Peace River Ice

Key Concerns
- Effects on ice related flooding at the Town of Peace River during freeze-up and break-up
- Effects on the ice bridge at Shaftesbury
- Effects on freeze-up water levels and implications for basements in Lower West Peace

Peace River Ice (PRICE) Model
- State of the art model to simulate pre- and post- Project ice conditions
- Collaboration on PRICE development from experts in the field of river engineering and hydraulic modeling from across North America
- 3 years of field ice data collection since 2003 to improve understanding of ice conditions and PRICE model calibration
- Field data and collaboration between Alberta Environment, BC Hydro, Glacier Power, and other experts have resulted in improved understanding and management of river ice

Model Results
- Ice will lodge at Dunvegan headworks and build further upstream (on average) than present
- Generally delayed freeze-up through the Town of Peace River and Shaftesbury, with open water at least 20 km downstream of Dunvegan every year
- Slower ice front progression will result in ice that is generally more resistant to collapse and secondary consolidation
- Break up timing no different from present
- Freeze-up water levels slightly higher (0.5 m on average) than present