North American Energy – Water Nexus Roundtable
Canada – US Transboundary Perspectives

Panellists:  Kathryn Furlong – Université de Montréal  
Kelvin Kethchum – BC Hydro  
Owen Saunders – Canadian Inst. of Resources Law  
Terry Surles – Desert Research Institute

Moderator:  David Rudolph – University of Waterloo
Longest International Border in the World: 8,890 km

*Over 3,000 km are water!*
Major Transboundary River Systems

E.g. #1: Columbia River
Originates in Canada and flows south
Major Transboundary River Systems

E.g. #2: Red River
Originates in USA and flows north
Red River Flood 1997
Winnipeg Floodway

- Completed in 1965 designed for the 160-year flood.
  - Based on hydrologic record from 1875 to 1955.
- Capacity nearly exceeded in 1997.
- $1 billion Expansion required to protect Winnipeg.
  - Increased climatic variability over last 30 years
Strategies for Future Power Needs

• Ontario Govt. plans to close all coal-burning plants and replace them with nuclear plants.

• International trepidation in the wake of the tragic crisis in Japan.

All Canadian Power Exports Go to the USA
Expansion of hydroelectric plants

• more remote and challenging locations
Uncertain Impacts of Climate Variability

- questionable reliability of reservoir storage
The true Water-Energy Nexus for millions of foreign tourists annually
Canadian Resource-Based Economy

MACLEAN'S

America is thirsty
Let’s sell them our water before they take it. P.26