

RODGERS CREEK ESTUARY ENHANCEMENT PROJECT

The West Vancouver Streamkeeper Society, in collaboration with the District of West Vancouver, is planning to create a salmon-friendly estuary at Rodgers Creek.

Today, access is limited to only the highest tides, which occur for only a few hours every two weeks. By building a channel through the intertidal zone, adult salmon returning to spawn in the creek will have access to the creek through a broader range of tides.

The project will be similar to estuary enhancements completed at Lawson Creek in 2007 and at McDonald Creek in 2013. Both projects have proven to be tremendously beneficial for returning adult salmon.



Rodgers Creek today

RODGERS CREEK ENHANCEMENT CONCEPT PLAN



LEGEND

- | | |
|---|---|
|  FRESH WATER |  HIGH WATER LINE |
|  ROCK BOULDERS |  STREAM CENTRE LINE |
|  WOODY DEBRIS |  CONTOUR LINES |
|  RIPARIAN GRASSES |  LANDSCAPE TREE (existing) |

- 1 The existing Rodgers Creek outlet spills onto a rocky beach where the creek flow becomes braided and too shallow for salmon to access the creek mouth except at higher tides.
- 2 Channelization maintains water depths to the lower reaches of the beach allowing salmon to access the creek mouth for significantly longer periods of time.
- 3 Offshore creek bank provides stream protection from storm driven waves and directs creek flow along the beach where suspended stream sediments are deposited improving shoreline stability and bio-diversity.
- 4 Upland slope restoration will further confine the creek to a predetermined pathway.

- 5 Stable and higher shoreline elevations provide wave protection and opportunities to enhance riparian habitat values through the planting of salt water tolerant native grasses and shrubs similar to those employed successfully at Lawson Creek and McDonald Creek estuary project sites.
- 6 Lower intertidal rock mound creates a wave trap and low energy zone that accumulates sediments on the lee side forming a tombolo feature. This rock mound provides stable surfaces for encrusting invertebrates and algae. The finer sediments forming the tombolo increase shoreline protection and habitat diversity.
- 7 High-water line.



Returning male coho salmon



Example of streambed suitable for salmon



Newly planted shoreline vegetation at McDonald Creek



Mature dune grasses



Driftwood and debris at Rodgers Creek outlet after a storm event



Location of proposed Rodgers Creek channel



Lawson Creek estuary enhancement - completed 2007

The Rodgers Creek Estuary Enhancement Project will require excavation of beach material to create a stream path through the intertidal zone (see section drawings below).

Glacial till will be used to seal the creek pathway. Sand, pebbles and cobble stones will form the creek bed. Armour rock will be placed on top of this material to provide shoreline wave protection and opportunities for riparian planting. At lower-tide areas, the creek will revert to a braided outflow.

Additional sand, gravel and rock will be delivered naturally by the creek. The material will further enhance the estuary, gradually lifting the beach and protecting the estuary from storm events. This is exactly what has occurred at Lawson Creek and McDonald Creek following similar projects.

RODGERS CREEK SHORELINE ENHANCEMENT LOOKING NORTH - SECTION A-A

RODGERS CREEK SHORELINE ENHANCEMENT LOOKING EAST - SECTION B-B

