. On May 26, 2015, the City applied for a stay of the Order pending a hearing and final decision from the Board on the merits of the appeal. A hearing has not yet been scheduled for the merits of the appeal.

[3] This application for a stay of the Order has been conducted by way of written submissions. Both parties provided affidavits in support of their respective cases. The City asks for a stay to be granted. The Respondent argues that a stay ought to be denied.

BACKGROUND

[4] The Middle and Lower Dams are located within Colliery Dam Park and are referred to generally as the Colliery Dams. They were built in 1910-1911 by the Western Fuel Company to supply water for coal washing and for use by miners. The reservoirs behind the dams are now used as park ponds and are popular fresh water swimming spots. The City operates the dams under conditional water licences C061424 and C061423, which allow the dams to store water for land improvement purposes.

[5] For a number of years, both the City and the Dam Safety Section of the Ministry of Forests, Lands and Natural Resource Operations (the "Ministry") have been concerned about the safety of these dams.

[6] In 2002, the City obtained an engineering report from Water Management Consultants which concluded that the spillway capacities for both dams are undersized. The authors of this report referred to a 1992 review of both dams which also identified issues respecting the adequacy of the spillways.

[7] In 2003, Golder Associates Ltd. ("Golder") conducted a dam safety review for each of the dams on behalf of the City. Golder's reviews found that the spillway capacities were not up to current design standards and that the dams would be unable to handle the specified flood events. Golder referenced earlier studies that identified the same issue.

[8] In or about 2008, the City retained EBA Engineering Consultants Ltd. ("EBA") to conduct a seismic hazard assessment. In its report dated April 14, 2010, EBA identifies, among other things, the presence of a school, a daycare, and residences in the inundation zone.

[9] An inundation zone study was completed in September of 2012 by Associated Engineering. Associated Engineering considered several different events expected to result in the failure of the dams. Two of the main types of failures considered were flood induced dam failure and failure during a seismic event (i.e., an earthquake). In the Executive Summary of its report, Associated Engineering states:

Currently, both structures are classified as "Very High Consequence" under the *Dam Safety Regulation*,¹ due to the population present in the downstream floodplain areas. Previous reports have identified that neither dam meets the expected level of performance for flood or seismic safety, and both are considered to be at a level of risk outside the envelope of acceptable risk using generally applied standards (EBA, 2010).

[10] Associated Engineering's evaluation of the consequences of dam failure include many fatalities, even more casualties, and millions of dollars in incremental economic damages. Based upon its research, Associated Engineering concludes, in part, as follows:

- a) The estimated number of casualties resulting from the seismic event requires the consequence classification of the Lower and Middle Dams along the Chase River to be increased from "Very High" to "Extreme" based on the British Columbia Dam Safety regulation. The "Extreme" classification is the highest consequence classification under the ... Regulation. (page 7-3)

[11] Based upon its conclusions, Associated Engineering recommended that the City select one of two options:

1. Rehabilitate or replace the existing Lower and Middle Dams to meet the current Dam Safety requirements.
2. Remove the existing Lower and Middle Dams. (page 7-3)

[12] In 2012, City Council decided to remove the dams and restore the Chase River in Colliery Dam Park to its natural state. It retained engineering firm Klohn Crippen Berger to initiate the application process with the Dam Safety Section for replacement of the two dams. This would be done in a two-phase approach beginning with dam removal in the later summer through early fall of 2013, and reconstruction in the subsequent year.

[13] In order to keep its residents informed of its decision, a decision that the City understood would have a significant impact on the financial, cultural and heritage-preservation interests of its residents, the City scheduled two days of open houses to take place in November, 2012.

[14] Between October of 2012 and the summer of 2013, public opposition mounted to the City's decision to remove the dams. According to the City, the opposition grew to "public outcry and protest." Consequently, in August of 2013, the City adopted a resolution to pursue a new strategy to deal with the long term mitigation of risks associated with the dams. The City also posted emergency evacuation signs in the community below the dams. It also decided to retain

¹ According to the Respondent, dam failure consequences classification is determined in accordance with the criteria in Schedule 1 of the *Dam Safety Regulation*, which include identifying the population at risk, the potential loss of life, damage to the environment and cultural values, potential infrastructure and economic losses. The classifications are "low", "significant", "high", "very high", and "extreme".

engineers to provide remedial options to address the dam safety issues. City Council also sought to clarify and confirm the degree of hazard posed by the dams.

