

## ***Manitoba's Water Management Strategy***

At one point, the Province of Manitoba was a leader in Canada for its water management. However, we have failed to keep that torch aloft. Expected changes in climate across the Canadian prairies are calling for a greater frequency and intensity of widespread drought punctuated by more unpredictable and extreme rainfall events, making effective use of our water resources increasingly important. Discussions of global food security have grown in volume and intensity and changing and unpredictable weather have added fuel to the fire. We need to bring these issues further into our control so as to increase food productivity and operation efficiency, not allow it to decrease.

The Interlake region of Manitoba was declared in 2007 by the IISD to have the worst adaptive capacity to climate change in all of Western Canada. Historically, 84% of crop insurance claims in Manitoba are a result of water, either flood or drought, out of possibilities that include frost, hail, disease, winterkill, mould, and wind. In 2011, excess moisture and drought made up 98% of crop insurance claims with excess moisture claiming the lion's share at 73%. Payments for this year were \$326.9 million with Excess Moisture Insurance at a loss rate of 935%. Certainly, years like this are going to happen occasionally and the insurance system built to absorb and withstand these years. But as this becomes increasingly normal, it also becomes increasingly unsustainable. Amongst these issues, the Province for Manitoba has yet to release a drainage guide for agricultural production.

Great expectations for Manitoba's Water Management Strategy are not only common sense; they are necessary to continue to improve crop production for a future that will need increased crop efficiency more than ever to feed an increasing population on a decreasing land base for an industry that is a significant player in our economy. This presentation will discuss the current issues facing Manitoba's ability to effectively manage its water resources and technologies (i.e. tile drainage) that are being explored in agricultural production.

**Speaker: Avery Simundsson**



Avery is a Mechanical Engineer, graduated from the University of Manitoba. She has studied in Australia, Mexico, and Germany in the fields of biomedical engineering, control engineering, and product development. Being born and raised on a mixed farm in the North Interlake has given her cause to better understand the economics of large-scale water management for success and disaster management in the agricultural sector.



## TECHNICAL PROGRAM

Her passion for agriculture and its development in Manitoba has led her to become a Project Leader with the Prairie Agricultural Machinery Institute in Portage la Prairie.