

# Quantity not quality is new focus for Tsolum River Restoration Society

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The Tsolum River Restoration Society is turning its focus away from work to improve the quality of water in the river and on to managing its quantity.

Its successful campaign to get the former Mount Washington copper mine capped and covered has led to dramatic improvements in water quality, leading to a return of fish and wildlife.

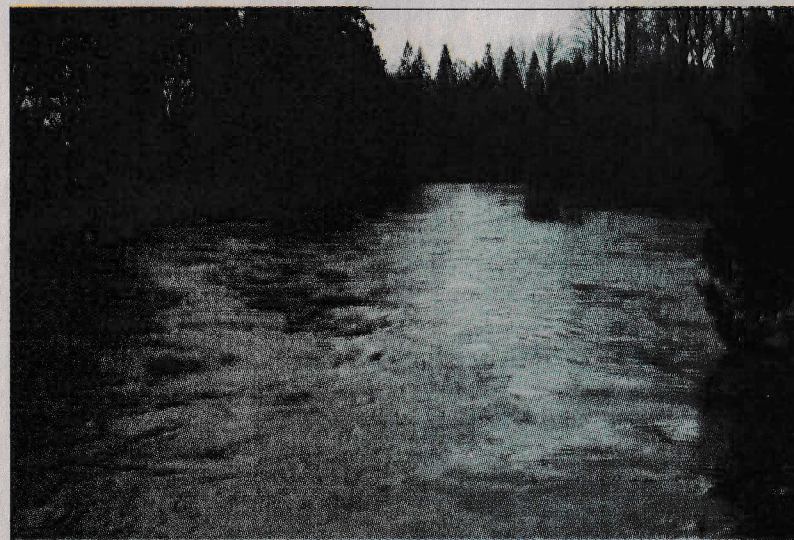
That has been a triumph against the odds - and one that was recognized through the top B.C. mine reclamation award received by society president Wayne White only last week.

It was also a cause for celebration at the Comox Valley Regional District's Exhibition Grounds on Sunday - International Rivers Day - when the society presented the CVRD with a salmon sculpture in recognition of its conservation efforts along the riverbank.

The society won't be dropping its guard on water quality issues, but now has fresh battles to fight.

"The Tsolum has too much water in the winter and not enough water in the summer-time," says restoration society executive director Jack Minard. "Our objective now is to reduce this dramatic difference."

Maximum flows in the river for six months of the year - between early October and mid April - quite often reach more than 50 cubic metres a second.



These two photographs were taken at the same point on the Tsolum River to illustrate the contrast between high and low flows at different times of the year.

That is enough to cause gravel on the riverbed to move, so damaging fish eggs and therefore reducing the prospects for good return salmon runs in the future.

And on some occasions, flows have been as great as 250-260 cubic metres a second, resulting in severe disruption and erosion along large stretches of the river, and flooding in low-lying areas of Courtenay - especially when high tides push upstream against the river flow.

But very low flows are bad news, too. They are a frequent occurrence during the summer months and also damage fish stocks.

Low flows reduce the available habitat and in summer allow river temperatures to rise to above 25 degrees Celsius, which is toxic for fish.

It's crucial that the minimum flow is never less than one cubic metre a second, and preferably rather more than that.

The society is trying to strengthen its partnership approach to the issues by getting more bodies involved, especially the City of Courtenay and Comox Valley Regional District.

And it is putting forward a nine-point program of projects and policies it hopes will reduce winter floods but maintain minimum flows in summer.

One key objective is to increase storage capacity at Wolf Lake, which is currently used to maintain a minimum flow to the Tsolum in the summer; and possibly create a new discharge point into the Constitution Creek wetland, which would enhance minimum flows to more of the river's length.

They are also looking to devel-

op new storage locations, offering examples such as Lost Lakes and Helldiver Lake, both of which were highlighted as possibilities in a technical report published five years ago.

The creation or restoration of wetlands to slow runoff rates and create fish refuge habitats will also be pursued, such as at Towhee Creek. And direct land runoff into storage ponds or seepage galleries would also prevent runoff and help recharge aquifers.

The creation of agricultural and rural residential rainwater storage ponds or cisterns is also on the agenda, as they would help augment water supply for summer irrigation.

And where new building takes place, the society wants it to be a requirement that any new construction within the watershed should have to manage runoff on site, rather than allowing it to drain away; and large minimum lot sizes should be maintained to keep development densities low.

Over and above promoting physical works, the society intends to mount educational campaigns to inform residents about the hydrological cycle, pollutant prevention, the safe use of stored water, ways of reducing runoff, and methods to capture and reuse water.

Minard said over the years people had devised numerous ways to get rid of rainwater as fast as possible "while natural systems, fish and wildlife, agriculture and indeed humans themselves need water to remain as long as possible before it becomes salt water as it joins the ocean."