

**CONFIDENTIAL MINUTES**  
**COLLIERY DAMS TECHNICAL COMMITTEE**  
**WEDNESDAY, 2014-MAY-21 AT 9:00 A.M.**  
**TRAINING ROOM, CITY HALL, 455 WALLACE STREET**

---

**PRESENT:**

*Snuneymuxw First Nation:*  
Chris Good (10:15 a.m.)

*Colliery Dam Park Preservation Society:*  
Jeff Solomon  
Geraldine Collins  
Lorne Gale  
Leon Cake

*City of Nanaimo:*  
Toby Seward, Director, Social & Protective Services  
Holly Pirozzini, Recording Secretary

*Executive Committee:*  
Ted Swabey (12:00 p.m.)  
Ian Howat (12:00 p.m.)

Katherine Gordon, Facilitator

---

1. Call to Order

The meeting was called to order at 9:10 a.m.

2. Minutes

The Committee was requested to provide changes to the draft minutes for 2014-Apr-10 and 2014-May-12 by Friday, May 15.

3. Middle Dam

Facilitator – At yesterday's meeting, the consensus was to advise Dam Safety Section (DSS) of the Committee's decision to defer any remediation work on the Middle Dam to a later date.

Colliery Dam Park Preservation Society (CDPPS):

- A significant amount of money has been paid for the risk analysis and the Committee should rely on the findings which indicate that there is very little benefit in doing remediation work at the Middle Dam in terms of risk to the community.
- DSS has been present in meetings where the risk assessment approach was discussed and they didn't state earlier that they weren't in support of it.

Golder Associates (GA):

- DSS has stated categorically that something needs to be done with the Middle Dam spillway to bring it up to the classification standard.

- DSS is aware that the risk assessments have shown that the risk is minimal, but they need to follow regulations and the rules of the seven criteria they have based the *High* classification on.

CDPPS:

- We are breaking new ground with the risk assessment approach and we're aware this is a test case for the Province and a new approach for DSS.
- DSS is accepting the risk assessment for the Lower Dam, but not for the Middle Dam.

**Q:** What would DSS do if the City stated that they would be doing nothing to the Middle Dam based on the risk assessment showing that the risk is minimal?

**A:** City responded that we have a reputation to deal with DSS in future projects and we have to recognize the difficult position they are in. We believe there is a very positive argument based on the risk analysis, to not do anything at the Middle Dam. In yesterday's meeting we discussed three alternatives respecting the Middle Dam and what DSS will require from us: do nothing; do improvements over a longer term; or do something quickly. We want to pursue doing nothing.

GA:

- The Dam Safety rule books are reviewed approximately every 10 years.
- Things are evolving and changing in this business, so there may be time to do another Dam Safety Review in 7 to 10 years.
- From a system point of view we know that waiting won't make a difference to the safety of the community.
- We will need to make a case for DSS to make a favourable decision.
- The City needs to respond to the email from Scott Morgan, dated May 08, 2014.
- The email makes no specific reference to the Middle Dam or the Lower Dam, but states the next steps.
- We believe DSS is prepared to use the risk assessment.

CDPPS:

- Referred to a comment made in an earlier meeting and clarified that there is spillway capacity at the Middle Dam and that there was no overtopping in 1955.
- Advise DSS that we've done the risk assessment and we're going to put remediation work in the Middle Dam off to a later date.

**Q:** Is it an acceptable range for risk if we only do work on the Lower Dam?

**A:** GA responded that DSS had to classify the Middle Dam, but we heard from them that we could plan for remediation work there in future. They said there is no dam in the Province that is not classified. When the dam is reviewed in 10 years, the situation, design criteria, capacity of the system could all have changed. PMFs have gone up in the past 20 years. From the City's point of view, you could advise DSS that you will address the Lower Dam now because that is the most cost benefit to the community and will put the work on the Middle Dam in abeyance for future.

City:

- City stated that although the group consensus is to do nothing at the Middle Dam now, Council will need to be advised that improvements to the Middle Dam may be necessary in future.

