

EARLY WARNING SIGNS OF CLIMATE CHANGE IMPACTS IN SASKATCHEWAN

- One indicator of growing climate change impacts is the **sharp increase in the number of extreme weather events** in Saskatchewan. This is necessitating increased spending under the Provincial Disaster Assistance (PDAP) program. Fifteen years ago the annual average expenditure on PDAP was under \$3 million. In the last 7 years, spending has averaged more than 20 times that amount.
- **Record high summer temperatures** in several communities are another indicator of impacts in Saskatchewan. In 2018, for instance, three all-time heat records were set: Val Marie hit 40.9°C, Assiniboia recorded 41.1°C, and Broadview set a new all-time high of 39.4°C.
- As global average temperature rises, historically dry areas can become even drier. Southwest Saskatchewan is no stranger to drought, but the lack of precipitation in 2017 was exceptional. **Assiniboia and Moose Jaw recorded their driest year on record.**
- A fourth warning sign of climate change impacts is the **unprecedented forest fire season** our province experienced in 2015. 1.7 million hectares of forest burned. By July 7, 2015, **13,000 residents in 51 northern Saskatchewan communities** had been **forced to leave their homes**. Northern Saskatchewan had never before experienced the need for an evacuation at this scale. This was followed by an exceptionally intense forest fire striking Fort McMurray in 2016, destroying 2,500 homes and forcing over 80,000 people to evacuate. That fire moved across the border into Saskatchewan.
- The **American dog tick** and other tick varieties are spreading across our province as climate conditions become more favourable to their survival. **West Nile Virus** moved into Saskatchewan over a decade ago, and the black-legged ticks that carry Lyme Disease are starting to show up in our province, with their numbers expected to grow in the years ahead.
- A warmer atmosphere can hold more water vapour, leading to heavier rainfall events. In Saskatchewan more communities are experiencing **intense precipitation events that cause serious flooding**. Southeast Saskatchewan has been hit particularly hard - facing a 1 in 500 year flood event in 2011 and a 1 in 100 year rainfall event in 2014.



Source: "Prairie Resilience" is Not Enough, Peter Prebble, Margret Asmuss, Ann Coxworth and Bob Halliday, Saskatchewan Environmental Society, December 2018.

Read the **Saskatchewan Environmental Society's** GHG emissions reduction recommendations for the Government of Saskatchewan at: www.environmentalsociety.ca

