

Local

Wild weather beating path to B.C.

By Ron Seymour

Friday, October 29, 2010

Fierce rainstorms will become more common in the decades ahead as the effects of climate change are felt in B.C., participants at a Kelowna conference heard Thursday.

Big storms that previously happened once a century will happen every 50 years, and the kind of deluges that occurred once every five years will happen every other year, said Chris Johnson, a member of the B.C. Water and Waste Association's climate change committee.

Precipitation in Greater Vancouver in an average 24-hour period will rise 17 per cent by 2070, Johnson says, with bigger increases in the province's north.

The increase in intensity of future storms will force changes to the way drainage systems are designed, to better accommodate the runoff, said Johnson, an engineer.

In fact, those changes to capacity may have to come sooner rather than later, Johnson said, because some current studies are yielding increases in precipitation greater than was previously foreseen.

"Observed data is trending greater than the models predict," Johnson told a few dozen people attending a conference titled Rain to Resource, hosted by the Okanagan Basin Water Board.

A key part of the conference is to encourage a change in the way stormwater runoff is viewed. Historically, drainage systems have been designed to move as much stormwater as quickly as possible off hard-surfaced areas.

An emerging approach, conference participants heard, is to design buildings and streets in such a way that water is put into the soil near where it falls, rather than conducted along elaborate drainage systems.

"We just want to get the water back into the ground," said Scott Murdoch, a landscape architect with a Victoria firm.

Examples of this approach, Murdoch said, include having small ditches alongside streets in new subdivisions, rather than curbs and gutters. And so-called rain gardens around new buildings capture water and direct it into the soil.

The traditional approach to drainage systems can cause long-term environmental damage in some neighbourhoods, Murdoch said. For instance, the runoff can be carried away from old trees that need the moisture to survive.

"The hydrological processes can be changed by poor design," Murdoch said. "The trees, they're starved of water, and a lot of them 10 or 15 years after the subdivision is built."

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