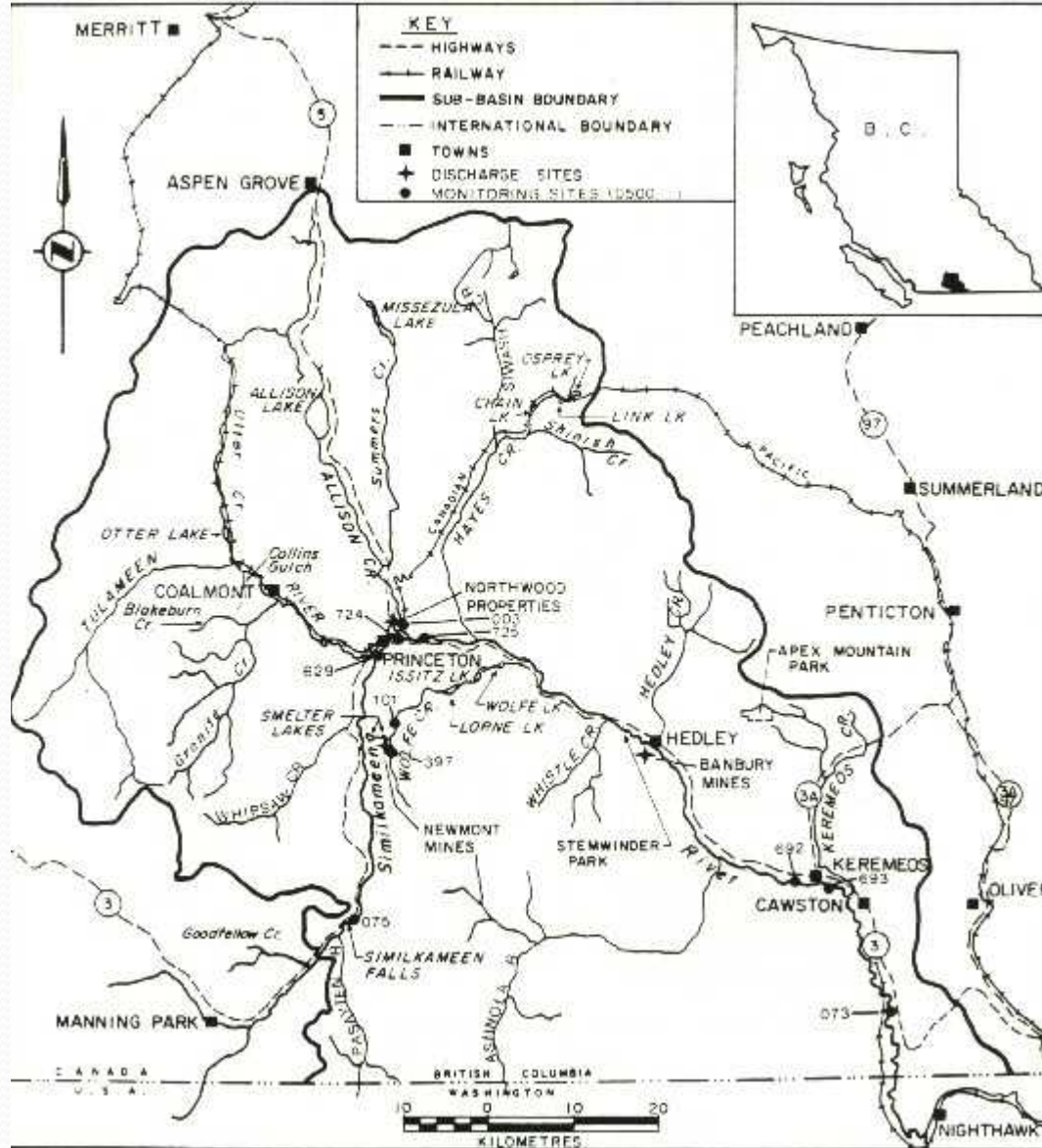


Similkameen Watershed

- Largest Watershed in the Okanagan system contributing 75% of flow of Okanagan River
- Drained by the Similkameen River
- Within the political boundary of Regional District Okanagan Similkameen
- Southern Interior Ecoprovince:
- From alpine ecosystem to the grasslands of the dry lower Similkameen



SIMILKAMEEN RIVER SUB-BASIN





The Similkameen River

- Named for an indigenous people called <Similkameigh>, meaning "treacherous waters".¹
- Rises in the Hozameen Range of the Cascade Mountains app. 10 Km N of Allison Summit, Manning Provincial Park
- 251 Km (196Km) to confluence with Okanagan River, Oroville Washington and covers 9190 Sq Km , 7,600 Sq Km in B.C.

