

Annex II

Nomination form for “role model” cities and local governments

Please send the nomination form to isdr-campaign@un.org. Nominations will be accepted on an ongoing basis throughout 2010-11.

	Specifications
<p>City / Local Government (name, location, size)</p>	<p>District of North Vancouver</p> <p>Municipal Hall: 355 West Queens Road North Vancouver British Columbia Canada V7N 4N5</p> <p>google earth: 49 degrees 20 minutes 44.88 seconds North; 123 degrees 4 minutes 44.88 seconds West</p> <p>population: 82,560 (2006 census figure)</p> <p>size: 162 square kilometers: 19.5% residential, 64.5% wilderness, 8.3% urban parks</p>
<p>Name of Mayor / Governor / Community leader</p>	<p>Mayor Richard Walton</p>

Major Disaster Risks
(indicate major disasters that have occurred, prevailing hazards and vulnerable conditions)

Climate:

The District of North Vancouver is sandwiched between the Pacific Ocean and the Coast Mountain range along the SW coast of British Columbia, Canada. Particularly during fall and winter seasons, intense storms stall over the area, depositing heavy precipitation before rising up over the mountains and moving into the interior of BC. The storms often arrive with strong winds, warm temperatures and significant amounts of precipitation. Critical weather conditions for landslides are an extended period of rainfall causing ground saturation combined with intense rainfall (>7mm per hour). It is not unusual to receive 100mm+ precipitation in a 24 hour period.

Situation:

Two major watersheds supply Metro Vancouver's drinking water. The highest peaks in the area approach 1500 meters elevation, the lowest areas are at sea level, over a distance of only a few kilometers resulting in generally steep terrain. Many small creeks drain from the mountains into the ocean. The District forms part of Port Metro Vancouver, with heavy industry and transportation corridors located along the ocean front. Residential and commercial development has occurred on several debris fans. Most of the easily developed areas have been developed. As population continues to slowly grow, there are two options or a combination of both: urban density will increase and/or development will push into the surrounding mountainous terrain. The urban-wildland interface area is steep and forested. While the climate is generally wet, forest understory has built up ladder fuels, increasing the potential magnitude of forest fires. Situated within the Cascadia subduction zone, the District of North Vancouver is vulnerable to earthquakes. Geologic evidence indicates that megathrust earthquakes have occurred every 300-800 years along the SW coast of British Columbia. Geological Survey of Canada conducts extensive research and monitors seismic activity, see <http://earthquakescanada.nrcan.gc.ca/>

Recent events:

- 1995 major debris flow occurred on MacKay Creek in 1995, causing significant damage to residential properties.
- 2005 landslide claimed the life of a woman sleeping in her home and seriously injured her husband.
- 2006 windstorm caused damage resulting in \$10 million in clean up costs.

Hazards:

Landslide, debris flow, earthquake, flood, forest fire, severe storm

Progress and results (indicate main areas of progress, based on the “ten essentials”)

1. Organization and Coordination

An emergency management working group meets regularly and includes stakeholders from various municipal departments, health authority, neighboring municipal government, school district, first responders (Police, Fire, Ambulance), public safety lifeline volunteers (Search and Rescue, Emergency Social Services, Amateur Radio Operators, Emergency Preparedness Educators), social services agencies, etc. Municipal and Regional emergency plans outline roles and authorities to prepare for, respond to and recover from a disaster. Department emergency plans identify specific tasks and areas of responsibility to carry out the operational aspects of emergency management.

A natural hazards task force was formed in 2007. The task force is comprised of eight volunteer District residents with the mandate to recommend to Council the community's tolerable level of risk of from natural hazards. The task force received presentations from subject matter experts in the topics of natural hazards, risk assessment models, mitigation methods, financial and legal considerations. The task force sought public input through a variety of public consultation processes and, after much deliberation, made their recommendations to Council. Those recommendations form the District's current policy for risk tolerance. Hazards and risks are carefully considered when granting building and development permits. Risks are compared with the risk tolerance criteria and further reduced to as low as reasonably practicable. Read more at www.dnv.org/hazards

The District works closely with the Association of Professional Engineers and Geoscientists of British Columbia, sharing best practices and assisting in the development of guidelines for professional practice.

The District works with residents, private corporations and neighbouring government land owners to collectively reduce risk from landslides and forest fires by taking action to improve drainage on slopes and create defensible spaces along the urban-wildland interface area.

2. Assign a budget

An annual budget is assigned to the Natural Hazards Management Program to assess and manage risks. An annual budget is also assigned to the North Shore Emergency Management Office to develop municipal emergency plans, provide education for public, businesses and municipal staff, and to maintain the Emergency Operations Centre facility in a state of readiness.

Incentives are available to homeowners living on the crests of slopes to upgrade storm drainage systems (connecting hard

surface drainage to the municipal storm drainage system). The District funds a "Geotech-on-Demand" service, where property owners can request the services of a qualified professional to conduct a brief geotechnical or hydrotechnical assessment of their property and provide minor general guidance on next steps in reducing risk. This service is also used to assist in communicating the more technical aspects of risk assessment reports generated by the District.

