

## Effects of Pollutants in Bowker Creek

Pollutants in the creek lead to many negative implications, such as the limited species able to survive in the ecosystem. According to our survey of Bowker Creek, 86.84% of the specimens in Bowker are of the “Pollutant Tolerant” category. 100% of them are of the “Somewhat Pollutant Tolerant” or “Pollutant Tolerant” classifications. Species such as midge larvae, aquatic worms and leeches, are found in abundance within the creek; whereas species of “pollutant intolerant” categories, such as riffle beetles and gilled snails, are not found in Bowker Creek. Thus, signifying that the quality of Bowker Creek is not suitable for a diverse array of aquatic organisms. Another potentially concerning pollutant to the creek is excess phosphorus and nitrogen can lead to algae blooms, which cause a depletion in the water's oxygen, thus killing the other oxygen-dependent organisms in the water. Additionally, after heavy rainfall, sediment from the creek is disturbed, burying bottom-dwelling creatures and causing the water to become opaque and cloudy. The non-translucent water can lead to a lack of sunlight to the underwater species and impact the growth of vegetation in the water. The pollution of Bowker Creek not only affects the Bowker Creek's ecosystem, but the ecosystems of the creek's outfalls, such as Ross Bay and Willows Beach.

<b>Pollution Tolerance</b>	<b>Number Counted</b>	<b>Common Name</b>
Somewhat Tolerant	5	Scud
Tolerant	10	Aquatic Worm

Tolerant	13	Leech
Tolerant	8	Midge Larva
Tolerant	1	Planarian

Figure above shows the collected data of our survey on the aquatic wildlife of Bowker Creek