

Colliery Dam Park

Leon Cake
July 13, 2015



COLLIERY DAM PARK

Information gathered from:

**City of Nanaimo Operation,
Maintenance and Surveillance
Manual for Chase River Dams**

Prepared by Golder and Associates

Issued for use 2004



Chase Watershed Hydrology

- Hydrology of the watershed
ESTIMATED 3 times
- 3000 year flood corresponds to a
80M³/sec flow
- PMF is 198 m³/sec which is markedly
excessive
- There has been no systematic
measurement of weir flow over the
life of the dam



Middle Dam Hydraulic Performance Curves

Two different ESTIMATES were performed on the spillway discharge

The spillway capacity is not known

No field calibrations were done to resolve the discrepancy



Extreme Storms

**Dams have passed significant storms
without damage most recently
2003**

**Important task - watershed
inspector,**

**gathering data on actual spillways
flows during storms**



Report out of Date

Document submitted to DSS as required

Seriously out of date

Information is incorrect by today's standards

When does City plan to do the update?



Stay and Appeal Affidavits

DSS presents these affidavits

Robert Mclean

- **did not do an in depth analysis if it is correct or not, nor have I done my own analysis of the risks**
- **between 13 and 27 residence would sustain sever damage with damage valued at between \$5.3 and \$8.3 million with 2 dams breaching**

Scott Morgan –

- **Estimate casualties between 30 to 60 people**
- **Estimated damage at \$40 to \$46 million**
- **Unsolicited letter to NDN editor stating 150 will die**



What is Best

Given the information in this presentation , along with all of the conflicting information, is another basis to request the province to grant our community

One year to:

Complete Studies

Select Committee

Complete Technical Committee tasks



COLLIERY DAM PRESERVATION SOCIETY

THANK YOU

Any questions?