

Watershed Planning in Calgary, Alberta

Land use and development practices are critical to watershed health. Like all rivers, the water quantity and quality in the Bow and Elbow Rivers depends on the land area within their watersheds, but the idea that managing a river really involves managing land is relatively new. Historically, water management in Alberta has focused on water licenses and approvals and the management of instream flows. As important as these functions are, managing for water quality and dependability of supply have become increasingly important. In ecological systems, including watersheds, everything is connected to everything else by complex exchanges and interconnections. Surface water, groundwater and wetlands all have connections and interconnections with the physical and biological components of the landscape. In order to manage our watersheds effectively, this whole web of interconnections needs to be understood and managed. Watershed management in this context has three crucial characteristics it recognizes:

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AS WELL AS A CRITICAL
LIFE SUPPORT SYSTEM.**

- the connections between surface water and groundwater and the importance of wetlands and riparian areas
- the connections between land use and infrastructure and water quality and quantity
- that both water management and land use decisions must consider the future of watershed functions and interconnections.

Calgary's river valleys have changed dramatically over the last one hundred years. Calgary's relentless history of urbanization has been focused and continues to focus on the river valleys and floodplains of the Bow and the Elbow Rivers. The extent of Calgary's physical growth and its regional land use influence is now at a watershed scale. This affects the future conditions of the Bow and Elbow Rivers as well as the future quality of life for every Calgarian. Calgary's river systems are a fundamental part of our sense of place and identity as well as a critical life support system. Given the regional extent of Calgary's growth pressures and the scale and rate of landscape change and development currently in progress - the future of Calgary's river valleys and watersheds is uncertain.

Established by the Mayor's Office in 1991 to give advice to City Council on issues affecting Calgary's river valleys, the River Valleys Committee is well positioned to bring the influence and expertise of over 60 diverse member groups to its role in shaping civic policy and action. It is now more important than ever for the RVC to take action to fulfill this unique mandate. A number of important and far-reaching land use and development

policies and projects are currently in progress, which have far reaching implications for the future of Calgary's river valleys and watersheds. For example, the City is currently involved in a comprehensive Land Use Bylaw review, three ongoing Regional Policy Plans affecting Northeast, Southwest and South Calgary, and a revival of the East Village redevelopment process. At the provincial level, Water or Watershed Management Plans are currently being developed for the Bow River, Elbow River and Nose Creek, sponsored by the Bow River Basin Council, Elbow River Watershed Partnership and Nose Creek Watershed Partnership, respectively.

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In addition, several Ministries within the Government of Alberta are jointly transitioning from "water management planning" to a newer, integrated "watershed" paradigm, through the development of a comprehensive *Land*

Use Framework and Framework for Watershed Management Planning. When finalized, these documents will help guide all major decisions concerning Calgary's waterways, with the endorsement and support of all pertinent regulatory and approving agencies.

The City of Calgary has the potential to develop and demonstrate "best practices" in Low Impact Development (LID), particularly with respect to stormwater management and water conservation landscapes. Urban expansion and regional land use intensification must incorporate watershed management and water quality targets. Inner-city redevelopment can also incorporate water conservation techniques and a "green" infrastructure approach to providing community amenities, addressing the many costs associated with stormwater management and urban infrastructure.

River valley areas are just as precious as "true" water resources because of the critical interconnections between the two. The RVC is endeavouring to ensure that watershed management and the critical roles our river valleys play in water quality are part of land use and development practices and decision making in Calgary.

Rivers are only as healthy as their watersheds are – they are intricately connected and cannot be treated independently. The role of the RVC is to see and champion the values of our watersheds as "public goods." The public interest is not just social and cultural but ecological as well. We promote the long-term maintenance of our river valleys' important watershed functions and their important social and cultural heritage roles, as well. The floodplains and valley lands are as much a critical watershed component as the rivers themselves; they are all parts of the watershed ecosystem and critical to Calgary's social and cultural heritage, not to mention its future!

For these reasons, the River Valleys Committee focuses on impacts originating in the valley lands rather than on the rivers, per se. We welcome your involvement in ensuring a bright and clear future for Calgary's river valleys.