



CWRA ACRH

**Canadian
Water
Resources
Association**

**Association
Canadienne
des Ressources
Hydriques**

November 4th, 2010

12:00 NOON Holiday Inn South
1330 Pembina Hwy

Canadian Water Resources Association

CWRALUNCHEON

Understanding the Role of Arctic Melt Ponds and the Impact on Climate Change

Melt ponds greatly increase how much light passes through sea ice compared to snow covered or bare ice. This rise in the amount of light passing through the ice has the potential to enhance heating of the underlying ocean and to increase water column primary production. During the International Polar Year-Circumpolar Flaw Lead system study in the Canadian Beaufort Sea, conductivity, temperature, depth and photosynthetically active radiation (PAR) profiles were collected under a variety of drained white ice through to deep melt pond surfaces. This unique dataset was used to examine how a melt pond-covered sea ice surface controls the under-ice light field and to estimate solar heating and primary production during this period. This research will add to the knowledge of the light environment in the Arctic Ocean, assist with improving the models of sea ice melt in the Arctic and consequently improve global circulation models used to determine potential climate change impacts.

This luncheon presentation is eligible for 1.0 credit hour of Association of Professional Engineers and Geoscientists of the Province of Manitoba (APEGM) professional development. The Manitoba Association of Landscape Architects (MALA) also considers this luncheon as a continuing education opportunity.



FEATURING GUEST SPEAKER:

Andrea Rossnagel

M.Sc. Candidate

**Department of Environment and Geography
University of Manitoba**

CWRA MANITOBA BRANCH EXECUTIVE

Erin Shay - President

Karl-Erich Lindenschmidt - Vice-President

Trish Stadnyk - Secretary

David Fuchs - Treasurer

Dave Brown - Past President

TO REGISTER

CONTACT: Norma Bentham
Manitoba Hydro

Email: nmbentham@hydro.mb.ca

COST: \$15.00 CWRA Members
\$17.00 Non-Members

**Registration Deadline: 12:00 Noon
Friday, October 29th, 2010**

If after registering, you are unable to attend the luncheon, please cancel prior to registration deadline. For further inquiries please contact Norma Bentham via email or call 204-360-3754.

No shows will be charged for the cost of the luncheon

Promoting Effective Water Management