

District-Wide ISMP for North Vancouver: The District has a bold vision to systematically retrofit individual properties as they come up for redevelopment. The catalyst for pending action is the ‘death by a thousand cuts’ consequences for watershed health.

“Through our Official Community Plan Update, the District is advancing a vision for restoring the rainfall absorption capacity of our watersheds, one property at a time, over time,” states Richard Boase. Much like the visions for the **Bowker Blueprint** and Philadelphia’s **Green City, Clean Waters** plan, this will take a 50-year commitment.”

Risk to Watershed Health: “To draw attention to the urgent need for action on single-family residential properties, we have created a set of images to illustrate why and how watershed health is at risk. Mackay Creek is our case study.”

“The watershed is at maximum build-out; and is undergoing redevelopment as the older housing stock is replaced. We analyzed trends and examined specific properties to quantify the implications of an expanding house footprint. Within 20 years, 10 percent of the existing lots in the Mackay watershed could be redeveloped, with a consequent **25% increase** in impervious area and **10% increase** in annual runoff volume (refer to Figure 21 on next page for redevelopment example).”

“We are developing a set of prescriptive solutions that would reverse the trend. An absorbent topsoil layer is a fundamental building block. This is why the WBM team views the **Topsoil Law and Policy and Technical Primer Set** as a potentially powerful tool to help municipalities achieve a watershed restoration vision (refer back to p. 59).”

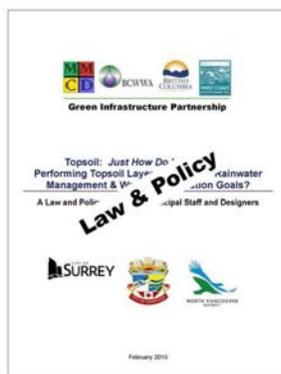
Watershed Landscape Restoration Strategy: “The District of North Vancouver has observed the experience of other municipalities that have applied the ISMP Template. They have spent a lot of money to get reports that say spend more money. The District simply cannot afford to go down a path that leads to engineering solutions that are unaffordable and unrealistic.”

“We suspect the ISMP process as currently defined is beyond the District’s financial ability to undertake and implement. Yet we are faced with a looming 2012 deadline to have work done to meet our regulatory commitment under the region’s Liquid Waste Management Plan.”

“We need an outcome-oriented alternative to the ISMP Template, and we believe we have it with our proposed **Watershed Landscape Restoration Strategy**. This is our District-Wide ISMP, and we hope to implement it through the current OCP Update (refer to Figure 21 on next page).”

Ecological Integrity: “A key message is that the focus of this landscape-based strategy is on restoring ecological integrity. We are not talking about changing floor space ratios. We are just saying people have to pay closer attention to the surficial treatment of our watershed landscape.”

“Restoring and protecting our watersheds starts by changing the land ethic. Since this is about behaviour, we have to build from the ground up. This can be achieved by an holistic strategy that is keyed to *cumulative and complementary steps*. We start with the individual property and we move out from there,” concludes Richard Boase.



In 20 years, 10% of existing single family lots could be redeveloped in the Mackay Creek watershed. Ecology is from the ground up. So, applying the Water Balance Model, we can theorize that by.....

- Improving top soil depth to 400 mm; and
- Collecting roof runoff on-site in a simple rain garden

We could potentially see results that show:

- ✓ 10% less impervious area per lot than existing
- ✓ 5% less annual runoff per lot than existing
- ✓ 42,000 m³ decrease per year rather than 105,000 m³ increase in total runoff volume

With the same redevelopment

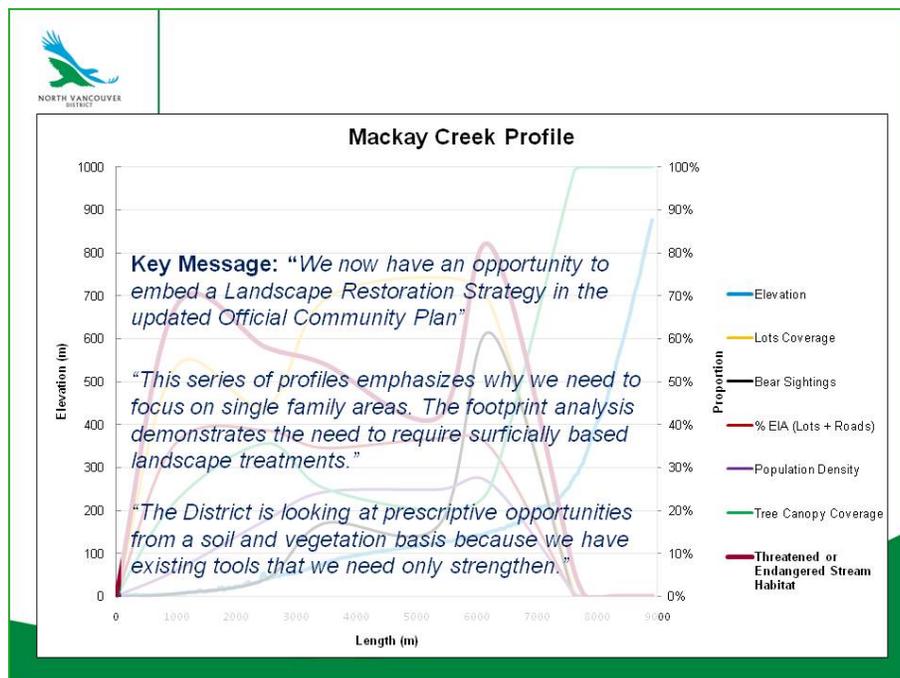


Figure 21 – Turning a Risk into An Opportunity in the District of North Vancouver