[15] While it investigated other options, the City asked the Comptroller to put its application "on hold". The Comptroller agreed, but urged the City to quickly implement a plan.

[16] In September of 2013, the City formed a "Technical Committee" to, among other things, develop options for remediating the dams in order to satisfy the requirements of the Dam Safety Section of the Ministry. Golder was retained by the City to act as the City's consulting engineers and technical advisor to the Technical Committee. Golder conducted investigations related to the remediation of the dams.

[17] In October of 2013, the Comptroller attended a meeting with the City and advised that, due to the City's delay in coming up with a long term plan, he was considering whether to issue an order under the *Water Act*.

[18] On March 4, 2014, Golder presented four remediation options at a meeting attended by representatives from the Dam Safety Section, the City, and other organizations. The four options were: enlarging the spillway, building an auxiliary spillway (swale), building a labyrinth spillway, and an overtopping protection approach. The minutes of the meeting state that the City's preferred option for further consideration was the labyrinth spillway. The overtopping approach was the secondary option.

[19] In April of 2014, the Comptroller met with Golder and the City's Technical Committee to discuss Golder's consequence classification for the dams. The Comptroller agreed in principle to lower the consequences classification for the Lower Dam to "very high" and for the Middle Dam to "high", pending receipt of Golder's final report on the technical rationale for revision of the previous "extreme" consequence classification.

[20] Golder produced five reports for the City between July and November of 2014. However, City Council resolutions over this period reflect dissatisfaction with the remedial options presented and a desire to pursue alternatives.

[21] In November of 2014, City Council directed staff to review the concept of an alternate swale/drainage course (an auxiliary or second spillway) to Harewood Creek. Golder was asked to undertake this review.

[22] Also in November of 2014, Golder provided its report to the City titled "Consequence Classification", confirming its recommendation that the Dam Safety Section adopt the "very high" and "high" classifications for the dams.

[23] In a letter to the City dated January 23, 2015, the Comptroller accepted Golder's proposed dam failure consequence classifications for the two dams. The Comptroller also noted that, in October of 2012, the City had provided a plan to address the safety hazards posed by the dams (i.e., removal of the dams) but that no plan had yet been implemented. He states:

Please note that although the dam failure consequence classification of both Middle Chase River Dam and Lower Chase River Dam is now set

at a lower classification than previous, both dams still have serious deficiencies that require immediate attention. Therefore, in accordance with Section 7.1 *Potential safety hazard at a dam*, BC Dam Safety Regulation, the City of Nanaimo, as owner of Middle Chase River Dam and Lower Chase River Dam, must prepare a revised plan that:

- a) identifies and prioritizes the actions required to correct the potential and existing safety hazards, and
- b) gives a timeline as to when the actions will be completed.

Please submit your revised plan to this office by February 27, 2015. The plan must clearly demonstrate implementation of priorities in a timely manner to reduce the risk posed by these two dams.

[24] In early February of 2015, "Golder's Auxiliary Spillway – Conceptual design" report was provided to City Council, along with a staff recommendation to pursue the alternate drainage course to remediate the Lower Dam. The staff report states as follows:

Further to Council's direction to pursue additional analysis of the Colliery Dams, Golder has now provided a report that provides an analysis of water distribution in an overtopping event/capacity of existing spillway and a review of the concept of an alternate swale/drainage course to Harewood Creek. The Golder report confirms that the existing spillway is substantially undersized and will not meet engineering or DSS [Dam Safety Section] regulations in a severe storm event.

This staff report outlines the various remediation options presented to Council over the past eight months. Staff recommends pursuing the alternate drainage course/swale as it is the option that appears to be most viable (pending final design review), is estimated to be approximately two thirds of the cost of the labyrinth spillway or overtopping option, and may allow for additional cost savings that could be achieved through the design and construction process.

[25] On February 6, 2015, City Council voted against proceeding with the auxiliary spillway option and voted, instead, to continue investigating and preparing a revised plan. Council advised the Comptroller that it would not be able to meet his February 27, 2015 deadline and requested an extension.

