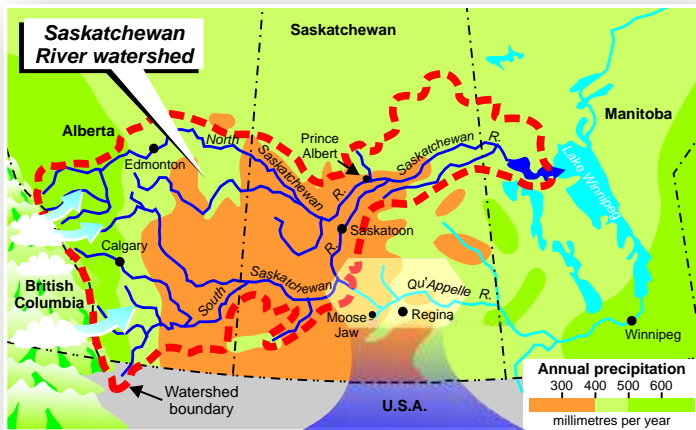


WATER: A PRECIOUS RESOURCE IN A THIRSTY LAND



Watering a dry land

Water has always been the limiting resource for prairie life — where there was sufficient water, ranches, farms, and towns sprang up. Because rainfall in southern Saskatchewan is meagre, most streams are small and originate from spring snowmelt. Many streams also receive flow from springs that help maintain a base water level throughout the year. Local streams and springs support marshy sloughs filled with the chatter of birds, and saline lakes with salt-encrusted shores. The vital exception is the Saskatchewan River system, which crosses Saskatchewan carrying waters from the far-off Rocky Mountains.

Agriculture
Irrigation near Outlook
R. Turner (GSC 2003-5046)

Municipal water supply
Saskatoon water-treatment plant
R. Turner (GSC 2003-5046)

Wildlife habitat
Piping Plover
J.P. Goossen, Environment Canada

Recreation
Lake Diefenbaker marina
R. Lapace

Power generation
Gardiner Dam
Prairie Provinces Rehabilitation Administration

Industry
Belle Plaine potash mine
D. MacDougall, SIR

The many ways we depend on the Saskatchewan River system

The Saskatchewan River system is the most reliable source of good-quality water in southern Saskatchewan. Over 30 communities, including Saskatoon, Regina, Prince Albert, the Battlefords, and Moose Jaw, draw their water from the river system. River water is increasingly used to irrigate farmland and generate hydroelectric power.



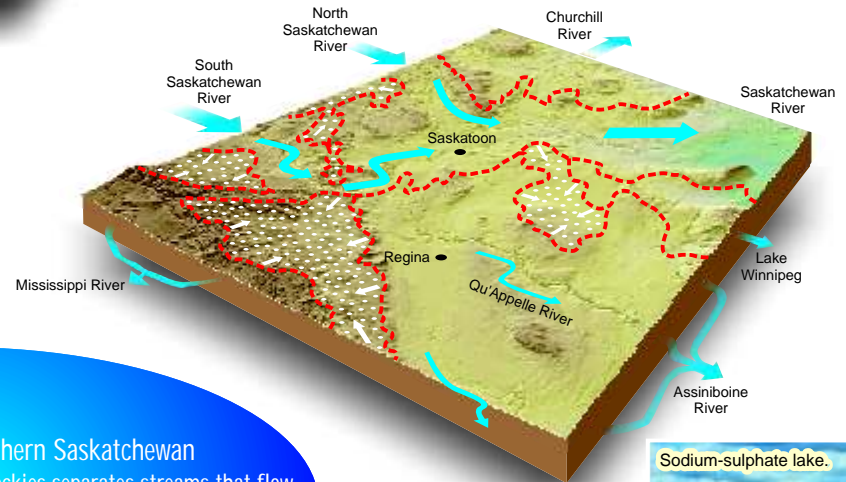
Where does your water come from?
Every day we drain the sink, tub, and toilet.
Where does your water come from? Where does your waste water go?

The Qu'Appelle River: borrowed water

At the end of the last ice age, the South Saskatchewan River flowed down the Qu'Appelle River valley. Today, 11 500 years later, about one per cent of the South Saskatchewan River is diverted into the Qu'Appelle River. Here, a series of reservoirs and lakes are used for recreation, irrigation, and industrial and municipal use.

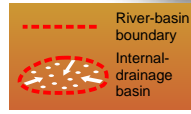


A continental divide in southern Saskatchewan
The well known continental divide in the Rockies separates streams that flow west to the Pacific from streams flowing east to Hudson Bay. Another continental divide separates waters bound for the Gulf of Mexico from those that flow north to Hudson Bay. Where is this divide?



Where streams don't flow to the sea

Most rivers run to the sea. However, there are large areas of southern Saskatchewan where the drainage is internal and water does not escape to the sea. Such areas are rare elsewhere in Canada. Runoff within these internal drainage basins can produce saline lakes surrounded by white salt crusts. Dissolved salts are transported in surface and ground waters to the lakes. As the lakes have no outlet stream, the salts are trapped, and concentrated by ongoing evaporation of the lake waters.



J. Dale