

# Douglas Creek Weir

The Douglas Creek Watershed encompasses most of the Gordon Head Local Area. Roads, driveways, and roofs are impervious surfaces that occupy 37% of the watershed. Water drains from these impermeable planes and travels through the storm water system to the Park boundary and into the creek channel about 20 m upstream of the weir.

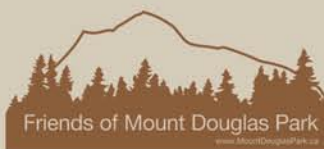
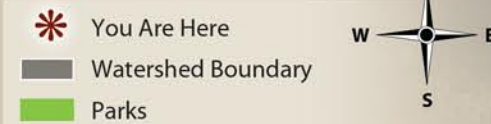
## Weir making a Difference!

The storm water collected from the urban watershed comprises rainwater and various pollutants such as oil from cars, heating oil, paints, soaps, and other liquids spilled into house or street drains. A significant amount of rainwater also contains hydrocarbons, silt and sand from the roads.

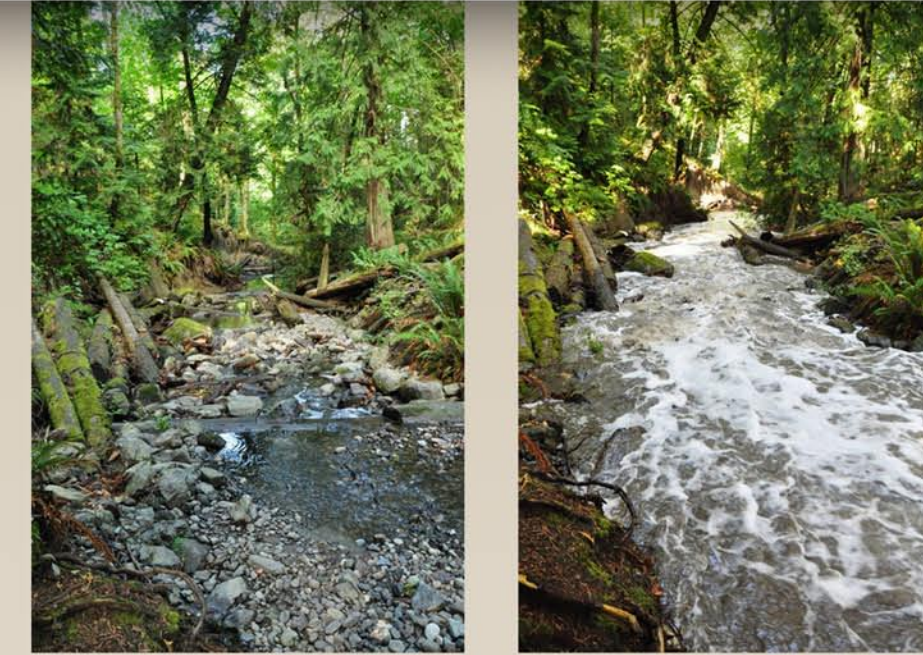
The quality and quantity of water reaching Douglas Creek has a considerable impact on the stream environment and in particular, the salmon rearing habitat. The inverted weir was built to address the problem of pollutants and silt entering the creek.

The weir protects the creek by restricting floating oils and other substances to the surface of a collection pond. The water is also slowed in this pond, allowing silt to settle. Only clean water below the surface is able to pass through the angled pipe and into the creek.

### Legend



Through public awareness and education with outreach information individual or family improved water practices can help protect Douglas Creek. Additional information can be found at [www.saanich.ca/esbackyarddcw.ca](http://www.saanich.ca/esbackyarddcw.ca) or scan the QR code.



Douglas Creek before and after a storm surge

## Storm Surge

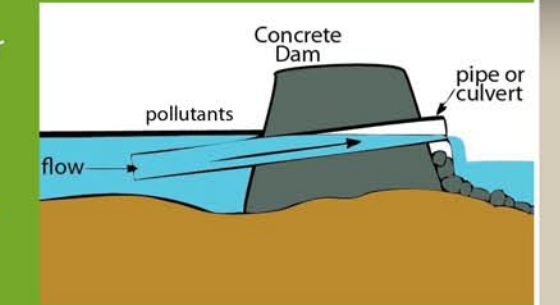
The large volume of water from a heavy rainfall can overpower the limited water storage capacity of the weir and allow trapped contaminants to flow over the structure and continue downstream.

When a storm surge occurs, the increased water volumes wash out salmon spawning beds and erode the creek banks. The hydrocarbon pollutants found in the rainwater are quite dangerous to the salmon and along with silt, can smother young salmon fry.

Additional stormwater management measures are contemplated in the future to mitigate peak flows. There are currently rain gardens and bio swales along Suan Juan and Shelbourne to help retain and filter the collected water.

## Right of Passage

The Douglas Weir is located in Mount Douglas Park within the urban watershed of Douglas Creek. It was constructed to prevent pollutants in the 5.5 km<sup>2</sup> water catchment area from entering Douglas Creek. The inverted weir structure creates a barrier that separates floating oils and other contaminants in the water by blocking them and only allowing clean lower water to pass through.



## Start at the Source!

You can help the Douglas Weir keep Douglas Creek clean by making several small changes:



**Disconnect downspouts** - Divert rooftop water from the municipal storm water system to your lawn or garden. The ground water table will be improved and it will help considerably to reduce storm surges.

**Build rain gardens and swales** - Support the creation of more in-street rain gardens and swales. The water impurities that pass through the rain garden vegetation are absorbed and decomposed. Swales form temporary ponds which act as a first stage settling pond for silt and keep silt from entering the storm system.



**Be aware of automobile pollutants** - Be careful to contain leaks and recycle used motor oil appropriately.