[26] In a letter dated February 25, 2015, the Comptroller provided the City with a one-month extension (to 4 pm on March 27, 2015) to select a remediation option and a plan for the Lower Dam, and to submit a plan of action for the Middle Dam. He also warned that the reduced consequence classification that he approved on January 23, 2015 was based on Golder's assessment and reports, but only if remediation of the Lower Dam is completed. The Comptroller explains:

Increasing flood flow capacity at the Lower Dam reduces the probability that the Lower Dam will breach following from the cascade

effect of a Middle Dam breach. Acceptance of the proposed failure consequence classification was based on the understanding that the flood flow routing capacity of Lower Dam would be increased this year (2015), as outlined in Golder's remediation options and consistent with the TC's [Technical Committee's] mandate. Should remediation of Lower Dam not occur this year, the failure consequence classification of Middle Dam will be assessed 'very high'.

[27] In March of 2015, the City submitted plans to the Comptroller that did not involve any remediation of the dams.

[28] On April 9, 2015, the Comptroller issued an order to the City advising that it was not in compliance with the *Dam Safety Regulation*, as none of the information that he had previously required had been received. The April 9th order required the City to select from two remediation options for the Lower Dam (install Golder's labyrinth spillway design or the auxiliary spillway design). Instead of doing so, the City returned to the previously identified option of an overtopping protection approach for the Lower Dam, which had been the subject of a proposal by GeoStabilization International ("GSI"). The City asked the Comptroller to consider amending the order to allow for consideration of this third option. [A formal request for an amendment was made on April 28, 2015.]

[29] Affidavit evidence submitted by the Comptroller regarding the stay application establishes that a US Federal Emergency Management Agency Manual had been published in 2014, recommending that the overtopping protection approach not be used in relation to dams over 40 feet in height. The Lower Dam is 77 feet in height. In late April 2015, the Comptroller and Dam Safety Section staff met with a delegation from the City and GSI to hear a presentation by GSI of its overtopping approach to remediation. Following that meeting, the Comptroller agreed to an amendment of the April 9th order to allow for consideration of the overtopping approach, provided that it was accompanied by an expert opinion on the advisability of the approach in terms of proper practice.

[30] On April 29, 2015, the Comptroller of Water Rights revoked the April 9th order and issued the Order now under appeal.

The Order

[31] The Order is five pages and reviews some of the research and studies conducted on behalf of the City to evaluate the safety of the dams and provides an overview of the remedial options identified to address the dam safety issues. The Order reviews the previous directions given by the Ministry pursuant to section 7.1 of the *Dam Safety Regulation*, and the extensions of time given to the City to address the safety issues in a "real" way.

[32] The Order imposes the following requirements in relation to the Lower Dam and the Middle Dam.

The requirements ordered for the Lower Dam

[33] The Order requires the City to correct the potential safety hazard of the Lower Dam by immediately taking the necessary steps to increase its flood routing capacity to 144.0 cubic metres per second by selecting one of the following three remediation options:

- The labyrinth spillway design (Report on Dam Remediation Options, Golder, August 29, 2014),
- The auxiliary spillway design (Auxilliary Spillway – Conceptual Design, Golder, January 16, 2015), or
- An overtopping protection approach which, combined with other features as may be required (together the “overtopping protection approach”), would provide a level of protection comparable to that provided by the other two options,

[34] The Order requires the City to notify the Comptroller’s office of the remediation option selected by June 1, 2015. If the City chooses the overtopping protection approach, then the June 1st notification must be accompanied by a report from an independent expert, satisfactory to the Comptroller’s office, with the qualifications and experience required by section 12 of the *Dam Safety Regulation*. The independent expert’s report must also confirm the technical feasibility of the proposal to meet the flood routing capacity at the Lower Dam, and meets recognized dam safety guidelines.

[35] The Order requires the City to prepare a design report and construction plans for the selected remediation option and submit them to the Ministry for approval under the *Dam Safety Regulation* by June 22, 2015.

[36] The Order also requires the remediation option for the Lower Dam to be completed by November 15, 2015.

