

Beaver



Canadian Geographic photo

- How Beavers shaped Canada -- Extraordinary water engineers!
- How Beavers live in the water
- What do Beavers eat? -- How do they raise their young?
- Beaver's essential role in climate change adaptation
- How Beavers create wetlands
- Wetlands are the foundation of healthy watersheds

Climate Change Adaptation



- What is climate change and how will it affect us personally?
- Understanding climate change adaptation
- Students design their future homes in the context of their future neighbourhoods
- Emphasis on energy conservation and water conservation
- A one-hour in-class program

Creek Science



- Combines Science and Math -- Working with two-digit numbers, decimals
- Capture macro invertebrates -- Observe/draw macros
- Link kinds of macros to water quality -- Customizable curriculum
- Great with alternate programs

Macro Invertebrates



- In-class one hour lesson
- Explore the world of macros -- Focus on life cycles
- Discover macro invertebrate strategies for survival, which differ by type
- Students craft models of macro invertebrates
- Great for Primary and Intermediate grades
- Works well in community events

Mark Creek Flume Restoration Tour



- 1-hour tour (best with a classroom introduction)
- Impacts of 1948 Mark Creek Flood
- Why was the flume built? Why did it need to be repaired?
- How does Teck deal with perpetual acid mine drainage?
- What are storm water culverts? How are they impacted by climate change?
- Importance of riparian vegetation in preventing erosion

Stream Trailer



- Living lab on impacts and dynamics of water erosion
- A 6 x 9 stream table on wheels with its own reservoir
- Focus on the vital role of riparian vegetation in preventing erosion
- Choice of units -- Dams, Culverts, Farming impacts, Storm water management
- Stream Trailer in spring - Creek Science in fall is a favourite combo with teachers

Water Science Certificate - available in Cranbrook and Kimberley only



- 4-session course (1.5 hours each) on stream monitoring
- Matches well with Geography 11/12 and Outdoor Education 11/12
- Additional units:
 - Riparian stewardship with Permaculture practices
 - Water temperature statistics/graphing (requires computer lab - expertise in Spreadsheets)