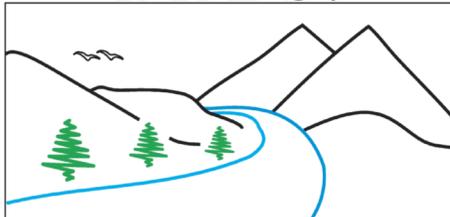


NRESi



"Our environment is our future"

For **Illuminate** information and link to the webcast: http://www.unbc.ca/nres/nresi_webcast.html

RESEARCH COLLOQUIUM SERIES

Dr. Steve Helle

**Environmental Science Program
UNBC**



Friday

Oct. 29, 2010

3:30 - 4:30

LECTURE THEATRE

7 - 150

Bioenergy for a Green University

As part of UNBC's bioenergy plans, a pellet system has been installed to provide heat to the I.K. Barber Enhanced Forestry Laboratory (EFL) and a biomass gasifier is being installed to provide heat to the main campus. The 400 KW pellet system has been in operation for over a year and is capable of supplying 100% of the EFL heat demand. The 4.4 MW biomass gasifier is designed to reduce natural gas consumption for campus heating by 80% and is scheduled to be in operation at the end of the year. Based on operational data from the pellet system, and technical specifications for the biomass gasifier, these systems will be discussed with respect to greenhouse gas emission reductions and air pollution emissions compared to the previous natural gas heating systems. To place these systems into context, an overview of bioenergy systems in general and in BC will be presented.