The requirements ordered for the Middle Dam

[37] For the Middle Dam, the Order requires the City to prepare and submit a revised conceptual plan by the end of 2015 that identifies and prioritizes any actions required to correct the potential safety hazard with the Middle Dam, and establishes a timeline for taking those actions.

[38] The Order requires the City to implement the revised plan for the Middle Dam in accordance with the *Dam Safety Regulation*, and within a reasonably expeditious time frame, but no later than the end of 2017.

Interim Stay

[39] The above-noted deadlines set out in the Order were temporarily stayed by the Board on May 29, 2015, with the consent of the parties, to allow the Board time to consider the City’s stay application.

The Appeal

[40] The City's Notice of Appeal sets out the following grounds for appeal and remedies sought:

- The Order should be reversed because the Comptroller erred in estimating the potential safety hazard posed by the dams and erred in assessing the scope and urgency of remedial action that is presently required.
- In the alternative, the City states that the Order should be varied to grant the City more time and greater discretion to identify and consider other options.
- Additionally, and in the further alternative, the Order should be varied to respect City Council's statutory authority over decisions regarding the fulfillment of municipal purposes because:
 - the Comptroller lacks the jurisdiction to require City Council to make a choice regarding a remediation option and to fetter that discretion with timelines and parameters set by the Comptroller, or
 - if the Comptroller has the jurisdiction, then he erred in ordering the City to make a choice regarding the Lower Dam in a manner that does not accommodate the plenary nature of the City's Council, including the possibility that the City will not comply with the Order if the Council vote on which particular remedial option is preferred results in a stalemate, and
 - the Order should be modified so as to respect City Council's statutory authority over decisions regarding the fulfillment of municipal purposes.

[41] In its Notice of Appeal, the City also provides a relatively detailed overview of its position on the Order. It observes that the Order includes two options for the Lower Dam from the April 9th order, and the additional option of an overtopping protection approach. The City explains that it attempted to retain GSI to provide the necessary report for the third option, but GSI said that it could not complete a report within the Order's timeframe and, given that the City had previously worked with Golder on a different approach, and in an effort to streamline the process, the City would be better off working with Golder.

[42] The City also explains that City Council has declined to choose between the two options involving a new spillway design. Given that the third option is not presently viable, the City wants to pursue appropriate dam safety measures "without being constrained by the parameters and tight deadlines imposed by the April 29 Order." It believes that the Comptroller has overestimated the risk posed by the dams and is requiring excessive remedial measures in response.

[43] If the City must perform a remedial action, it seeks the time and opportunity to consider preferred alternatives to a new spillway design, as it has been doing since Council reversed its decision to remove the dams in 2012.

ISSUE

[44] The only issue to be decided is whether the Board should grant a stay of the Order pending a final decision on the merits of the appeal.

RELEVANT LEGISLATION AND LEGAL TEST

[45] Section 92(9) of the *Water Act* grants the Board the authority to order a stay:

- 92** (9) An appeal does not act as a stay or suspend the operation of the order being appealed unless the appeal board orders otherwise.

[46] In *North Fraser Harbour Commission et al. v. Deputy Director of Waste Management* (Environmental Appeal Board, Appeal No. 97-WAS-05(a), June 5, 1997) (unreported), the Board concluded that the test set out in *RJR-Macdonald Inc. v. Canada (Attorney General)* (1994), 111 D.L.R. (4th) 385 (S.C.C.) applies to applications for stays before the Board. The test requires an applicant to demonstrate the following:

- (1) There is a serious issue to be tried;
- (2) Irreparable harm will result if the stay is not granted; and,
- (3) The balance of convenience favours granting the stay.

[47] The onus is on the City, as the applicant for a stay, to demonstrate good and sufficient reasons why a stay should be granted under this test.

[48] The Panel will address each aspect of the *RJR MacDonald* test as it applies to this application.

DISCUSSION AND ANALYSIS**Whether the Panel should grant a stay of the Order pending a decision on the merits of the appeals.**Serious Issue

[49] In *RJR MacDonald*, the Court stated as follows:

What then are the indicators of "a serious question to be tried"? There are no specific requirements which must be met in order to satisfy this test. The threshold is a low one.

[50] The Court also stated that, unless the case is frivolous or vexatious, or is a pure question of law, the inquiry generally should proceed onto the next stage of the test.