CDPPS suggested that careful wording be used to provide an open statement to DSS respecting Middle Dam future improvements and costs.

**Q:** Could monitoring be added at the Middle Dam to indicate to DSS that the City has done something for alertness?

**A:** City responded that the Call Alert public information system could be maintained which would alert if there was overtopping of the Middle Dam in a flood situation.

**Q:** Is there a reasonable cost alternative (to rip rap or mats) of allowing overtopping of Middle Dam?

**A:** GA responded that Council could be advised of a solution with costs, but this work and money will be put aside for the future if needed. Put a timeframe in place to remediate the Lower Dam and monitor its performance annually before spending money to remediate the Middle Dam.

**Q:** Is it enough to advise Council that the Middle Dam may need work, but the costs are unknown?

**A:** City responded no, we will have to qualify the costs for the work. We can indicate that this work has been planned for with a caveat that it may not be necessary.

GA:

- They have lowered the classifications. Based on this and after work is done on the Lower Dam, they may lower the risk rating.
- Inspecting the dams and providing an annual report to DSS may reduce the profile of this project and DSS may move this project off their radar.

**Q:** Is the classification based on the condition of the dams now and not on the remediation work that is being planned? Will DSS review it again after the work has been completed?

**A:** GA responded that there is the consequence and the risk to consider and the classification is based on a combination of both.

Facilitator - At yesterday's meeting, DSS appeared dissatisfied with no work being planned at the Middle Dam, but they also did not say that something has to be done. We have been asked to come back with a strategy and a plan to have an open-minded discussion respecting the Middle Dam.

CDPPS stated that DSS could be advised that it's not cost effective to do anything at the Middle Dam, but have a placeholder for the minimal amount of work and cost required to allow the Middle Dam to overflow.

GA suggested that Council be advised of the costs for a plan to remediate the Middle Dam and that a presentation be made to DSS that the Lower Dam will be monitored until the next Dam Safety review (7 years – 10 years).

City requested that GA spend a small amount of time to provide an order of magnitude for costs to armour the slope on the Middle Dam to allow for overtopping.

**Agreed: The priority is the Lower Dam. With respect to the Middle Dam, GA has completed a risk assessment that shows it is not as high a priority as the Lower Dam; therefore, TC supports remediation of the Lower Dam with monitoring at the Middle Dam for 7 years until the next Dam Safety Review. The City will leave the**

**monitoring system for water levels in place and there is a well-established Emergency Measures procedure. It is also recommended that the Operations and Surveillance Manual be updated with a focus on the Middle Dam. GA has provided order of magnitude costs to armour the slope of the Middle Dam. The Committee believes this will adequately satisfy DSS' requirements with respect to the Middle Dam in the interim, based on the discussion had with DSS and it meets the Committee's objectives.**

GA was requested to make the argument to DSS that it is a viable solution (that no work is required at the Middle Dam at this time). GA suggested that surveillance on water levels at the Middle Dam will be a good interim measure to put in place.

CDPPS:

- DSS shouldn't be concerned with the cost of overtopping for the Middle Dam.
- The report to DSS could state that the Middle Dam is being monitored until the next Dam Safety Review.

City:

- There is an obligation to report to Council with information and costs, for improvements to both the Lower and Middle Dams, in order to receive political approval for the budget.

Chris Good arrived at the meeting at 10:15 a.m.

Facilitator – The costs to remediate the Middle Dam are irrelevant to DSS and do not have to be included in the recommendation, but City has noted that there is an obligation to provide these costs to Council.

Facilitator – Advised that CDPPS has requested the Committee revisit Option 2 – swale (auxiliary spillway). Suggested that the Committee review the two options again and then discuss if there is a rationale for a third option. The next steps are recommendations to the Executive Committee on options, rationale for the options, and the timeline.