Contributory watersheds and major Tributaries;

- Pasayten River
- Tulameen
- Ashnola



- Pasayten River

Pasayten Wilderness Area



Tributary headwaters in Washington State - into Similkameen River - into Okanagan River - into Columbia River into Pacific Ocean = International River

Secondary Tributaries

- Otter Creek
- Allison Creek
- Hayes Creek
- Wolf Creek
- Smith Creek
- 20 Mile Creek (Hedley Creek)
- Keremeos Creek



First Nation Band Lands

- Upper Similkameen Indian Band (USIB)
- *Traditional territory extends from Manning Park in the west, Aspen Grove in the north, Hedley in the east and south to the USA border*

Current Chief: Richard Holmes

- Manages eight Indian Reserves in the Similkameen River watershed from Hedley, BC to past Princeton, BC.
- Member of Okanagan Nation Alliance (ONA) with 63 members, smallest member of ONA.
- Progressive First Nations Community in the forestry industry, employing approx. 160 full-time and part time workers
- "largest " private employer in the Similkameen Valley.

Land base of 2,708.5 hectares
Includes Reserves:

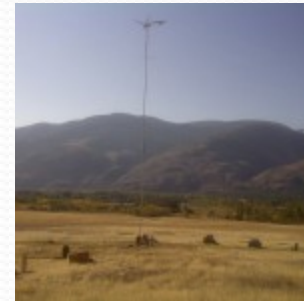
- Chuchuwayhu 2
- Chuchuwayha 2C
- Lulu 5
- Nine Mile Creek 4
- One Mile 6
- Vermillion Forks 1
- Wolf Creek 3



First Nations Band Lands

- Lower Similkameen Indian Band (LSIB)
- Current Chief: Robert Edward
- Member of Okanagan Nation Alliance (ONA)
- Speaks the Nsyilxcen language
- Population 482
- Operates its own school on Band lands
- Recently completed a wind power project at the LSIB Elementary School

Land base of 15,276.4 hectares
which includes 11 reserves divided
into pockets of land stretching
over 90 kilometers



Pre European Settlement

- Indigenous people lived from resources landscape provided
- No major interventions to landscape
- Components in the various ecosystems managed according to nature's cycles of growth/death and re-growth
- Change was usually slow but...
- Natural phenomena created instant change: landslides, wild fire, etc.

Post European Settlement Activities

- Mining
- Ranching
- Agriculture :
- Logging:
- Concentrated Settlement
- Water extraction
- Industry
- Recreation
- Fire suppression
- Dam (future?)

Each activity creates a change reaction

Some reactions are newly understood

Conflicts of interest



Climate

- Varying weather scenarios
- Altitude affected
- Cyclically affected by El Nino/La Nina
- Four climate stations
- Six snow survey stations
- Summit SRWMP Part 1 scoping study Table 4-2 details hydrometric stations



Water Source Terms

Aquifer

- An underground bed or layer of permeable rock, sediment, or soil that yields water.

Ground water

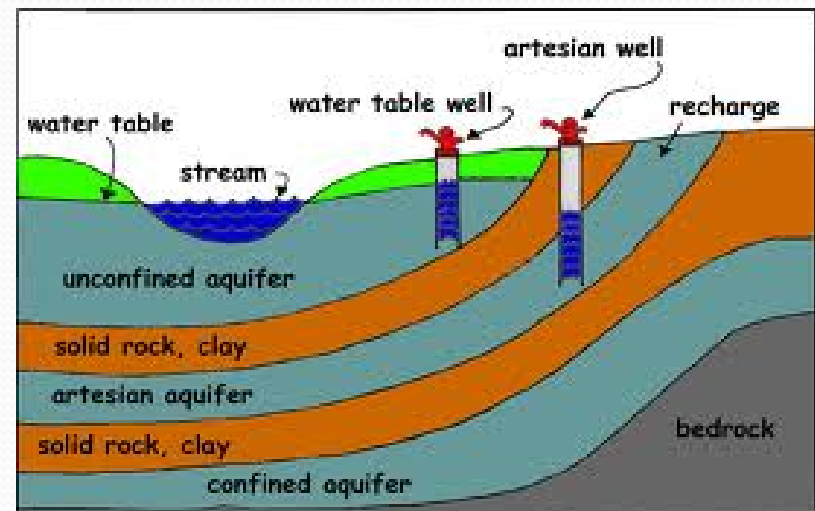
- Water that comes from rain and snow that seeps into the soil. Many wells tap into ground water

