Canmore to host water and climate conference

LYNN MARTEL CANMORE

As what little that remains of this winter's snowfall melts from the surrounding mountaintops, water will be on a lot of minds as the Canmore-based Western Watersheds Climate Research Collaborative (WWCRC) hosts back-to-back conferences next week focussing on water and climate science and management.

Scheduled as part of World Water Week, which precedes World Water Day on March 22, the conferences will run concurrently from Sunday (March 16) through Wednesday (March 19) at Canmore's Radisson Hotel and Conference Centre. The two events will be attended by scientists, water managers and representatives of utilities and oil companies intent on learning what they need to know about the future of Canada's water resources and how best to manage the effects climate change will have on that supply.

As part of the conferences, a public event is scheduled at the Radisson for Tuesday (March 18), including a presentation on how hydrological science supports sustainable water resource management, and how science is translated into public understanding through Parks Canada's interpretive theatre program. The evening will also include the premier performance of *Up in the Air* by Parks' World Heritage Theatre's Laurie Schwartz, which will be performed through the 2008 summer.

The Tuesday evening event offers an opportunity for people to mingle and talk with scientists, and the conferences and the public presentation are all part of the WWCRC's mandate to help make climate science understandable to the general public, said WWCRC director Bob Sandford, noting that Canmore is the ideal setting for that to take place.

"We want to make Canmore a centre for scientific research for water and climate issues, and a place where that research is translated into language the average person can understand and act upon," Sandford said. "We're the headwaters of the Prairies' water; all of it comes from here. Fifteen per cent of the watershed region has 40 per cent or more of its resources. We are the upper reaches of one of the most significant watersheds in the west."

The conference, running from March 16 through 18, is entitled Past and Future Hydroclimatic Variability. It will be attended by 75 leading scientists who will focus on informing water resource managers and planners about the availability of hydro-climate records that span the past millennium, and which look forward to the next century.

Dr. David Sauchyn, University of Lethbridge professor and member of the Prairie Adaptation Research Collaborative, said the main focus is to show how current science-based water management and planning can be augmented by using records that capture greater hydro-climatic variability than that which is presently made possible by weather and flow gauge records.

Water managers are accustomed to keeping and working with records, Sauchyn said, but usually those records are short term, covering less than 50 years.

"We'll show how scientists study water over the long term," Sauchyn said. "We'll be showing them how we're able to study water levels a century into the past, and a century into the future. While the longer records don't have the same accuracy as the shorter term ones do, they do have the ability to show greater variability in water resources, and water managers see the value in that. There's a lot to be said for studying the full range of variability."

One of the authors of a 500-page national report that was released Friday (March 7), which was compiled by 145 leading Canadian scientists studying the current and future risks presented by climate change, Sauchyn said the level of interest in water availability is high right now as Canadians begin to experience a new climate regime with a greater range of extremely wet and extremely dry years.

This conference, Sauchyn said, will provide water managers with a solid view of the research scientists undertake, the strength and weaknesses of that research, and present options for supplementing the programs water managers are currently using.

Kicking off with the March 18 public presentation, the second conference, which also takes place at the Radisson, will focus on the work of the IP3 research project, which is working toward improved understanding of surface water, snow, glacier, permafrost and weather systems related to cold regions.

The IP3 - which stands for the Improved Processes and Parameterisations for Prediction in Cold Regions Network - is a network of 14 university researchers and 25 collaborators from across Canada, the U.S. and Europe working toward an improved understanding of the cold regions' hydrometeorology and testing advances in atmospheric and hydrological prediction in the Rocky Mountains and the Arctic.

"This conference will be attended by representatives of utilities and oil companies and other interested parties who need to know how much water is going to be available in and from Canada's cold weather regions," Sandford said.

To see such conferences take place in a setting such as Canmore, is a remarkable thing, Sandford said.

"It's quite something to have a conference such as this taking place outside of the university environment,"

WATER

CONTINUED ON PAGE 35

Canmore touted for research centre

WATER

CONTINUED FROM PAGE 33

Sandford said. "Through these conferences we demonstrate that a climate research centre can be located in Canmore and function very effectively in support of research and translate its outcomes in ways that help all of us understand water and climate issues better."

Although the Town is not directly involved in the WWCRC, to have Canmore host conferences of this calibre is represents a great step toward drawing an advanced learning institute to the area, said Mayor Ron Casey.

"I think it's really quite remarkable to have this conference in Canmore, and it's great to see universities involved," Casey said. "One of things we've always hoped to be able to encourage as a town is a university or a satellite research facility. To have this collaborative operate from Canmore is terrific."

Interested parties who work in water and water management who are interested in attending either conference are invited to contact Sandford at sandford@telusplanet.net Reprinted with permission from the *Rocky Mountain Outlook*, 13 March 2008