CDPPS:

- The costs are what's driving the decision on the two options (labyrinth spillway and overtop dam) and they are higher than expected.
- Should reconsider the swale option.
- The swale area may be utilized for education (i.e. a Snuneymuxw First Nations centre) or for recreation; involve the City's Parks & Recreation Department.
- We have time to consider all the options and shouldn't rush to make a decision.
- Limited information (cross sections and plans) has been provided to make a decision on which option.
- In past involvement with park projects, have received renderings to analyze.
- Can't picture other options and an end user appeal without a visual or consideration to the park aspect.

City:

- We need to review the two options first, and then discuss the third option as a separate issue.
- We are over budget by \$90,000 now and don't have any money to pursue a third option and its costs.

- Labyrinth is a standard engineering design and is a definitive solution that any contractor can bid on it.
- A stop log is a key component in the labyrinth design.
- There are more unknown risks with the construction method for the overtopping option and there will be more maintenance required.
- Supports the labyrinth option because of the design and cost certainty.

CDPPS: (Jeff)

- GA has qualified the risk and has specified what work needs to be done.
- Neither option meets the requirements that are essential: cost effective and least disruptive.
- Labyrinth is extremely disruptive to the park.
- Nobody has ever died in Colliery Dam, but the labyrinth will be a public safety hazard.
- There is not a lot of water flow on a regular basis, especially in the summer; only 40 cms in a good rain.
- There isn't time to do the overtopping this year and the labyrinth work would be rushed to complete in 5 weeks.
- GA has removed the sense of urgency.
- Use the information we have been given and consider if there are other options for the park.
- It's not okay to lower the water in each reservoir to half this summer when the BC Summer Games will be occurring in Nanaimo.

CDPPS: (Leon)

- The process has been rushed; wished more thorough information was provided (spreadsheet of all evaluations and the timing for these), plus an analysis of the strength / life expectancy of the concrete and spillways.
- We have spent money to save the lakes and now need to make sure the solution is cost efficient and suits the community for use of the park.

SFN:

- Environmentally, would like to minimally impact the park and protect the fishery.
- Overtopping option has a lot of uncertainty (fill materials and climbing costs) and it needs to accommodate low flow times.
- Removal of trees is an issue because there are culture modified trees within the proposed swale area.
- The Committee needs to define its role and reach a decision on behalf of the Harewood community.
- This has been a long process and there is a tight window to achieve permitting even if it can be expedited.
- Supports the labyrinth option; recognizes that fencing and signage will be necessary for public safety.

CDPPS: (Geraldine)

- Surprised at the costs of the two options increasing from \$1 to \$2 million to \$7 to \$8 million now; both are too expensive.
- Requested better costing from GA as they have indicated that there may be cost savings.

CDPPS: (Lorne)

- Labyrinth option is big, ugly, cumbersome and dangerous.

- In favour of overtop dam option even though there are uncertainties because of less impact to the park.
- Spillway upgrade is 60 ft wide by 17 ft deep is a massive concrete channel with lock block walls, but look is functional.
- 90% of the time it will have a few inches of water running in the bottom of it with maybe over a foot in winter time.
- Haven't included public safety costs in spillway upgrade.
- To create the spillway upgrade requires working in the waterway with machinery, blasting or chipping fill and potential for fishery contamination.
- Low level outlet 18 in valve will drop the water level 10 ft (only giving a few days of release) and then it's no longer useable as a lake.
- 30% of water volume will be left in the lake and this will affect users' access.
- Simple to add a low level valve in the labyrinth option and could do a similar thing for the overtopping option, but this will cost more money.
- Labyrinth spillway (18 m wide) option accounts for a 1 in 50,000 year flood event and will likely never be used to its capacity.
- We will have destroyed the park for a very small chance that an event may occur.
- Swale option is too invasive.
- Need an option that maintains the look of the park, but provides a safety measure for a very low frequency event.
- 12 m spillway version is less invasive, but is limited because it doesn't provide for the very worst case scenario, whereas the overtopping option is unlimited.
- No value has been provided for safety issues in the labyrinth option and the visual impact for something that will never be used.
- There's a family of otters every morning that come up the spillway which would be lost with the labyrinth.
- Compared costs for the two options and the overtopping option is less by one-third.
- It is premature to be making decisions on conceptual costs without any renderings.
- Supports overtopping option because it is the least invasive and most cost effective.

