

Date: Tuesday, March 17, 2015  
Speaker: **Brent Bitter**, M.Sc., RPF, Manager Spatial Information  
Management and Modeling Unit Technical Resource Branch,  
Saskatchewan Ministry of Environment  
Time: 16:30 p.m. – 17:30 p.m.  
Place: Room CL 112



## ***The use of unmanned aerial vehicles (UAV) for environmental protection, monitoring and research***

The Spatial Information Management and Modeling Unit within the Technical Resource Branch of the Ministry of Environment has been actively investigating and promoting the use of unmanned aerial vehicles (UAV), commonly known as a drones, to provide timely and cost effective methods of acquiring environmental data in relation to environmental protection, monitoring and research since late 2012.

This presentation will discuss the nature of the Ministry's UVS program and will provide the Unit's findings to date regarding UAV applications, including: mapping rare and endangered (R&E) features of the environment; aerial photography of crime scenes (wildlife infractions); volumetric analysis of sand and gravel leases; remotely investigating collapses at historical coal mine workings; wildlife management and habitat related surveys; monitoring the spread of invasive species; remote observation for wildfire management and prescribed burns as well as related regulatory implications. In addition, the use of small UAVs to collect LIDAR data will be discussed based on field studies conducted in partnership with the University of Regina Department of Geography and Environmental Studies to identify and map sensitive slopes using a combination of high resolution orthophotography and LIDAR.

