

15 April 2008

Jennifer Symcox
Natural Parkland Management Coordinator
City of Calgary Parks

Bridget Couban
Natural Areas Project Coordinator
City of Calgary Parks

RE: Twelve Mile Coulee Park Management Plan – Draft January 2008

Dear Ms. Symcox and Ms. Couban,

The River Valleys Committee (RVC) would like to thank you for your department's continuing stakeholder consultations, and for the opportunity to review and comment on the revised draft Twelve Mile Coulee Park Management Plan (the Plan). We would also like to commend City Parks for incorporating many of the RVC's earlier recommendations and for your efforts to address concerns raised by the stakeholder advisory committee.

The RVC supports and endorses the creation of this invaluable Major Natural Environment Park as well as the development of a comprehensive management plan for its beneficial and sustainable evolution. The RVC has strong and continuing interest in natural areas such as Twelve Mile Coulee, especially as they connect to and affect Calgary's water resources and river valleys system.

In general, the RVC strongly supports the preservation of natural areas within the city's boundaries, but recognizes that public education and awareness of the fragility and sensitivity of these areas are critical to their survival. In that sense, the public's usage of Natural Environment Parks such as 12-Mile Coulee, Bowmont and others should be seen as a privilege; thus, the concept of stewardship must be central to park management plans.

RVC members who have been involved in the discussion and review of this planning process have expressed the following general remarks:

Slope stability

Local geotechnical reports ought to be revisited, especially prior to approving a stairway access into the ravine at the site of the 2005 landslide. Our latest information (30 Jan 08) indicated that the causes of this slide were still unknown. There are areas along the shoulder of the regional pathways at top of bank that are also showing early signs of instability – putting pathway users at risk; mitigation plans for these pathways may also be prudent, based on a review of available information.

The RVC recommends that a comparison be made between the existing drainage report's projections and the observed impacts (from June 2005), prior to determining final access routes and trail alignments through the ravine. Any serious discrepancies between projected and observed data should be resolved and addressed, to ensure that risks to human safety and ecological preservation are minimized.

- A meeting between RVC and Water Resources and/or Urban Development was promised; we are still awaiting this critical discussion.
- It is likely that soil conditions in the developed uplands above the coulee, especially regarding their absorptive/retention capacity, have changed dramatically since the last drainage report was prepared (ca. early 1990s, prior to residential construction in Tuscany).
- The total saturation levels of the developed upland areas must be re-assessed for their capacity to retain stormwater, and to determine if the point-discharge swales & pipes along the top of the bank are still at risk.
- Large slope failures of this sort often result from over-saturation of the bank, rather than overland (point-source) flows.

Ravine trail alignment

A particular section of the proposed ravine trail immediately adjacent to and south of the large sandstone outcropping has been given special consideration, due to conflicting opinions between the RVC and Nature Calgary (NC). Briefly, two options were considered: NC prefers an alignment that essentially follows the creek bed; RVC prefers a higher-level alignment along the east bank overlooking the outcrop.

The RVC recommends the higher-level trail alignment option on the east slope, based on adherence to several principles, as outlined below. In special circumstances, alternative approaches to preservation and education should be considered prior to decisions that will affect the integrity of the broader coulee ecosystems.

- The first priority of the Plan is to protect the resource of the Park; that is, to preserve local ecological functions in as close as possible to a natural state. This principle is consistent with other Calgary Parks plans.
- The essential foundation of the ecosystem, and thus the essential foundation of 12-Mile Coulee Natural Environment Park, is the creek itself. The riparian ecotone, where water interfaces with the landscape, is of highest priority for RVC, regardless of specific individual plant or animal species.
- Ecologically, the Park's biodiversity is of utmost importance, and this is assessed on the area's *potential to support* a variety of species, as listed in the Plan (biophysical inventory, pp. 52-62).
- The RVC has emphasized for years that creek crossings should be minimized, but the creek-bed option would require an additional five structures. Each additional crossing structure would provide at least two additional opportunities for off-trail excursions (into/through the creek).

- Seasonal trail closures may be most effective for protecting valuable ecological assets, such as vegetation and nesting or brooding areas. In some areas or at some times, limits on public access may be necessary to ensure the long-term sustainability of the park. Such temporary closures would be left to the discretion of the Director of Calgary Parks.
- Whereas there may be uncommon plants in the coulee that warrant special protective measures, there may also be special opportunities to showcase various species and educate park users about biodiversity and the significance of the local ecology.