[51] In its Notice of Appeal, the City states that the Order is not one that affects the interests of a private dam owner; rather, it affects the City's interest in dam safety, good governance, public park provision and the stewardship of the public assets of its community. It states, "The Colliery Dams are a matter of significant

public interest and Council is expected to manage the Colliery Dams in a manner that reflects the will of its residents.” In this regard, it notes that when City Council decided to remove the dams in 2012, it was met with public protests. In its view, choosing the best means to respond to the Dam Safety Branch’s concerns is a complex and highly political decision and cannot be made quickly and easily.

[52] The City submits that its appeal alleges errors in the scope and urgency of the Order.

[53] The City also submits that City Council must meet and vote on resolutions that the Council collective considers to be in the public interest. The outcome votes reflect a spectrum of views of the individual Council members. The City submits that decisions compelled by the Order engage highly political issues that may make it difficult for the City to identify an option that satisfies the majority of Council members within a short period of time.

[54] The City argues that neither Council nor the Comptroller have chosen a specific remedial option that they respectively consider best for the dams. The Order seeks to compel Council to choose between options that Council has so far rejected. It also requires Council to make a positive choice between the options within one month. This does not respect the time required by Council to engage and respond to its residents and the time needed to perform its democratic functions. In addition, the Notice of Appeal seeks relief that avoids unnecessary and unlawful interference with Council deliberations.

[55] In addition, the options are too narrow and fetter Council’s discretion. Council ought to be able to present other alternative options that are acceptable to the Dam Safety Section once Council has had sufficient time to retain the services of an independent engineer, receive advice from the engineer, and consider the options endorsed by the engineer. Council must be able to choose through a deliberative process that is unfettered. It submits that the exercise of the Comptroller’s statutory power to issue orders under the *Water Act* should not be interpreted as including a paramount or dominant power over City Council’s exercise of its discretion to make decisions by resolution or bylaw.

[56] Finally, if the Comptroller may use the terms and conditions of an order under the *Water Act* to control City Council deliberations, the manner in which this has been done is procedurally unfair.

[57] Accordingly, the City submits that its appeal raises serious issues.

[58] The Comptroller submits that the City has not put forward any substantive law or evidence that establishes a serious issue to be tried. The Comptroller submits that the City’s materials contain no qualified opinion or fact to support the contention that he erred in identifying a safety hazard or erred in the scope and urgency of remedial action.

[59] Instead, the Comptroller submits that his affidavit evidenced “establishes there is no reason to doubt the City’s own engineering reports, the hazard posed by the Colliery Dams, or the scope and urgency of remedial action.” Further, the Comptroller submits that there is no cogent evidence to suggest that the Order is “unreasonably narrow or time-pressed.” The Comptroller submits that the City’s

arguments focus on the lack of time to explore alternative options, or otherwise make a decision, despite having deliberated and investigated alternative options, with the assistance of numerous professionals, for several years. The Comptroller states: "Merely being concerned about the financial and political costs of remediation does not, in itself, amount to raising a serious issue that satisfies the first step of the test in *RJR-MacDonald* for interlocutory applications."

[60] The Comptroller also submits that, with regard to the issues of urgency and timelines in general, the City has had substantive warning with regard to the hazards posed by the Colliery Dams and has thorough and reliable professional reports on remedial options.

[61] With respect to the jurisdictional issue, the Comptroller submits that there is no substantive evidence or law that establishes that this is a serious issue. The Comptroller identified a contravention of the *Dam Safety Regulation* and the need for the Order. The Comptroller submits that there is no conflict in laws or authority and that the City does not have the final say on whether it must take action to address the dam safety hazard posed to the public.

Panel's findings

[62] The Panel has carefully reviewed the parties' submissions and the City's grounds for appeal. Both parties provided affidavit evidence, detailed submissions and referred to case law in support of their respective positions on this branch of the test. The volume of submissions and evidence on whether or not there are serious issues to be tried, in and of itself, suggests that there are serious issues to be decided in this case.

[63] The Panel finds that the City has met the threshold for this issue. The Panel cannot find that the appeal is frivolous or vexatious, or is a pure question of law. Consequently, the Panel will proceed to consider the next part of the three-part test.

