



## Watersheds in Alberta

Watersheds are the sum of the streams that gather from heights of land and flow into a common water basin. Watersheds gather, purify and regulate our water supply. Intact watersheds provide food, shelter, calving grounds and watering areas to our wildlife.

High lands, such as the Rocky Mountains, intercept water-laden clouds blown from the Pacific Ocean and cause precipitation. Some of the precipitation accumulates in snowfields and glaciers and is slowly released into the watershed. Some runs down steep slopes until it reaches the foothills forests where trees, mosses, lichens and organic soils absorb it.

Water quality increases as it passes through healthy watersheds. Vegetation and soil absorbs water and filter out pollutants. Aeration in fast-flowing streams destroys parasites and bacteria. Water flowing over rocks picks up essential minerals such as calcium and phosphorus.

Four of Canada's great rivers originate from the Eastern Slopes of the Rocky Mountains in Alberta:

- The **Peace** and **Athabasca** Rivers flow east and north, joining in Wood Buffalo National Park to form the mighty Mackenzie River that empties into the Arctic Ocean.
- The **North** and **South Saskatchewan** Rivers join in Saskatchewan and flow through Manitoba and eventually into Hudson's Bay. 90% of the water in the Saskatchewan River Basin comes from the foothills watersheds, which make up only 12% of the area of the river basin.



### River Basins of Alberta

([www3.gov.ab.ca/env/parks/ahnic/rivbasin.html](http://www3.gov.ab.ca/env/parks/ahnic/rivbasin.html))





### **Watershed Protection**

Long ago, the people of Alberta recognized the value of protecting their prairie water supply. The Eastern Slopes of the Rocky Mountains have been recognized as our key watersheds since the early 1900's.

In 1948, the Federal and Provincial Governments established the Eastern Rockies Forest Conservation Board, which provided a watershed management policy and planning framework for the Rocky Mountain Forest Reserve until 1973. The Reserve was formally established by the Forest Reserves Act in 1964 for the maintenance of water supply and the conservation of forests and other vegetation.

In 1977, the Eastern Slopes Policy was developed after substantial public consultation. The Policy's highest priority was "watershed management to ensure a reliable supply of clean water for aquatic habitat and downstream users."

Clean and abundant water is vital to everyone. But our supply of clean water is threatened: very few of Alberta's watersheds remain intact. Our watersheds are being degraded at an alarming rate by activities such as forestry, industrial development, cattle grazing, residential sprawl and off-road vehicle use.



(V. Pharis)

### **Common Threats to our Watersheds**

- Forest fragmentation by forestry and oil and gas industries
- Road construction and erosion
- Pollution from industrial activity, agricultural chemicals, confined feeding operations (feedlots), urban storm water and sewage, golf courses, etc.
- Damage by recreationists and back country enthusiasts
- Stream bank deterioration by agriculture
- Climate change leading to a drier climate in southern Alberta
- Lack of water conservation

### **Take Action to Protect Your Water**

- Call or write your MLA about your concerns for watershed protection
- Learn more about water conservation and local watershed initiatives



(C. Bruun)

