

Schaft Creek Environmental and Social Baseline Studies

Climate

Three permanent weather stations are in place to measure:

- Wind speed and direction
- Relative humidity
- Air temperature
- Rain and snow

Air Quality

Stations are set up to measure:

- Dust
- Particulate matter (less than 2.5 and 10 µm)

Hydrology

Hydrology studies include:

- Monitoring stream flow
- Modelling stream flow
- Evaluating long-term flow with the Water Survey of Canada stations
- Analyzing flood flow frequency
- Conducting low flow frequency analysis

Groundwater

Groundwater studies include:

- Monitoring wells
- Monitoring water quality
- Observing groundwater flow and direction
- Modelling groundwater
- Groundwater into proposed Schaft Pit

Water Quality

When studying water quality, we evaluate:

- Acid rock drainage potential
- Lakes, streams, wetlands and ponds
- 41 water quality baseline sampling locations
- pH, conductivity, turbidity, nitrates, phosphates, metals, etc.

Aquatic Biology

- Aquatic biology includes studies on:
 - Stream sediment quality
 - Aquatic insects
 - Algae

Fish and Fish Habitat

In studying fish and their habitat, we conduct:

- Habitat surveys of Schaft Creek, Mess Creek, Skeeter Creek, Stikine River, etc.
- Fish community sampling: presence/absence assessment, electrofishing, fish health (metal content)

