Beckwith Pond Dam Decommissioning - Updated Jan 2024

Reported by Doug Ashbee, NQCA director.

NQCA members Pres. Michael Moore, Vice Pres. Trevor Barry & I met with Saanich Parks staff on Sept 29, 2023, to discuss the results of the soil elevation test holes dug on Sept 12th. Unfortunately, the results showed the dam height to be greater than 3 m and therefore not exempt from the new dam decommissioning regulations. We are basically left with only 2 options; remove substantial vegetation surrounding the ponds or reduce the height of the dam by approx. 75 cm (2 1/2 ft) as originally proposed by Jordan Mann.

Saanich staff met with the Dam Safety Officers the first week of Oct to discuss the data & necessary actions to bring the dam into compliance. They promised to get back to us once they have formulated a plan.

- 1. The results of the Rizek Geotechnical natural soil level tests Sept. 12 revealed a much lower level than hoped for, meaning the dam height would have to be lowered by 4 ft. as measured from the maximum water level at the existing concrete spillway, effectively drying up the duck pond. This is unacceptable to the community and eliminates the original plan as posted.
- 2. After an Oct.25th on-site inspection, experienced dam consultant Brian Lecase is preparing a report on possible alternate solutions that may satisfy DSO (Dam Safety Office). Unfortunately, the report wasn't finalized in time for our meeting but will be presented by Jordan Mann at the next NQCA meeting Thurs Jan 25 @ 7:00 pm at Saanich Commonwealth Place.
- 3. Maintaining current water level in the ponds would require removal of all vegetation from both sides of the main dam #1 where the main risk of dam failure would occur. However, it would most likely not include any removal of vegetation from saddle dams #2 & 3 which adjoin Lucas Ave backyards.

- 4. The DSO has determined the risk factor assessment to have a significant 'consequence' rating because of the flooding of 4 low lying homes (by 6" in the backyards) on Crosshaven Close during the recent atmospheric river event. This consequence rating could possibly be reduced by the construction of a diversion berm and proper drainage channel enhancement along Beckwith Creek.
- 5. Paul deGreeff mentioned in previous conversations that after the dam is brought into compliance and the DSO satisfied, Saanich & Don Mann still hope to proceed with dredging the small duck pond & constructing a weir to maintain as much water as possible.
- 6. No work will be completed until the next fisheries window in August 2024.

Following this meeting I sent the following questions for clarification to Suzanne Samborski, Saanich Parks Director. Her email response below:

From: Suzanne Samborski < Suzanne.Samborski@saanich.ca >

Date: October 4, 2023 at 9:28:01 AM PDT **To:** Doug Ashbee dncshbee@icloud.com>

Cc: Michael Moore < iammichaelmoore@gmail.com >, Eylin Gilbart < eylingilbart@hotmail.com >, Paul de

Greeff < Paul.deGreeff@saanich.ca >

Subject: RE: (External Email) Beckwith Ponds

1. Can you confirm that the test drilled Sept 12th proved the depth of the big pond was over 3 m and therefore falls within the dam decommissioning requirements?

The test pit did not confirm the depth of the pond. It confirmed the depth of the native soil level prior to the dam's construction. Ideally the test pit would have shown a high elevation of the native dense soil which would have allowed for a high construction elevation for the partial decommissioning spillway and retention of the water levels in the pond. Unfortunately, the test pit showed a very low native soil level which translates to a low spillway elevation and at least partial pond draining to meet Dam Safety Regulations.

2. Of the 2 recommended options, would it not be preferable to remove the necessary vegetation (primarily deciduous cottonwood trees) affecting the dam integrity rather than drastically reduce the dam height & water level - which also impacts the small duck pond even though there is no risk there?

With either option, wildlife habitat is affected. The dam partial decommissioning, as per the description in (1.) above would result in the water level dropping in the pond and we know the community is opposed to this. Would this just involve vegetation removal on the east side of the big pond where the only possible breach might occur rather than other areas? No – this point needs to be confirmed with the geotechnical engineers, but Saanich believes that it would involve removal of vegetation on all 3 dams.

3. What is the timeline for possible vegetation removal - months or over a few years? The Province wants the dam brought into compliance with the regulations as soon as possible. Dam Safety Regulation - Province of B.C. (gov.bc.ca). Vegetation removal would occur during the permissible nesting bird windows (outside of nesting season).

And is it possible to replant affected area with more suitable & fast-growing shrubs & trees with less distributive root systems. I'm sure the Pulling Together Volunteer Team would be willing to help with that task to help save this jewel in our community. No – grasses are the only allowable vegetation on the dam faces (both front and back face).

- 4. Would it be possible to reinforce the width of the east bank of the big pond with an enhanced dirt berm to reduce the RISK, and an additional dirt berm or diversion alongside the few low-lying homes to reduce the CONSEQUENCE rating to minimize the decommissioning actions required? Retention of the dam will require significant investment in geotechnical assessment and reporting along with any remedial works recommended by the geotechnical engineer. In addition, a diversion berm would need to be constructed to reduce the consequence rating regardless of whether the dam was improved or not. If the decision is made to retain the water level by bringing the dams into compliance with provincial regulations, tree removal, dam repair and diversion berm construction will all be required for this option. This is likely to occur with cost-sharing between the current license holder and Saanich, so will require Council approval.
- 5. Is it possible Saanich could take over the Don Mann's water license to help reduce the action required, or did Brent say your legal department has advised against it? The Province will not transfer the water license to a new owner until the dams are brought into compliance with the Dam Safety Regulation. Water licenses carry responsibility for dam maintenance.