## SES SEMINAR LUNCH & LEARN SERIES

## **GUEST SPEAKER:**

## Dr. Chris Parsons

Assistant Professor, CERC Ecohydrology Group Earth and Environmental Sciences University of Waterloo

"Legacy phosphorus in freshwater sediments: Mechanisms controlling internal P loading and eutrophication"

Anthropogenic nutrient enrichment has led to the accumulation of phosphorus in many freshwater sediments. This legacy phosphorus may be either buried or remobilized to overlying water, contributing to the proliferation of harmful algal blooms, near shore algal fouling and bottom water anoxia. The chemical, physical and biological factors influencing the stability of phosphorus in the solid phase, and hence the release of phosphorus to overlying water are complex as well as temporally and spatially variable. I will present a study on phosphorus speciation in sediments of a coastal marsh of Lake Ontario, highlighting the coupled biogeochemical cycling of carbon, nitrogen, phosphorus, iron and sulfur and contrasting the impact of enzymatic and mineralogical controls on phosphorus mobilization. I will also review the importance of internal phosphorus loading across a range of Canadian freshwater environments.

Thursday - March 8th 2018 12:00-1:00pm

## Alexander Hall 218



Everyone is invited to attend

Ontario Agricultural College



SCHOOL OF ENVIRONMENTAL SCIENCES