

# UVic study: Outdated rainwater system leads to pollution in Victoria region

BY JUDITH LAVOIE, TIMES COLONIST    FEBRUARY 27, 2010



Stormwater management is sending pollutants "into sensitive water bodies" in the Greater Victoria area says a University of Victoria study

**Photograph by:** Staff, Times Colonist

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Salmon streams are being destroyed, killer whales poisoned and beaches polluted by rainwater because of an outdated system of stormwater management in Greater Victoria, says a new report from the University of Victoria's Environmental Law Clinic.

When it rains in the capital region, water sweeps over roofs, streets and parking lots, picking up pollutants on the urban landscape, the report says. "Storm sewers then convey that tainted water at high speed and volume into sensitive water bodies."

The hard-hitting report, put together by six law students, supervised by professors Deborah Curran and Calvin Sandborn, on behalf of the Veins of Life Watershed Society, is being submitted to the Capital Regional District.

Most toxic chemicals going into waterways and ultimately, the ocean, come from runoff, which sometimes also contains fecal contaminants because of crossover between sanitary and storm sewers, the students found.

"Stormwater has helped destroy our once-abundant salmon streams. Its high velocity erodes stream banks and silts water, destroying salmon habitat and its temperature and toxins kill fish," says the report, which documents futile attempts by volunteers to restore local salmon streams.

Runoff is pinpointed as the main source of PCB contamination in killer whales and the reason shellfish beds are closed to harvesting.

The problems are a legacy of Greater Victoria's obsolete 19th century stormwater management system, which relies on piping water away rather than allowing it to be absorbed where it drops, the students found.

Adam Campbell, one of the report's authors, said solutions can be relatively simple and low-impact development should be one of the first moves.

Sandborn said the goal is to keep the water on the land where it falls and let it evaporate and infiltrate there.

Storm ponds, trees and green space, which allow water to filter through the soil and slowly release into the watershed, would help stop the pollution and are cheaper than blacktop and pavement, Sandborn said.

The report recommends forming a Capital Regional District Rainwater Commission to allow a watershed-wide approach to managing rainwater.

A more controversial recommendation is that, instead of financing drainage from property taxes -- which the report says has resulted in essential infrastructure being neglected for more than a century -- there should be a user-pay utility charge, with residents paying to have water piped away.

That would encourage homeowners to use green techniques on their property and reduce the need for expensive new infrastructure.

"If we act now, our grandchildren will benefit dramatically. They'll be able to walk on beaches free of stormwater fecal contamination. From those clean beaches they'll be able to spot the occasional orca still wild in the straits. They will walk along the banks of local urban streams, awed by the magic of restored salmon runs," the report concludes.

"We can do all of this, but first, the leaders of the CRD must take action and establish a rainwater management strategy."

CRD chairman Geoff Young, who has an advance copy of the report, said cross-boundary problems make managing rainwater more difficult.

"But some of the ideas they have put forward are ones we have started talking about," Young said, adding green development is attractive, but sometimes not as easy as it sounds.

For example, green areas to absorb rainwater can make the city stretch out instead of remaining compact, he said.

A public meeting on the stormwater report will be held Thursday, 7 p.m. at the University of Victoria Fraser Building.

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