Surface Water

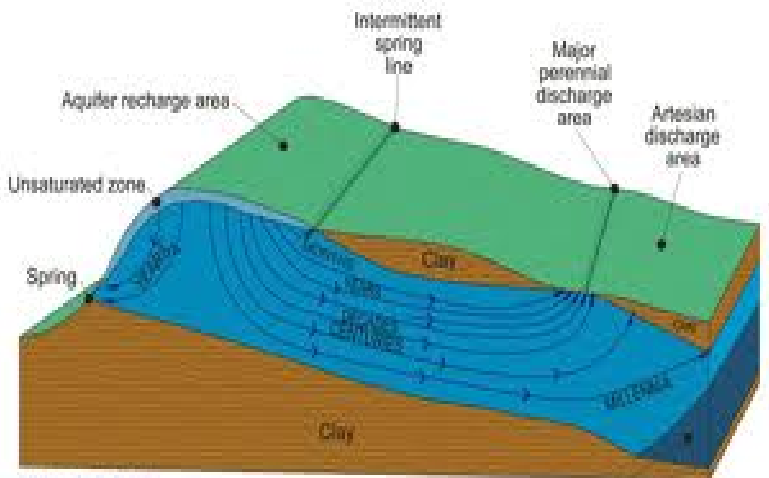
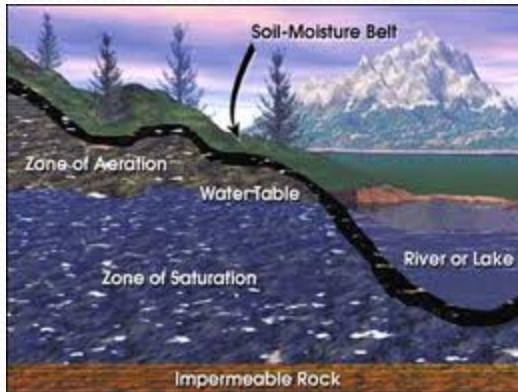
- Water on the ground's surface, lakes, ponds streams etc. Ground water and surface water can change places.

Aquifer

Pore spaces are filled with water and are interconnected, water flows through them. Sandstones, unconsolidated gravels, and porous limestones make the best aquifers. May be a square kilometers to thousands of square kilometers in size.



Ground Water, Aquifer, Surface Water



Saline groundwater

Water Sources

- Snow: Predominantly high elevation watershed = snow
- Accumulation of anywhere from 340 cm (app. 11 ft) more in some areas
- High elevation = cold nights = metered flow
Snowmelt/runoff peak: late May to mid June



Water sources

- Obvious sources on surface
- Several confined aquifers
- Similkameen River Valley linked to river
- Aquifers are detailed in Summit SRWMP Part 1 scoping study 4.3
- 104 water licenses for surface water, current, pending or active applications
- Uses:
 - Irrigation
 - Domestic
 - Cooling (mining)
 - Storage (Fortis dam?)

Irrigation Districts and Domestic Water Systems

- Cawston Irrigation District (CID) 1921
- Fairview Heights Irrigation District (FHID) Domestic & Irrigation 1951
- Keremeos Irrigation District (KID) 1906-07 1921
- Similkameen Improvement District (SID) 1891-
- Hedley Improvement District (HID)
- Allison Lake Improvement District (ALID) 1968
- East Princeton Waterworks District 1950 (Domestic, defunct) Town of Princeton water system now supplies East Princeton
- Olalla Improvement District (1964) water supply now operated by RDOS
- Eastgate: north Hwy 3 water system installed by Tower family approx. 40 years ago



Parks, Protected Areas and Provincial Recreational Facilities

- Bromley rock
- Cathedral Park/protected area
- E.C. Manning Provincial Park
- Keremeos Columns
- Nickel Plate Provincial Park
- Otter Lake Provincial Park
- Snowy Protected Area
- South Okanagan Grassland Protected Area, Chopaka West, Mt. Kobau
- Stemwinder Provincial Park
- Various Ministry of Forests Campsites particularly along the Ashnola River Road, Old Hedley Road, and in various wilderness areas.

Larch in fall colour, Cathedral Lakes. Provincial Park



Lifeblood of the Similkameen Valley

