

# Colliery Dam Park

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# COLLIERY DAM PARK

## **WE DO NOT KNOW**

- ▣ **Spillway capacity -Let us see the numbers**
- ▣ **Water Distribution - where does the water go?**
- ▣ **Auxiliary Spillway – without the studies we do not know what we need**



# WHAT WE NEED TO KNOW

**Can the concrete wall survive the design flood?**

- ▣ **Is the concrete strong enough?**
- ▣ **What are the dimensions and geometry of the concrete wall?**
- ▣ **Will The concrete fracture or erode?**





# WHAT WE NEED TO KNOW

**If the concrete wall will not survive:**

- ▣ **Do we need more rock to support it?**
- ▣ **How much water will flow over the dam in the design flood?**
- ▣ **What is the lateral dissipation of the water once the spillway has reached capacity?**



# WHEN WE HAVE THE ANSWERS:

**We can then determine what upgrades we need.**

- ▣ Do we support the dam wall?**
- ▣ Do we protect from overtopping?**
- ▣ Do we redirect the water?**



# WHAT IS THE REAL STORY

What happens to Nanaimo in a hypothetical 34,000 year flood

- ▣ Happens over time – days
- ▣ Evacuation occurs downstream before dam crests
- ▣ Flood damage throughout Nanaimo has occurred
- ▣ Possible dam failure damage is incremental to wide spread existing flood damage





# WHAT IS THE REAL STORY

- ▣ City maintains that risk remains severe from a 34,000 year flood event
- ▣ Risk Assessment is ignored
- ▣ We do not know what will happen, pure speculation



# WHAT WE NEED TO KNOW

**We have spent \$3 million and we still do not know:**

- ❑ **The dimensions of the lower dam**
- ❑ **Is the concrete strong enough to resist erosion**
- ❑ **Will it fail if overtopped**
- ❑ **The technical information regarding spillway capacity**






# WHAT'S NEXT

**There is absolutely no urgency**

- ▣ Insufficient data on record to support proposed option
- ▣ Water level has never exceeded half of measuring board
- ▣ Important to maintain realistic surveillance and emergency planning
- ▣ Compile data for best solution



# Basic Requirements

- ❑ **Spillway measurements over high rainfall season**
- ❑ **Dam dimensions and make up of concrete and rock buttressing**



# COMPLY OR DEFY

- ▣ **DSS has a history of accepting flawed studies**
- ▣ **Time to do it right**
- ▣ **Defy this Order and stand up for what is right**





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**THANK YOU**