Irreparable Harm

[64] At this stage of the *RJR MacDonald* test, the City must demonstrate that its interests will suffer irreparable harm if a stay is not granted. As stated in *RJR MacDonald*, at page 405:

'Irreparable' refers to the nature of the harm suffered rather than its magnitude. It is harm which either cannot be quantified in monetary terms or which cannot be cured, usually because one party cannot collect damages from the other. Examples of the former include instances where one party will be put out of business by the court's decision ...; where one party will suffer permanent market loss or irrevocable damage to its business reputation ...; or where a permanent loss of natural resources will be the result when a challenged activity is not enjoined

[65] The City submits that it will suffer irreparable harm if a stay is not granted and it is forced to choose one of the remediation options. It submits that if a stay is not granted, the City will have to comply with the Order. It will have to make a choice on the remediation option for the Lower Dam and commence construction before the Board has had an opportunity to consider whether the City should be afforded greater discretion in how it responds to the safety concerns, if any, of the dams.

[66] If, after a full hearing of the evidence and arguments, the Board determines that the City should have been allowed more time and the ability to pursue different remedial options, the City may experience harm with regard to:

- financial expenditures;
- loss of park amenity;
- the representative democratic functions of individual Council members and Council as a whole; and
- a heightened risk of political discontent.

[67] The City submits that this harm will be “irreparable” because the City cannot seek damages from the Comptroller.

[68] In support of its submissions on harm, the City relied upon affidavit evidence regarding City finances from the Legislative City Manager and Corporate Officer of the City, Chris Jackson, and on the affidavit evidence of Niki Wilson, Paralegal with the law firm representing the City in this proceeding. The latter evidence relates to potential protests and disobedience by residents (and certain Council members) if there is damage or alteration of the park.

[69] The City also submits that it will suffer irreparable harm in the nature of “political harm”. It states that political harm will result from undue interference with Council deliberations. It submits that this is an unquantifiable harm to the democratic process. It states:

The City’s electorate may accept the Comptroller ordering the City to perform specific work, but still object to the Comptroller ordering the City’s own Council to make a specific decision that the Council has so far declined to make. The presumption is that Council votes reflect the will of the electorate.

[70] The Comptroller concedes that, if a stay is denied, the City may be forced to undertake the remedial works concerning the Lower Dam, and incur the necessary financial, political and other costs. However, the Comptroller submits that there is uncontroverted evidence before the Board that there is a need for immediate remedial action. Therefore, the Comptroller submits that the City will have to face these costs at some point, either now or in the future. The Comptroller notes that the City does not deny there is a need for the work on the Lower Dam; it simply suggests that its own consultant, Golder, might be wrong about the risks and what to do about them.

[71] The Comptroller also agrees that the financial harm incurred by the City as a result of compliance with the Order may well be irreparable; i.e., the expenses incurred may be unrecoverable. However, the Comptroller submits that costs should only be considered "irreparable" if they are not "inevitable". In this case, the Comptroller submits that the City will ultimately be required to undertake the required remedial work. A stay of the Order and a hearing of the appeal will only delay the work. Ultimately, the dams do not comply with the requisite *Dam Safety Regulation*.

[72] With regard to the potential for political protest or discontent, the Comptroller submits that it is "difficult to see how this is properly a harm for the Board to consider. The Comptroller notes that applicant for a stay in this case is the City, it is not the politicians – whether individually or taken together as a governing body – who make up its municipal Council. The Comptroller goes on to state:

With this lens, it is difficult to understand how the Applicant could suffer "political" harms. Political accountability is the domain of elected officials, not the government bodies that they govern. The convictions and stated intentions of individual Councillors have no bearing on this part of the analysis. While there may be financial costs associated with mounting a legal and practical response to acts of civil disobedience or protest, these costs can be an unavoidable part of governing in a society that permits its citizens substantial rights of democratic protest and expression. Furthermore, such costs are again insubstantial when compared with the interest of public safety in the face of an urgent and significant hazard.

Panel's findings

[73] At this stage of the test, the question is whether the City, as the applicant for a stay, has demonstrated that its interests will likely suffer irreparable harm if a stay is denied. As stated above, "irreparable" harm is harm that either cannot be quantified in monetary terms or cannot be cured, and includes instances where one party will be put out of business or will suffer irrevocable damage to its business reputation.

