H01: Hydro-climatic Impacts and Adaptation

Conveners: Rajesh Shrestha[1], Yonas Dibike[1], Daniel Peters[1]

Co-chairs: Rajesh Shrestha[1], Yonas Dibike[1], Daniel Peters[1]

[1] Environment and Climate Change Canada, Water and Climate Impacts Research Centre, University of Victoria, Victoria, BC, Canada, V8P 5C2
Phone: 250-363-8909,Fax: 250-363-3586, E-mail: rajesh.shrestha@canada.ca

Session Description

Climate change has the potential to affect the mean hydrologic state and its variability, such as the volume and extent of snowpack, the magnitude and timing of snowmelt driven spring freshet and rainfall driven stormflow, and the seasonality and extreme states of water fluxes. Coping with these likely impacts requires adaptation strategies, such as modification of current water management strategies, as well as mitigation measure, such as updating/upgrading existing water resource infrastructure.

This session aims to provide a platform for presenting research that assess the implications of climate variability/change on planning, allocation and operations of water resources, and adaptation/mitigation measures that address the potential negative/positive impacts. We seek presentations on hydro-climate impacts studies on water demand and supply, such as municipal, agriculture, hydroelectric power generation, floods and drought. Of particular interest are studies that examined adaptation/mitigation measures ranging from the local to regional scales. We also encourage contributions that address emerging implications of climate change, such as dry and wet regime changes, regional and seasonal shifts in water fluxes, change in the frequency of extreme events, effects on hydro-ecological connectivity, and new methods and tools for assessing impacts and evaluating adaptation/mitigation measures.

Primary Affiliation: Hydrology