**Q:** Will damage occur and maintenance be required if overtopping did occur?

**A:** GA responded yes, but the spillway is designed for a 60-year term.

**Q:** Can the overtopping option costs be reduced?

**A:** GA responded that the labyrinth option costs were used and then 10% was added for the overtopping option costs with consideration given to the variability in the materials. These costs are estimates, particularly the 30% contingency would be reduced with more design work. Will have an inherent risk on the overtopping option no matter how much investigation because the fill materials are unknown. Drilling on the slopes and collection of samples could be done to determine the materials.

**Q:** Why wasn't an analysis of the spillway concrete done previously?

**A:** City responded that it's not a driving factor in the decision-making process. The focus was on coring the dam which has led to a lower classification of the dams and that was money well spent.

**Q:** Is it important to know how many years the spillway will last?

**A:** GA responded that it's part of the maintenance costs that may have to be addressed in future. If the labyrinth is replaced then you have eliminated that maintenance cost. This project has been driven by deadlines and schedules and requirements by DSS that

something be done in 2014. The costs are as realistic as possible based on the information available at this time.

City:

- The City and DSS have been driving the schedule to find a solution.
- Reclassification of the dams is a win.
- We have budget considerations .
- These are realistic cost estimates that may change depending on design, but prefer them to be too high than too low.

CDPPS:

- Oct 2013, DSS dams were both classified as *Extreme*.
- Due to GA's work, the dams have now been reclassified as *Very High* and *High*.
- DSS is aware of all the things we have done for short-term mitigation.
- We are now in a position to relax and not make any decision unless based on more exact costs.
- Labyrinth is too invasive and costly for a one circumstance event.

**Q:** Why are we designing for one inch of water 99% of the time?

**A:** City responded that engineers must design for the worst case scenario.

**Q:** What is GA's professional preference?

**A:** GA responded that there is no professional preference. The labyrinth is not something that is going to be used 99% of the time, but unfortunately, we have to design for things that are very low occurrence. Overtopping has not been done in the Province before and is not well accepted by DSS because they have no experience with it. From a risk point of view there is more assurance with the spillway labyrinth option. Consideration is being given to how these two options will look because they are in a park. Both options will work and we may be able to find cost reductions for both, but the decision has to be made on invasiveness in the park and what's best for the community.

**Q:** What will be the environmental footprint and impact on the park of the overtopping option?

**A:** GA responded that once cleared, there will be a better chance of regenerating some of the park ambiance with the overtopping option than with the labyrinth option.

City:

- GA provided four viable options and they are willing to stand behind their work.
- The Committee has chosen two of the options.
- Must consider the public's perception if we were to hire another consultant now to further explore options or if we asked GA to review other options.
- There is no more money to further explore options.
- Need to make a decision and provide a recommendation to the Executive Committee today.

**Q:** Is it achievable for actual construction for either option this year?

**A:** GA responded that the only way to complete the work this year would be to hire an early works contractor to reduce the field of contractors required and this assumes all permitting would fall into place.

City stated that a solution needs to be in place this year to proceed with the design and permitting so that construction can begin next year, including planning around closure of the park or a portion of it.

CDPPS advised that construction cannot be completed this year because in order for this to happen, the design for either option would need to be in place by July 1<sup>st</sup>.

**Agreed: It is highly unlikely that construction of either option could take place this year.**

Facilitator – The Committee is in a position to update the Executive Committee on the following:

- Middle Dam and key points raised around the Middle Dam; and
- planning issues for options for remediation of the Lower Dam.

Ted Swabey and Ian Howat arrived at the meeting (12:00 p.m.).

LUNCH break at 12:05 p.m. – 12:20 p.m.

