## Green Scene: Protecting and Enhancing the Streams of the Chines

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The Chines Escarpment is comprised of the forested hillsides on the south side of Port Moody where the slopes climb to meet the City of Coquitlam municipal boundary. These lands, long recognized as too unstable for residential housing, form a visually-pleasing backdrop to the older parts of Port Moody. Along this escarpment, a number of small streams arise within these forests and flow through Port Moody into Burrard Inlet. At one time, all of these streams would have supported salmon. Now they lie mostly buried in culverts where they flow through the historic areas of Port Moody with their potential to support ocean-migrating salmon, for the most part, sadly extinguished.

However, there is now an opportunity to restore and enhance at least some of these streams. Prior to the development of plans for residential development or renewal, the City of Coquitlam has wisely required that stormwater management plans must be developed to ensure that opportunities to restore stream health, prevent erosion and promote groundwater infiltration are not overlooked. Because the streams of the Chines are shared between Coquitlam and Port Moody, the two municipalities, along with Metro Vancouver, have jointly undertaken the development of a so-called Chines Integrated Stormwater Management Plan (ISMP).

The concept of "stormwater" is a little outdated but speaks to the potential for heavy rainstorms to erode property and flood low-lying lands. In a natural forest, much of the rainfall will infiltrate into the ground where it replenishes the water table and ensures a gradual release into streams. Once development occurs, the land surface is hardened by roads, roofs and other surfaces which prevent rainwater infiltration. This has the effect of concentrating rainfall into sudden and erosive flows. The water table drops especially during dry periods which can dangerously lower summer water flows in streams and impact tree health. Historically, engineers dealt with streams by burying them in culverts so that the water could not erode ravines or escape except at the point of discharge. Clearly, such measures eliminated all potential for fish and wildlife to thrive in a natural stream setting. We now understand that small streams along our coast provide essential habitat for salmon and that burying streams in culverts constitutes habitat destruction, an offense under the Fisheries Act (at least it was so until the Harper government abolished this regulation last year). Thus, in recent decades, more inspired management techniques have been applied to urban development throughout the lower mainland. Stormwater management plans are designed not only to protect property from erosion and flooding but also to enhance or ensure stream health. Greenways complete with salmon streams also enhance community values.

The draft Chines ISMP recommends a number of measures to improve stream health in most of the streams flowing from the Chines. For the most part, the upper reaches of these streams are reasonably healthy as their headwaters lie in natural forested areas. Of all these streams, only South Schoolhouse Creek which flows through Miller Ravine and crosses St. Johns Street just downstream of the Port Moody Secondary School still remains mostly open and allows upstream passage of salmon. However, some enhancement work to protect its eroding stream banks and improve spawning habitat

would be very beneficial. This Creek also has potential to be severely impacted by construction of the Evergreen Line as its tunnel will emerge directly in front of the Creek.

> Just south of St. Johns Street, Dallas Creek still provides reasonably good habitat for salmon. B. Brandhorst photo.

Between South Schoolhouse Creek on the east and Suterbrook Creek on the west, about a dozen small streams flow from the Chines. For the most part, their flows



have been channelized, buried in culverts and now discharge at four points into Burrard Inlet. Of these streams, the Chines ISMP identifies both Kyle and Dallas Creeks as having some potential for "daylighting" and enhancement where the streams flow in culverts through the older parts of Port Moody. With massive redevelopment now planned for this area, there is some hope that that tree-shaded salmon streams could once again flow through downtown Port Moody. The Chines ISMP suggests diverting Kyle Creek to run through the middle of the former sawmill site. If this site becomes new green space – as some people have called for – the flow of Kyle creek though it could create excellent chum spawning habitat and became an attractive feature of a new addition to Rocky Point Park.

Dallas Creek has extensive forested headwaters in the Chines and flows through some still-open areas in the older residential area of Port Moody before discharging at what is now called Slaughterhouse Creek on the east side of Rocky Point Park. The upper reaches of Dallas Creek still sustain cutthroat trout. Of all the creeks in the Chines, it probably offers the best opportunities for restoration.

With a new community plan under development for this part of Port Moody as well as the current construction of the Evergreen line, now is the time to develop a grand vision to create corridors of green and restore historic streams. The Cities of Port Moody and Coquitlam are currently accepting public comments (email them to <a href="mailto:mburton@coquitlam.ca">mburton@coquitlam.ca</a>) on the Chines ISMP until July 31 (for more details, see <a href="http://www.portmoody.ca/index.aspx?page=43&recordid=829&returnURL=%2findex.aspx">http://www.portmoody.ca/index.aspx?page=43&recordid=829&returnURL=%2findex.aspx</a>). I hope that people speak up in favour of restoring these streams.