

GIBSONS' CREEKS AND WOODLANDS

Gibsons has identified Goosebird, Charman and Gibsons Creeks as providing the vital services of conveying and treating rain water run-off, although more analysis on their properties are required before they are formally entered into the asset management strategy. The headwaters of Charman Creek are located in a forested recreation area in Upper Gibsons. Stormwater run-off from development in Upper Gibsons flows into the creeks, through natural settling ponds that clean and filter it, and finally, into the ocean as a naturally treated product. This means that Upper Gibsons has less engineered drainage infrastructure than if the creeks did not exist.

The very fact of recognizing the services provided by natural assets in the community leads to more informed and holistic decision-making.



Nature stores and filters run-off at a fraction of the cost of an engineered asset.

Ponds at White Tower Park (Upper Gibsons)

If these creeks and ponds ceased to perform their current functions then flooding would result and either development in Upper Gibsons would need to slow or stop, or engineered infrastructure would need to be constructed and maintained, again, at a cost that can be determined based on similar structures elsewhere in the Town and in other municipalities. Engineered asset replacement for the woodland would, in almost any scenario, be far more expensive than simply keeping the woodland healthy, which requires only general maintenance and pond dredging every three to four years at a cost of approximately \$10,000 per dredging. Additional analysis is required to determine the optimal number and type of trees in the woodland, as well as best practices for dredging, maintenance and associated costs, to maximize the ecosystem services provided by the creeks and woodland.