#### 4. Update to Executive Committee

Middle Dam Update: The Committee took the approach that remediating the Lower Dam is the priority because it is the higher risk dam and that any impact of failure at the Middle Dam would be adequately mitigated by work done at the Lower Dam. DSS has indicated that they are not convinced that this will be satisfactory, but they have also indicated that there is no urgency to address the Middle Dam. Based on discussions with DSS at yesterday's meeting, the Committee is recommending:

- The report to DSS from GA on behalf of the City on the Middle Dam will suggest that the Middle Dam be reviewed as well as the Lower Dam within a 7-year timeframe to see how the Lower Dam is performing with the remediation in place and identify if there are any other issues after that period of time, and bring additional information that may have changed for the Middle Dam over that time.
- Would provide an order of magnitude of costs for remediation that might be required at the Middle Dam. The Committee believes that this should be satisfactory to DSS. The Middle Dam is not high on their radar as long as the Lower Dam is addressed. This meets the Committee's objectives as being the most cost effective.
- Monitoring water levels on both dams and the Emergency Measures procedures should remain in place and the Operation Maintenance Surveillance Manual should be updated.
- GA has recommended that annual inspections take place on both dams and based on this, no work will be done at Middle Dam in this timeframe.
- GA will also determine an order of magnitude for armouring the slope (the costs to be provided in a report to Council; not for DSS).

**Q:** Will the order of magnitude for armouring the slope of the Middle Dam occur after seismic and other reports are submitted by GA?

**A:** City responded that it is preferable for the order of magnitude report to run concurrently in the next 4 – 6 weeks. We need to respond to the email from Scott



Morgan, DSS, respecting the classifications of the dams and at a further date provide them with GA's final report.

**The consensus of the Technical Committee is that no work is necessary at the Middle Dam.**

Lower Dam Update:

*Timing* – The original timing for work of this Committee was to put in place a short-term mitigation by 2014 and prepare a plan for long-term mitigation with completion of design by the end of this year, to be implemented next year. Advice from GA is that there wasn't any physical short-term mitigation that is cost-effective to put in place, so the Committee focused on long-term mitigation being in place this year, if possible, or by 2015.

*Challenges* – Completion of design, hiring contractors, permit and approval process (Dam Safety Section, Habitat Branch, Fish & Wildlife Branch, Department of Fisheries & Oceans, Archaeological impact assessment), depending on which option is chosen. The Committee has concluded that it is unrealistic to put an option in place this year.

**The consensus of the Technical Committee is that it is highly unlikely for construction this year, even if a decision was made today on an option.**

*Park Closure:* There may be a four-month closure of the park next year for the construction to take place. This allows for community consultation for the park and to conclude discussions with DSS and receive their approval on whichever option is chosen.

City stated that the timing of not being able to have an option in place this year, does not negate the need to get a solution in place by the fall for the work to be done by next spring.

Two Remediation Options for the Lower Dam:

The risk assessment resulted in the Committee addressing remediation for a flood event, rather than a seismic event. The following two options were considered:

- (1) Labyrinth: 18 m labyrinth weir, high concrete structure with a 17 ft drop to the water, loss of habitat, destroys heritage spillway structure, requires a new bridge, includes stop logs for controlled draw down of reservoir and a low level outlet for dry season releases - budget \$8.1 million.
- (2) Overtop Dam: tree clearing, trail construction, loss of habitat, landscaping to direct flow of water into a safer path, involves soil excavation, berm construction and a new bridge – budget \$7.3 million.

Both options were assessed respecting aesthetics in a park, public safety, and cost-effectiveness. Both options allow for the ability to take water from the upper level to the lower level (labyrinth through a low level outlet; overtop dam through a siphon system) for fisheries downstream.

Ted Swabey asked if the overtop dam work is done, did DSS say that the spillway at the Lower Dam would have to be done at a later date? GA responded that DSS said the condition of the existing Lower Dam spillway is an ongoing maintenance issue.

