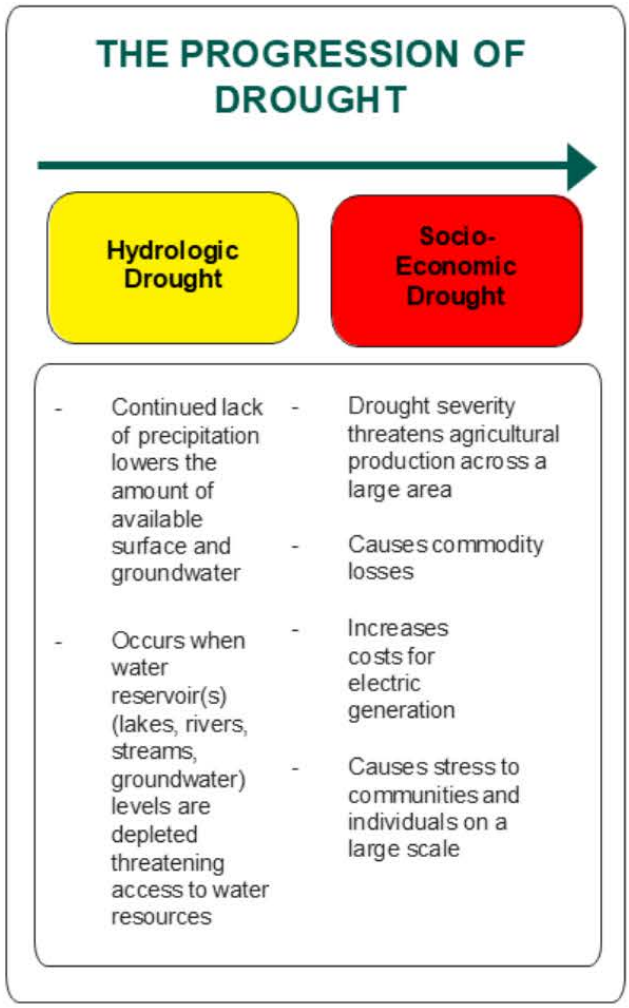
Town of Cabri
Hydrologic Drought Factsheet

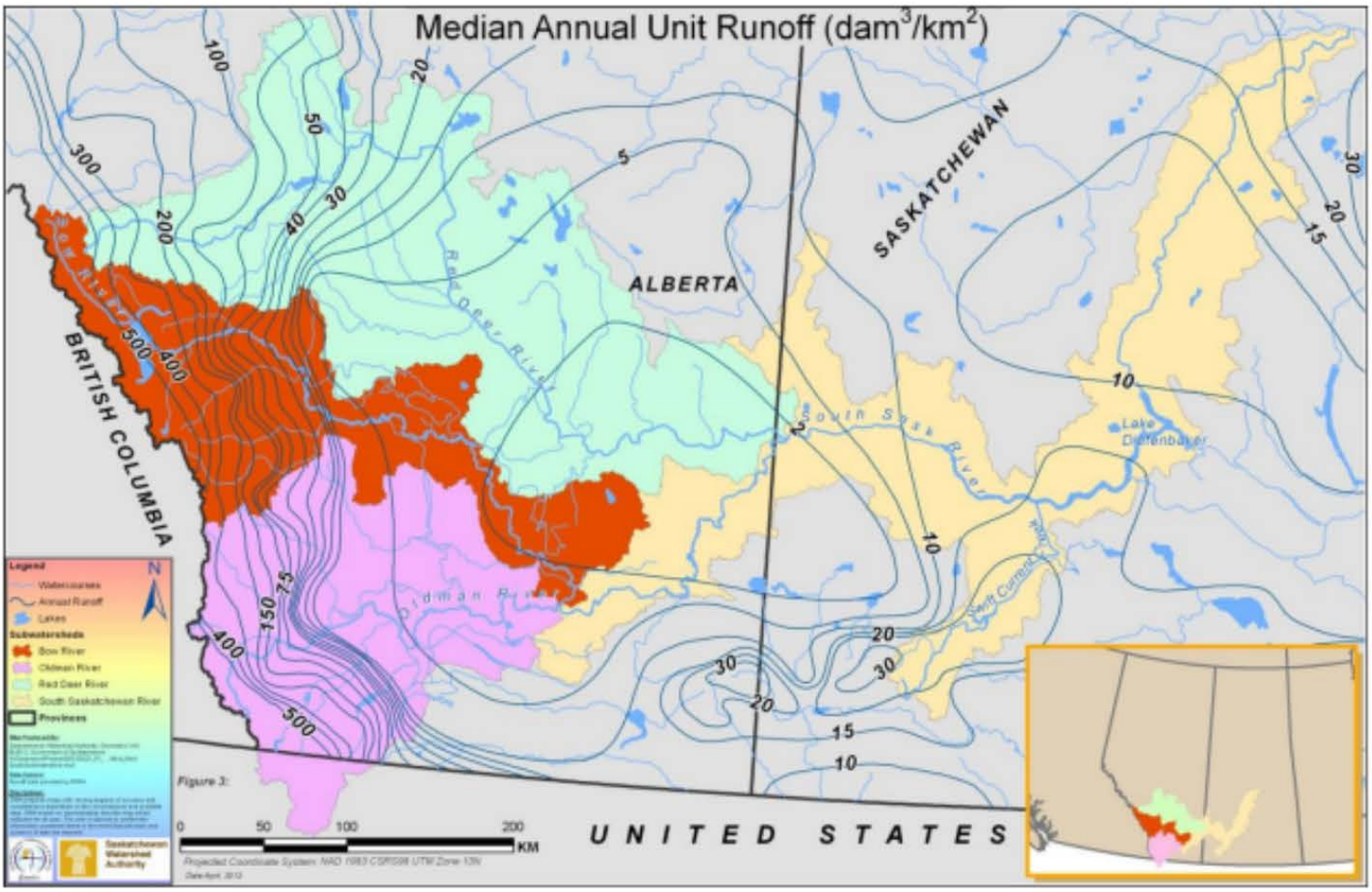
What is Drought?

