

OPPORTUNITIES FOR THE BOW RIVER SYSTEM

The opportunities that emerged from this work support the goals and principles of other key policy documents and approaches, including the Water for Life strategy and the



*Spray Lakes Reservoir
in Spray Valley above
Canmore*

South Saskatchewan Regional Plan being developed under the Land-use Framework. These opportunities are offered to the Government of Alberta and others with a stake in the way the Bow River System is used and managed, for consideration.

OPPORTUNITY 1: Manage the Bow River System in an integrated, adaptive, end-to-end manner, considering all users, interests and values

At present, many parties manage the Bow River System on a reach-by-reach basis for independent purposes, including power generation, irrigation, and meeting municipal needs. Social and environmental considerations such as fisheries, aquatic and riparian habitat,

and recreation are not always factored into management decisions, although they can have important economic spin-offs too. Integrated management would optimize opportunities for licence holders, the environment and other users along the entire system.

OPPORTUNITY 2: Pursue and support discussions between the Government of Alberta and TransAlta

Although TransAlta's primary interest is managing the Bow River System to maximize power generation revenues, the company continues to work collaboratively with other water users. TransAlta is now facing significant capital upgrades to its operating system, which creates a rare window of opportunity to influence long-term infrastructure investment choices and introduce a new management approach. There is a unique and timely opportunity for the Government of Alberta and TransAlta to discuss and negotiate the benefits, costs and opportunities related to integrated management of the Bow River System, specifically with regard to the storage reservoirs upstream of Calgary.

OPPORTUNITY 3: Identify and consolidate the functions required to enable integrated, adaptive management of the Bow River System

The opportunity to take a new direction would mean re-managing the Bow River as an integrated system from source to confluence, with a new long-term management function. The Government of Alberta could continue to be ultimately accountable for administration of water and watershed management activities, but the success of these efforts in the Bow Basin depends on a shared approach to management involving the key water managers and users of the resource. The potential roles, processes and authorities of a shared management function should be designed by a multi-stakeholder group, comprising at least some of the members of the Bow River Project Research Consortium, and should draw on the many successful examples from other jurisdictions.

OPPORTUNITY 4: Encourage and enable transparency and open data

Collaborative and transparent processes can successfully address complex, multi-faceted issues, yielding cost-effective and innovative approaches. The right information is a fundamental element for success, but often this valuable data and other information are held by the provincial government and it is not always easy to determine what is available and how to access it. The Government of Alberta and stakeholders are encouraged to explore ways and means of making their many excellent resources more easily accessible to researchers and others engaged in initiatives similar to the Bow River Project.

OPPORTUNITY 5: Continue working toward an improved and integrated Bow River Management System

Although a number of opportunities for better managing the Bow River System emerged from this project, additional work is needed to:

- a) ensure that all the goals identified for the project are met without unintended consequences, and
- b) identify and assemble data to further enhance the Bow River Operational Model and contribute to efforts that may emerge from this project to model other river systems in Alberta.

Moving ahead with this work in 2011 would build on the momentum from this phase of the project and would provide timely support for discussions between the Government of Alberta and TransAlta. As well, other stakeholders may be in a position to take action in some of the areas where more work is needed. These include: economic analysis related to hydro operations, recreation, tourism and fish habitat offsets; ecological and environmental considerations; additional modelling work; institutional arrangements; drought and flood mitigation; and green power.

The results, conclusions and opportunities in this report describe many significant benefits to integrated management of the Bow River System. All of these benefits could accrue to southern Alberta and the province as a whole through a thoughtful, well-planned and timely response to the opening that is expected to occur in the next year with respect to managing this river system. The Bow River Project Research Consortium is optimistic that these opportunities will be acted on and is pleased to have contributed to the discussion.