Graham Lake Improvement District Report presented at the GLID AGM from Trustee Chris Page – March 27, 2019

Good evening Ladies and Gentlemen,

One area of responsibility that I have undertaken is the monitoring and the maintenance of the dam at the outflow end of Graham Lake. The Graham Lake dam which was built in the early 1970's that retains a height of about 1 metre of water and is an earthen dam with a concrete spillway. The spillway controls the outflow from the dam into the creek bed below.

I have taken a course on Dam Maintenance offered by the Ministry of Forestry, Lands, Natural Resource Operations and Rural Development in Nanaimo. The government of BC has mandated that dams that could cause damage in the event of any failure be monitored and inspected on a periodic basis based on the risk assessment. I have walked down the stream bed from the Graham Lake dam to the ocean to assess the consequences of excess water flow.

There are 5 categories of dam failure consequence classification: these are low, significant, high, very high and extreme. If there was a major failure of the Graham Lake dam the risk would be classified as significant. This means that there is virtually no possibility of loss of life but there is a possibility of property damage. During inspection of the dam, I would be looking for excess leakage, cracking or other signs of failure. The Graham Lake dam should be inspected monthly based on this 'significant' classification. The dam must be maintained and repaired as necessary to minimize the risk of failure. This would include vegetation removal near or on the dam, clearing the spillway of debris and installing signs listing the appropriate parties to contact in the event of failure. It is unlikely that there will be a total failure of the dam based on its construction.

I am also in the process of producing an Emergency Response Plan for the Graham Lake dam. This would include the notification and involvement of the potential parties at risk including property owners and Ministry of Transportation regarding the roads. Also part of the ERP would be the list of parties that GLID would involve or cooperate with such as Emergency Support Services, Denman Island Fire Department, Mainroad Maintenance, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, the CVRD and possibly others. I anticipate this ERP to be completed sometime this year. Thank you.