[74] In this case, if a stay is denied, the Order will remain in effect pending the conclusion of the appeal and the Comptroller will be able to enforce the Order. Although the Comptroller accepts that the financial expenditures made by the City in order to comply with the Order may not be "recoverable" from the government, should the City's appeal be successful, it also argues that such financial investments in the dams will eventually have to be made; therefore, the expenditures should not be considered "irreparable harm", it is simply harm that is experienced sooner, rather than later. The Panel agrees.

[75] The Panel further finds that the risk of political discontent does not constitute irreparable harm in the context of a stay. The Panel agrees with the Comptroller that the risk of political discontent and/or protest and any impact on the democratic

functions of individual Council members and Council as a whole, are not the sort of harms that would justify a finding of irreparable harm in an application for a stay.

[76] The Panel finds that the City has not established that its interests may suffer irreparable harm between now and the time that the appeals are decided, unless a stay is granted. However, even if the Panel is incorrect on its assessment of irreparable harm to the City, the Panel finds that such harm is relatively minor and will not justify a stay of the Order.

Balance of Convenience

[77] This branch of the test requires the Panel to determine which party will suffer the greatest harm from the granting or the denial of the stay applications.

[78] The Comptroller submits that the balance of convenience favours denying a stay. The Comptroller submits that the Order was made in the public interest and that, if the Board grants a stay of the Order it will cause irreparable harm to the public interest. The Comptroller submits that the financial and political harms alleged by the City do not "stack up" against the real, quantified threat of loss of life, and the risks to the environment and resources posed by a stay of the Order. The Comptroller submits that the latter factors are of "paramount importance."

[79] The Comptroller maintains that the overwhelming evidence provided by the City's engineers over the years is that the spillways for both dams are severely undersized. He relies on the affidavit sworn by Robert McLean, a Senior Dam Safety Engineer with the Dam Safety Section of the Ministry on June 15, 2015.

[80] Mr. McLean reviewed eight consultant's reports: seven authored by Golder; one authored by Water Management Consultants. He assessed the methodologies in the reports to determine whether they appear reasonable using his own knowledge and expertise and to determine whether they conform to good engineering practice. In particular, he wanted to determine whether the consulting engineers were underestimating the capacity of the spillways or overestimating the design floods. He concludes as paragraph 10:

I found no reason to conclude that the consultant engineers were being too cautious in estimating the capacity of the spillways or the design floods. That is, I am of the view that they were not overstating the degree to which the spillways for both Middle and Lower Dams are inadequate.

[81] Those reports found that the spillways for the Middle and Lower Dams are not even close to being adequate in terms of their capacity to handle extreme weather events. Consequently, remediation is necessary.

[82] From the reports, Mr. McLean identified the following additional conclusions: there is a high probability that the dams will overtop in any given year, there is a medium probability that overtopping will lead to a breach and dam failure (it depends on the height and time of overtopping), there is a low probability that either dam will fail suddenly and catastrophically resulting in full release of the

reservoir, and that breaching of the Lower Dam could potentially have significant consequences with respect to loss of life and property damage.

[83] The Comptroller submits that the risks increase with each passing month that the dams are not remediated. The Comptroller notes that the City's engineer consultants have identified the following impacts from a dam failure: significant loss of life and general risk to a permanent population downstream (including a school and daycare), damage to public infrastructure, residences, and commercial facilities, and environmental damage. The Comptroller also states that, based upon Golder's estimated costs of the damage, the cost of remediation of the Lower Dam in accordance with the Order is lower than the estimated cost to the City of a dam failure.

[84] The City acknowledges that there is a public interest in dam safety and in compliance with section 7.1 of the *Dam Safety Regulation*. Section 7.1 requires that dam owners respond to a potential safety hazard by implementing a plan in a timely manner. The City states that it has not breached this section because "timeliness" in this context requires consideration of a number of municipal public interests, including the financial, cultural, heritage, and safety interests of the City's residents and ratepayers. In the circumstances, it argues that the balance of convenience favours granting a stay until the Board can hear its appeal and issue a decision on the merits of the appeal.