CDPPS (Leon) restated comments made earlier in the meeting (see above) and added that this decision is based on cost vs. finished product. Supports the overtopping option.

CDPPS (Jeff) restated comments made earlier in the meeting (see above) and added that the overtop dam is the least intrusive and cost effective. Supports the overtopping option.

CDPPS (Geraldine) agreed with comments made by Leon and Jeff. Supports the overtopping option.

City restated comments made earlier in the meeting (see above) and added that there is the potential for savings by going to an MSC wall system, as opposed to a cast in place for the labyrinth design. Supports the labyrinth option.

CDPPS (Lorne) restated comments made earlier in the meeting (see above) and added that there is an unknown public safety risk for the labyrinth option. Supports the overtopping option.

SFN restated comments made earlier in the meeting (see above) and added that the remediation work should not be designed for the 99% of the time, but for the 1% of the time or worst case scenario. Supports the labyrinth option.

Ted Swabey asked if there is a low water level valve in both options? City responded that a siphon can be included in the overtopping option, which will have the same outcome as the low level outlet in the labyrinth option.

**Q:** Is there another way to get water from the upper to the lower reservoir?

**A:** CDPPS responded that based on continued release, a water level outlet will provide 3 days of water (water level will go down 10 feet) then there will be no more water until it rains. The selection of an option should not hinge on this issue.

Ian Howat asked for clarification that the overtopping option requires three months of good weather, which is rare, so how would this impact the construction? GA responded that it would take approximately two months and there are methods to accommodate weather delays, but work will not be done in extreme rain.

**Q:** What is GA's experience with blasting fracturing the dams when working in spillways?

**A:** GA responded that if blasting is required, it will be a well-established and controlled type of blasting to minimize vibrations.

Ian Howat asked if a 1% flood event happens, what post-event maintenance is required for the overtopping? GA responded that no damage will occur to the soil/cement mix, but the topsoil will be lost and damage will occur downstream. The topsoil can be replaced. This will occur in a 1 in 50,000 year event.

Ian Howat asked if the labyrinth option can be turned into a two-step version so there is a low flow version and a high flow version? Can boulders be placed into the lower portion and plantings in the higher portion? GA responded that placing boulders in the bottom will reduce the capacity but they could give some consideration to this concept.

Discussion occurred about the importance of a low level valve or pulse water release (labyrinth option) and what would be the impact of a siphon on the water temperature (overtop dam option). It was suggested that further discussion should be held on these issues.

Facilitator – There is consensus that there are two viable remediation options that are within the same realms of cost. Four questions have been identified: Can aesthetic issues for the labyrinth be addressed? What are the options to release water at low level times into the Chase River system? What are the environmental impacts of both options? What will be the results and implications of the required archaeological assessment?

Ted Swabey expressed disappointment because the Committee has not agreed on a solution. He summarized today's discussion:

- We are not in a position to move forward this year to do the remediation work.
- Due to the reclassification, DSS is not going to demand that work be done during the winter.
- Both options have environmental concerns. GA has stated more information could be provided.

**Q:** Is there a way to move the City and the SFN to support the overtop dam option?

**A:** City responded that the overtopping doesn't have the certainty that the labyrinth does and if this is the only solution, then is hesitant to support it. SFN responded that if it is possible to address all of the unknowns and concerns (environmental and fisheries impact, quality and content of soil / possible contamination) they could consider overtopping.

**Q:** Is the cost of the overtopping the main concern?

**A:** City responded that the cost and the uncertainty because there is an inherent risk in the construction method.

**GA:**

- Labyrinth is a straight-forward construction, has more assured costs and concrete pouring is easier compared to earth moving for the overtopping.
- Overtopping is a slow, detailed operation that will require a good Contractor. It has to be done in sections and will need to work out accessing, excavation and replacement of the soil; there is a sequential risk that you might overrun the costs (has included a 30% contingency). This method is a new technique and will require working on a slope.

