

**Meeting Notes
City-Wide Ravine Study
Open House
June 24, 2009**

Attendees:

Steve Ono	CNV
Tony Barber	CNV
Dorit Mason	NSEOC
Michael Porter	BCG

Introduction by Tony Barber

- Michael Porter presented ravine study PowerPoint ([link to the presentation](#))
- Purpose of Study – Public Safety
- Consultant explained methodology

Next Steps were explained by Tony Barber

- CNV to do detailed assessment starting this Fall for high risk properties
- Will require permission from the property owners
- Study will be at the City's expense
- Any mitigation measures on private property will be at the owner's expense
- CNV may contribute to provide storm sewer or construction access

Question

Please explain the difference between assessment versus inspection for property at “moderate” and “high” risk?

Answer

Inspection is visual. Assessment is drilling holes, digging test pits, reviewing drawings, engineers analysis, etc.

Question

If a home is classified “Moderate” are these okay as is or is more work required?

Answer

- Just inspect and monitor
- CNV would monitor in future and update inspection in 5 years

continued .../

Comment

Congratulations to CNV for being proactive.

Question

- Any further assistance to Mosquito Creek residents for more assessment?

Answer

- Detailed assessment now done
- Remedial action orders issued
- Detailed design to be done at owner's expense
- CNV helping to coordinate between owners and providing contact with engineers, plus building public access route for remedial work.

Question

What was the cost of remediation for the 6 "high" risk owners in Mosquito Creek?

Answer

The cost varies greatly depending upon the details of each property.

Question

Any storm drain plans on MacKay Avenue?

Answer

CNV will look at it.

Question

Owner on MacKay did new drain in 2002 and was told to drain to back of property.

Answer

Would need to look at specifics of site. See Tony Barber.

continued .../

Question

Vancouver resident owns a unit in Cypress Gardens. How were these properties allowed to be built by the City on unstable slopes?

Answer

Standards and knowledge has changed since the properties were built. Many were built decades ago to the standards of the day.

Question

If an occupant is in one of the “high” risk structures, should they be evacuating?

Answer

No, not for “high” risk. There is no dire consequence. The recommendation is for a detailed assessment within 3 years. A risk of loss of life is low for these high risk properties.

Question

For fall assessment – how much advance notification will the City provide?

Answer

A lot more interaction. The City will be requesting owner consent to do detailed investigation for high risk properties. The City will probably give property specific information as soon as possible and even preliminary number information upon request.

Question

Risk. What is the difference between “low” and “very low” in the factor of safety?

Answer

Very low, probably > 2 factor of safety.

continued .../

Question

Owner is in the “high” category. How should I deal with bank financiers who react differently to high risk?

Answer

For your own property on Westview Drive, moving towards moderate or better engineer certification following geotechnical mitigation measures which should improve the bank’s perception.

Question

Suggest we go over and above the Canadian requirements.

Answer

Currently, there are no hard standards but CNV is following very good guidelines.

Question

I own an apartment in Cypress Gardens. Is it on Mosquito Creek?

Answer

It is on Thain Creek which is a branch of Mosquito Creek.

Question

Cypress Gardens. Maybe I didn’t get the notice because the property manager didn’t distribute them. Will the owners get notice direct in the future?

Answer

Yes, if that is preferred by you.

Question

With a “moderate” risk property, what can I do to improve it to “low” risk?

Answer

Maybe to improve the drainage and remove fill. Must look at site specifics.

continued .../

Question

DNV Berkley Slide. How strong was the recommendation for the storm drain there?

Answer

This was a different situation due to the homes at the base of the slope. Therefore, DNV required properties at the top of the slope to connect to the storm sewer.

Question

The provincial emergency program was activated in Berkley Slide, will it be activated in this case?

Answer

Only if a landslide occurs and causes a state of local emergency situation.

Question

Are there storm sewer drains in Cypress Gardens now?

Answer

Yes, even though the complex was built in 1966.

Question

Compare the water table factor to the earthquake factor for risk.

Answer

Rainfall and high water table occur annually. Major earthquakes only once every 400-500 years.

Saturated soils cause flow of soil. Earthquakes in dry condition cause less severe slides than in wet conditions.

Question

How much is adjacent property risk level a factor on own risk?

Answer

Drainage is important for all, fill removal less so.

continued .../

Question

How do we reconcile remediation action orders with riparian protection regulations?

Answer

Within setbacks, need Department of Fisheries and Oceans application. DFO is reasonable but some mitigation will be needed on a case by case basis.

Question

Neighbour says at Westview there is illegal dumping of invasives which kills trees. Is this true?

Answer

Yes, invasive plants like ivy can kill trees.

Question

Was DNV / CNV Parks involved in the tree removal at Cypress Gardens? Who pays on the City land? .

Answer

The City pays if there is an issue on City land. Local Area Service implemented if the benefit is only for the private owner and not the City. There is some City land next to Cypress Gardens so parks would be involved if public trees were removed

Question

Will Cypress Gardens work qualify for Local Area Service?

Answer

It will depend on the detail of the work needed, the location, and for whose benefit.

Question

Ivy attaches to trees and leaches out nutrients killing the trees.

Answer

Thank you for the information.

continued .../

Question

Do large fir trees etc. help stabilize slopes?

Answer

Yes. They absorb moisture and put down deep roots.

Question

Is the City looking at creeks full of tree debris that shifts the flow patterns and can cause the slopes to erode?

Answer

If you provide a specific location we will look at it.

Question

How can “high” risk be shifted to “moderate” risk?

Answer

- Options will arise from a detailed assessment
- May even be lower based on new information resultant from a detailed assessment
- Drainage, fill removal and retaining walls are common solutions

Question

A neighbour built an illegal retaining wall. What can I do?

Answer

Notify CNV of the location.

Question

Is it possible to contact the arborist to identify what plants to keep?

Answer

Yes, through the remediation plan which is the next step after a detailed assessment.