Members of the RVC who have reviewed and discussed the Plan and supporting materials have offered some specific comments, as follows:

Reference	Remarks
Introduction, p.5	In describing the park’s geographic and topographic contexts, specific mention should be made of its natural connections beyond the designated boundaries. Specifically, the coulee has been disconnected both from its mouth at the Bow River and from its source waters in the MD of Rocky View. While it is unfortunate that past planning and development decisions have led to the existing channelizations and realignments of the creek, it should be noted in the Plan in case there comes a time when restoring or reclaiming the natural meanders becomes feasible. Planning and management of this park could better ensure that connections will be appropriate when opportunities arise to extend the park’s boundaries.
Pilot Process, p.5	Application of the precautionary principle is commendable in the Plan. Additional references in the Plan to the maintenance of ecosystem processes and functions as first priority over active recreation are appreciated.
Guiding Policies, p.11	Where “protection of the resource will take precedence” is stated, emphasis should be on ecological resource (as indicated in the NAMP classification on p.12). For comparison, the UPMP includes the following phrase (principle 16, cited on p.70): “wildlife and habitat will take priority.” Under the reference to UPMP “Planning Unit 3, Bow River West,” the full description of this area should be quoted, including the five proposed improvements.
Multi-Use Trail Network, p.17	Contrary to the Plan’s “permitted use” of slow speed cycling, the UPMP recommends only pedestrian activities for this area. Further, a limit of 10 km/h will be impractical to monitor or enforce, even where non-compliance is leading to obvious ecological impacts or degradation of the resource.
Principles, p.18	An additional clause should be inserted, such as: “Seasonal wildlife and habitat sensitivities will be recognized and may require temporary trail closures.”
Principles, p.19	The bullet at top of page should be amended as follows: “Creek crossings will connect trails where necessary. Proposed trail alignment crosses the creek 15 times. Use of the southern portion of the coulee will be monitored and if users are still continuing to primarily use the creek as a trail, then Parks will re-evaluate and may need to develop restrict access to the southern portion of the trail along the and creek bed in order to protect the resource. ”

Resource Mgmt: Trails, p.25	The first sentence under “Trails” should be amended as follows: “... fragmentation of habitat caused by the proliferation of undesignated trails and inappropriate activities within the ravine.”
Creek Crossings, p.25	Arising from discussions with other stakeholders, there are concerns with the proposed crossing structures that the RVC believes need to be addressed. Parks’ expressed intent, that the creek’s natural tendency to meander will be respected in the crossing structures’ design process, is good, but questions remain: <ul style="list-style-type: none"> • What benchmark (flood level) are the bridges designed to withstand – 1:10/50/100-year event? • If the structures are anchored to the earth rather than tethered, could high velocities and volumes during a flood cause unintended damages? • If the structures are tethered rather than anchored to the earth, could additional damage be caused by loose or swinging debris during a flood? <i>Can the design criteria or terms of reference for the creek crossing structures be made available for stakeholders’ reference?</i>
Wildlife Underpass, p.26	Some mention is needed to address the potential outcome whereby educational programs fail to effect the desired change (i.e., the elimination of human disturbances in the wildlife corridor). Monitoring and enforcement options may need to be revisited, including further use of “wildlife” cameras.
Hydrology and Water Quality, p.28-9	Questions have arisen regarding the assumptions and recommendations in the area’s master drainage plan: their accuracy needs to be confirmed, following observations from June 2005. Specifically, steadily increasing quantities of stormwater should be expected following urban development in the upper watershed, along with steadily decreasing water quality. Future management of the park will rely heavily on this data, especially as it relates to activities on or above the escarpment and near the creek. The paragraph at top of p.29 should be amended as follows: “... water entering the park may also have negative impacts on the aquatic and riparian health of the park ...”
Cultural History, p.36	Ancient archaeological assets within the park are invaluable educational resources, but so are the activities that have shaped the area over the past 50-100 and 5-50 years. It might be worth noting in the Plan that interpretive programming shall include a portrayal of the pace of environmental changes, brought about by the increasing intensity of (human) access and activities. Such programming could incorporate recent urban developments and other human-related uses that have been detrimental to the natural resource (habitat and natural infrastructure).
Biophysical Inventory and Assessment, p.49-62	The wildlife section (pp.60-62) lists numerous mammals, amphibians, etc as being potential inhabitants of the park’s various habitat types. Some of the species listed are known to be endangered or at risk in Alberta. It would be helpful to include: (a) mitigation or enrichment strategies with regard to rare plants and animals, and (b) explanations for the citation indicators that are already in the inventory tables (i.e., footnotes/endnotes) are not included.
Glossary of Terms, p.66-7	Should include the following: <ul style="list-style-type: none"> • Resource: despite numerous references to “protection of the resource” in the Plan, the City has not included a definition of this term in the Urban Park Master Plan, Natural Area Management Plan, Open Space Plan or Wetland Conservation Plan.

Given The City of Calgary's recent experiences with having to refit existing Major Natural Environment Parks (e.g., Nose Hill and Bowmont Parks) due to rising urban and user impacts on wildlife habitat and populations, RVC members recommend that the Plan's first implementation phase focus on raising awareness and setting user expectations to better appreciate and accommodate the long-term needs and values of Twelve Mile Coulee Park as a natural resource.

We respectfully request that we be advised of any progress or decisions made regarding the above matters, prior to the Plan proceeding to City Council. Thank you again for soliciting and considering the comments of the River Valleys Committee.

Sincerely,

Steve Meadows, Co-Chair, RVC Land Use & Development Subcommittee

Bill Morrison, Co-Chair, RVC Land Use & Development Subcommittee

Mac Hickley, Manager, River Valleys Committee

cc: Ald. Dale Hodges, Ward 1
RVC Executive Council
RVC Board of Advisors
RVC Land Use & Development Subcommittee members