**Q:** Does the City doubt the overtopping design?

**A:** City responded that GA has stated that there is an inherent risk in the construction method and it has not been done in Canada. The overtopping is not a proven technology, so there are more risks and uncertainties that the costs could escalate. The labyrinth is an assured method.

**Q:** Does GA have confidence in constructing both designs?

**A:** GA responded that there are differences in design criteria because of the amount of water flow, but one is as effective as the other. The overtopping option is more complex and more difficult to construct. Post flood there will be more maintenance and more erosion at the toe of the overtop dam than at the labyrinth spillway.

**Q:** How many of the overtop dam constructions in the States has GA been involved in?

**A:** GA responded none. The fact that one design hasn't been done as many times as the other, doesn't necessarily make it unreliable. The overtopping method has been around for years all over the USA; what vary are the materials you mix the cement into.

**Q:** Did DSS state that they would obtain a peer review for the overtopping method?

**A:** GA responded yes.

Ian Howat asked if the water volume is 1m high at the top, is there more water in the lower section for the overtopping option? GA responded yes, the water will funnel down and velocities will increase. The soil mix in the lower portion is thicker and will have additional strength.

**Q:** Is there a way to move CDPPS to support the labyrinth option?

**A:** CDPPS responded that the main issues are aesthetics and public safety. The labyrinth is not visually acceptable. It could be improved by a covered culvert or tunnel, but that would significantly increase the costs. The costs would double to make the labyrinth more palatable.

CDPPS requested that the Executive Committee provide both options, including the costs, in its presentation to Council.

Next Steps:

Facilitator – If we assume planning takes place this year and work is done as early as possible next year, does SFN have a sense of the time line to go through the decision making process? SFN responded that the Chief and Council will be updated at a meeting on June 10.

Ted Swabey summarized that there are two issues to review:

- (1) SFN's concerns with the impact to the environment/fisheries downstream in the overtopping option; and
- (2) CDPPS' concerns with the aesthetics of the labyrinth option.

He added that Toby, on behalf of the City, is supporting the option that has the most certainty, but that is not an overriding factor in the final decision. A further meeting may be necessary with the Technical Committee to discuss a way to bring both sides towards acceptance of one option. Both options are viable and Council will need to hear about the risks associated with both.

**Q:** Can the public have an opportunity to hear about the options?

**A:** Ted Swabey responded that City Council and SFN Council may have questions for the Technical Committee. If the Technical Committee agrees on a solution, there will be a public presentation.

Ted Swabey and Ian Howat left the meeting at 2:35 p.m.

CDPPS suggested that GA could be asked to provide more information respecting environmental concerns with the overtopping option and to explore a culvert and costing to improve the aesthetics of the labyrinth option. City expressed concern that this project is already over budget.

5. Public information Update

Facilitator provided a draft *Public Information Update* for review.

The Committee requested that statements be added respecting:

- DSS had classified both dams as “Extreme consequence” for a flood or seismic event, based on the dams being very vulnerable to sudden failure and posing a serious risk to public safety;
- due to Golder’s site investigations and comprehensive risk assessment, the risks related to the dams in the event of an earthquake are significantly lower than previously believed;
- there is no longer a concern with a seismic dramatic rupture of the dams, instead this would be manifested through slow leaking through cracks in the dam walls;
- remediation options are being developed at the Lower Dam for an extreme flood event; and
- DSS has now reduced the dam classifications, subject to receiving a detailed report from GA.

City stated that Phil Turin, Secretary-Treasurer, School District #68, has been advised that a Press Release providing an update on the Colliery Dams will go out by the end of this week.

**Q:** When can signage in and around the park be reduced?

**A:** City responded that before reducing the signage, it’s important to release a public information update, advising of reduced classifications and that the Committee is engaged in reviewing remediation option(s).

Facilitator – Will email a revised draft Public Information Update to the Committee tomorrow for further review, prior to it being released to the public.

## 6. Conclusion

The meeting concluded at 3:30 p.m.