Panel's findings

[85] There is no dispute that the current spillway capacities of the dams do not meet current standards. The disagreement appears to be in relation to whether the risk of failure is sufficiently "imminent" to warrant immediate action. The City's view is that the risk has been overstated. The Respondent's view is that the risk assessed by the City's consultants, specifically Water Management Consultants and Golder, has not been overstated.

[86] Based upon a Technical Memorandum prepared by Mr. McLean, the spillways for both dams are not even close to being adequate, and there is a high probability of both dams overtopping in extreme flood events. Mr. McLean's affidavit evidence is also that there is a medium probability of dam failure as a result of overtopping. The Comptroller notes that, dam failure - though not likely to be a "sudden burst" of the dam walls - could occur in one or two hours for Middle Dam and Lower Dam respectively.

[87] The Comptroller also cites Golder's November 21, 2014 report titled "Consequence Classification" in support of its assertion that the balance of harm is in favour of public safety. Mr. McLean summarizes Golder's November 21st analysis and concludes at page 8 of his affidavit that Golder's analysis was based on the following:

- As there is a population downstream including permanent residents and those temporarily populating the area depending on the time of day (e.g., at the community school and daycare), there is an expected number of fatalities

at a rate that placed the dams predominantly in the "high" category to just slightly exceeding the boundary with the "very high" category.

- There is an expected release of contaminated soils into the downstream portion of Chase River and onto the inundated low-lying areas adjacent to the Chase River.
- Destruction of aquatic and terrestrial resources is likely to occur and it is probable that the resulting flooding downstream would permanently alter or destroy habitat.
- There would be expected impacts to infrastructure including public transportation, services and commercial facilities – principally related to some damage to the community school and to some bridges serving local streets in the residential area.
- Between 13 and 27 residences would sustain severe damage for the scenarios considered.
- The amount of approximate damage is between \$5.3 million and \$8.3 million for the two dam breach rates considered.

[88] In Mr. McLean's affidavit, he also attached a copy of Golder's "Risk Assessment" dated July 25, 2014. This assessment was submitted to the City and its Technical Committee, in order to "better understand dam safety risks and to comparatively evaluate various remediation options." In the Executive Summary, Golder states, "The risk assessment provides a means to more thoroughly assess potential failure mode probabilities and consequences." The assessment provides an analysis of affected assets and risks to life based on modelling of various scenarios. Golder considered all potential failure modes that lead to downstream inundation and consequences. Specifically, the failure modes of interest were breaches caused by either storm events, seismic events, or a broad category of "other events", including the cascading effects of a Middle Dam failure on the Lower Dam. The Respondent submits that, the potential impact of a relatively conservative scenario (fast breach of the Middle Dam due to a probable maximum flood, with no Lower Dam failure), includes:

- affected improvements value of \$44.2 million;
- contents of \$16.2 million;
- day population at risk of 917 people; and
- night population at risk of 1254 people.

[89] The Comptroller submits that the public safety hazards are "acute" and "the need for remediation is immediate".

[90] On the facts of this case, the Panel finds that the balance of convenience weighs in favour of denying a stay of the Order. Although the Panel appreciates that there is public support for protecting the park and the recreational values, the potential for loss of life and the damage to private properties, public properties, and the environment in the event of a significant flood event or a breach due to seismic

activity (which could happen at any time), outweighs the harms identified by the City.

[91] As noted by the Comptroller, the City does not dispute that something needs to be done about the dams. In fact, it made a decision to remove the dams three years ago. Since that time, the City has spent significant time and money on investigating options. The Panel appreciates that compliance with at least portions of the Order prior to November means that certain aspects of its appeal may be moot. However, given the significant and, with respect to loss of life, completely irreversible and irreparable harm that may result from a failure to comply with the Order over the coming months, the harm to the City of complying with the Order is, on balance, far less than the harm to the public interest.

DECISION

[92] The Panel has considered all the submissions and arguments made, whether or not they have been specifically referenced herein.

[93] For the reasons stated above, the application for a stay is denied.

[94] The Comptroller is directed to impose new timelines for completion of the Order respecting the Lower Dam.

[95] The Interim Stay is rescinded.



Alan Andison, Chair
Environmental Appeal Board

June 30, 2015