3. Prepare risk assessments

An overview hazard, risk and vulnerability assessment was completed in 2005. Since then, the District has undertaken detailed risk assessments across the region on both private and public land for landslides, debris flows and forest fires. Detailed flood and earthquake risk assessments are currently underway. The District is working with the University of British Columbia's Earthquake Engineering Research Facility and the Geological Survey of Canada to better understand the potential impacts of earthquakes to our built environment.

Hazard and risk information is available to the public via the District's website, www.dnv.org/hazards and also spatially via www.geoweb.dnv.org under the Hazards application. As new assessments are completed, notification is sent to property owners, public meetings are held and records are added to the District's natural hazard database. The District works closely with the real estate community to ensure that full disclosure occurs when properties are transferred to new owners.

The North Shore Emergency Management Office has prepared region-wide pandemic and evacuation plans in addition to all-hazards municipal emergency plans.

4. Invest in and maintain infrastructure

The District utilizes tools developed by the Government of Canada to measure the importance and vulnerability of critical infrastructure. This information is shared among a large number of stakeholders in the region to understand interdependencies. hazard mitigation and upgrades to municipal infrastructure is completed on a systematic basis, based on priorities determined through risk assessments. Forest fire fuel treatments and seismic upgrades have recently been conducted in areas surrounding critical infrastructure (water and sewer service delivery systems, municipal facilities). Upgrading infrastructure will be challenging in the years to come because infrastructure is aging rapidly and local governments lack the financial resources to keep up with the need for replacement.

5. Safety of school and health facilities

Schools and health care facilities are not under the mandate and jurisdiction of local government. However, the District works closely with these agencies to better understand strengths, vulnerabilities and anticipated needs in a disaster. Participation in joint exercises and emergency planning initiatives have strengthened these relationships.

6. Apply and enforce realistic, risk-compliant building regulations and land-use planning principles

Procedures are in place to ensure that qualified professionals assess applications for proposed development, taking into consideration natural hazards and risks. A policy for risk tolerance criteria was recently adopted and applicants are required to meet the criteria for new and re-development.

A new Official Community Plan is under development that includes Development Permit Areas for natural hazards to further regulate development in hazard areas. The District has partnered with Natural Resources Canada in an integrated risk assessment for natural hazards project. This four year project aims to refine a framework for local government land-use decision making, taking into account climate change and natural hazards.

7. Education programmes and training

A variety of emergency preparedness workshops are offered to the public and business community through the North Shore Emergency Management Office. Extensive information regarding hazards and risk reduction is available on the District's website, brochures and workshops. The provincial government develops educational information available to the public at www.pep.bc.ca.

The District is working with a local teacher to develop natural hazards curriculum for high school students.

8. Protect ecosystems and natural buffers

64% of the District is wilderness. Forest ecosystem mapping and an ecosystem-based management framework were recently developed to assist the District in meeting one of the key goals of our Official Community Plan: "to conserve the ecological integrity of our natural environment, while providing for diverse park and outdoor recreational activities". This topic is discussed in detail at www.identity.dnv.org. Policies and bylaws are in place to protect the natural environment that include limiting development near streams, strict regulations regarding removal of trees, and requirements for managing surface water runoff.

	<p>9. Early warning systems and emergency management capacities</p> <p>The District of North Vancouver has implemented a debris flow warning system, based on current and forecasted meteorological data combined with statistical analysis of historical events, to predict when debris flows are unlikely, possible, likely or very likely to occur. The system is updated hourly, and available between October - April each year via a telephone line and the District website. A similar warning system is in place for forest fires, updated daily. Emergency exercises are held periodically, for example, a full scale, multi agency interface fire exercise "Operation Dry Lightning" was held in 2008.</p> <p>The North Shore Emergency Management Office coordinates a telephone-based rapid notification system and ensures that the Emergency Operations Centre is maintained in a state of readiness. The District will participate in ShakeOut 2011, a drill where residents, businesses and staff are encouraged to drop, cover and hold.</p> <p>10. Needs of survivors</p> <p>The North Shore Emergency Management Office has a plan in place for Recovery Centres, aimed at coordinating the short term social needs of our community post-disaster through the Emergency Social Services volunteers, group lodging facilities and recovery centres. This plan needs further development to plan for mid and long-term recovery needs.</p>
<p>Which local institutions will be engaged in the Campaign? (in addition to the local government)</p>	<p>North Shore Emergency Management Office; Natural Resources Canada; Simon Fraser University; University of British Columbia; Association of Professional Engineers and Geoscientists of BC</p>
<p>Which part of the city administration will be the focal point for the Campaign?</p>	<p>Natural Hazards Management Program within the Environment, Parks and Engineering Division.</p>

<p>Achievement in all of the ten essentials areas (make an estimation as follows: 1 - poor/nothing in place, 2 - some progress in place, 3 - in place, well functioning or N/A)</p>	Essential N. 1	3
	Essential N. 2	2
	Essential N. 3	3
	Essential N. 4	2
	Essential N. 5	2
	Essential N. 6	3
	Essential N. 7	2
	Essential N. 8	3
	Essential N. 9	3
	Essential N. 10	2

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