Adam Olsen and Calvin Sandborn beside the outfall at Cadboro Bay Beach.

University Of Victoria

Restoring Urban Fish Streams

Researchers work with municipalities to better manage stormwater

By Phil Saunders
UVic Communications

Most of us like to complain about the rain, but a group of researchers at UVic actually get excited when it rains in Victoria.

As the rain cascades over rooftops, streets and parking lots, it also picks up pollutants from the urban landscape before entering a network of curbs, gutters and pipes that deliver tainted water at high volumes — gathering vast quantities of gasoline, heavy metals, solvents, lead paint chips, pesticides, herbicides, fertilizers, oil, coal and tar into our streams and ocean.

That stormwater toxicity is destroying our urban salmon streams, according to Calvin Sandborn, while high velocity water runoff erodes stream banks, destroying spawning beds.

Sandborn is the legal director of UVic's Environmental Law Centre — Canada's leading clinical program in environmental law — and has been working with local governments to use green techniques to help with stormwater problems. He co-authored a report entitled *Re-inventing Rainwater Management*, (available at www.bit.ly/uvic-h2o) presented to councillors in the Capital Regional District in 2010.

"They see that we can restore our salmon streams and clean up our beaches if we are just smart about it," he says.

Sandborn's assessments with the CRD also contributed to a national report released by UVic's POLIS Project on Ecological Governance, a trans-disciplinary centre that investigates and promotes sustainability. "This work is about bridging academic research with on-the-ground community action-a theory-to-practice approach," said Laura Brandes, communications director with POLIS. "The environmental movement has been saying for decades — act locally, think globally. It's nice to see it coming to fruition here in Victoria."

"Encouraging green rainwater management like rain gardens is a no-brainer, " Sandborn said. "It's economical, provides more urban green space, beautifies our city and will restore our urban streams."

Central Saanich Councillor Adam Olsen, a member of the Tsartlip First Nation, is more direct about his interest in looking at this issue. "We now know that poor storm water management has been destroying habitats in such places as the Saanich Inlet," Olsen said, "and are working together to reverse these impacts by bringing communities together behind a plan to alleviate and hopefully reverse these negative effects."

Olsen has championed changes at the municipal level with the support of Sandborn and others. Though some of the changes proposed are expensive, Olsen feels it's worth the investment, and hopes municipalities will make it enough of a priority to find the resources to help restore active breeding habitats for healthy fisheries.