Drought is a period of dry conditions. Droughts begin when not enough precipitation falls. Longer periods without precipitation eventually impact soil moisture levels. Hydrologic droughts occur when the effects of low precipitation begin to appear in the water supply causing low water levels in streams, reservoirs and lakes. Longer term hydrologic droughts over large areas can have substantial economic impacts and are called socio-economic droughts. An example of a socio-economic drought would include the drought of the 1930s.



Drought Impacts in Saskatchewan

- Droughts are among the costliest natural disasters in Saskatchewan and Canada.
- The 2001-2002 drought cost an estimated $5.8 billion dollars to the Canadian economy at the time a disaster of similar magnitude would cost more today.
- Droughts result in reductions in crop yields and livestock production. Other industries reliant on surface and groundwater supplies are also impacted.
- Hydroelectric power generation is diminished in severe hydrologic drought years due to reduced flow volumes.
- Lower amounts of water storage in the ecosystem increases the risk for grass and forest fires and reduces the availability of water for firefighting.
- Severe droughts within the meteorological record for Saskatchewan occurred in 1917-1926, 1930s, 1961, 1984-85, 1988, 2000-2004, 2015, 2021.



Drought and Surface Water

- Drought can have immediate and near-term impacts on surface water systems.
- The water supply in surface water sources has many sources.
- The South Saskatchewan River system originates in the eastern slopes and foothills of the Rocky Mountains.
- The entire drainage system covers varied environments including, prairie, foothill, and alpine eco-regions.
- Different eco-regions have different climates and therefore are varied in the amount of precipitation they receive annually.
- The amount of precipitation that results in drought also differs between eco-regions. The prairie eco-region directly around the Town of Cabri has the lowest amount of precipitation of the entire basin.
- Additionally, the region around Cabri contributes the lowest amount of runoff to the overall South Saskatchewan River system.
- Drought in any of the watersheds that are tributaries to the South Saskatchewan River Watershed can contribute to drought conditions in Lake Diefenbaker.
- Lower snowpack and lower than normal glacial melting in the eastern Rocky Mountains can also influence the total amount of runoff the South Saskatchewan River system receives.
- Drought conditions in Antelope Creek are caused by local precipitation deficits.

TOWN OF CABRI
EASY TO FIND, HARD TO LEAVE

SAW Saskatchewan Association of Watersheds

Water Security Agency