



Living with Our Rivers...

Dogs in River Park, Sandy Beach, Britannia Slopes and the Elbow River

River Park and Britannia Slopes are home to two treasured off-leash areas for Calgary dog owners. The proposed “Sandy Beach/River Park/Britannia Slopes Combined Park Management Plan & Design Development Plan” – now in draft form [July 2009] – introduces some changes that may be welcomed by some dog owners and troubling to others.

The draft plan calls for a multi-use park with greater separation of areas for off-leash activities and on-leash areas for playgrounds, picnics, and day camps. Some environmentally sensitive areas have also been identified where dogs will not be permitted – in particular, the river and riparian areas that surround it.

While many people have begun to suspect that the growing numbers of dogs in Calgary’s rivers and valleys may have some detrimental effects on the escarpments and riverbanks, most of us remain blissfully unaware of the extent of damage that concentrated dog activities create in these fragile environments.

Let’s just consider our urban setting for a moment. According to [Snohomish County’s website](#) (in Washington State), their 126,000 dogs produce the raw sewage equivalent of a city of 32,000 people, depositing more than 18 tonnes of dog waste in back yards every day. A little closer to home, a recent Vancouver [research report](#) on dog waste composting noted that 11,400 dogs produce about 2.3 tonnes of solid waste per day. According to the City of Calgary Bylaw Services, the number of dogs currently living in Calgary is over 110,000. Based on these calculations, Calgary dogs would produce between 16 and 23 tonnes of waste each day. For comparison, Snohomish County occupies 5,413 km² of land, while Calgary covers approximately 830 km².

“Well,” you are thinking, “I pick up after my dog. I am a responsible dog owner.” But there are always those times when we just can’t find the poop in the long grass and we think – “Ah! The Long Grass Principle – it will decompose naturally.” But the environmental safety of this approach depends on several factors, especially the number of dogs in the area (fewer is better). There are also times when a bit of poop is caught in the dog’s paws or coat and is carried into the river. When this happens, the bacteria commonly found in dog waste finds a rich growth medium, resulting in the potential for high bacterial counts, dramatically reduced water quality, and direct human health impacts.

But how do we know that off-leash activities are creating this problem? The storm water entering the Elbow River below River Park and Britannia is untreated, so the high bacterial coliform counts on the Elbow River may have multiple sources. According to a survey by Water Watch in 2007, *E.coli* was measured immediately downstream of Sandy Beach, at the following concentrations (# particles per 100 ml): 2,700 (7 June), 200 (28 June), 0 (12 July), 1,100 (17 July), 200 (16 August), 300 (28 August). It’s also important to note two things: first, local storms can profoundly affect water quality, creating contaminant spikes lasting for 24

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hours and longer; and second the Alberta Surface Water Quality Guideline for recreational use is 200 parts *E.coli*/100 ml. For these and other reasons, we need to look at scientific studies from other, similar urban areas to gain a better understand of the problems and possible solutions.

Studies from Austin, Texas (www.scoopthepoopaustin.org), Melbourne, Australia (<http://www.melbourne.vic.gov.au/info.cfm?top=6&pg=525>) and elsewhere (for example <http://www.usatoday.com/news/science/2002-06-07-dog-usat.htm>) report high bacteria levels in water bodies adjacent to off-leash parks. In one Austin study, water quality was tested upstream and downstream of a popular off-leash area (Bull Creek). Comparative bacteria levels at all locations were well within safety margins for recreational use, except for the creek area in the off-leash park. Further, the study noted that “levels were 8 times higher on weekends than weekdays when park visitors increase in the off-leash area.”

While reduced water quality is a serious concern for swimmers, rafters and people living downstream, it may also be a health concern for dogs and their owners. Accounts of dogs with lesions and infections after contact with river water and the fact that ingestion of bacterial coliforms may be deadly have led many dog owners to keep their pets out of the Elbow.

Other wildlife living in river valleys are adversely affected by dogs in the environment, as well. Birds take flight when dogs are present and many ground-nesting and migratory species cannot survive in off-leash areas (<http://news.bbc.co.uk/2/hi/science/nature/6978272.stm>). Fish and other aquatic organisms also suffer from damage to their habitats – ongoing surveys by Fisheries & Oceans Canada, Alberta Fish & Wildlife and Calgary River Valleys have identified over 380 active trout spawning redds (sites) in the lower Elbow River (downstream of the Glenmore Dam).

Additional impacts arise due to intensive dog activity at specific locations, such as riverbank erosion, lost parkland and damaged trails, destruction of fragile plant life on the escarpments, and a decline of natural riparian functions (water filtration, plant overshadowing for aquatic habitat, etc).

River Park, the Britannia Slopes and Sandy Beach are now parts of an urban landscape that offers dog owners and other park users opportunities to enjoy green space in the heart of Calgary. These precious resources are recognized in the City's *Natural Area Management Plan*, *Urban Park Master Plan*, *River Valleys Plan* and others, with directives to preserve or enhance the area's natural integrity and biodiversity.

Calgary is no longer a small city with a few dogs chasing sticks in the rivers – it is a major urban centre with a population over a million. So we are facing a problem of scale: where a few dogs in the river may be considered safe harmless fun, upwards of a thousand dogs on a single afternoon present serious problems that are impossible to ignore. Some years ago, there was a debate about whether horses should continue to be ridden through Calgary parks – today they are not. It is clear that there are some activities that are not sustainable if we are to maintain and in some measure, restore, the Elbow River in this shared parkland.

This article was written by members of the River Valleys Committee's Edu-Action Subcommittee in July 2009. More current information on this plan and park can be found at www.calgary.ca/riverpark.