1.0 Introduction

The South March Highlands (SMH) is an outcrop of Canadian Shield on the western edge of Ottawa's urban boundary, in the old City of Kanata (Figure 1). It covers approximately 895 ha and is bounded by March Road in the north, Second Line Road to the east, Kanata Avenue in the south, and Huntmar Drive to the west (Figure 1). It is a continuation of a ridge that runs northwest for approximately 30 km to Fitzroy Harbor on the Ottawa River. The exposed bedrock base of the SMH has not been extensively developed for agriculture and likely has had little commercial logging since the late 1800's. Consequently, much of its forest cover has reached maturity, and portions are beginning to acquire old-growth characteristics. According to a review of the existing conditions conducted for the City of Ottawa (Brunton, 2008), there are 10 vegetation types, with much of the SMH area being comprised of Deciduous and Mixed Forests. The area also has two provincially significant wetland - complexes centered around - Shirley's Brook and the Kizell Wetland. The combination of maturity, multiple vegetation types and wetlands results in a high level of native biodiversity. This includes nine known species at risk with a conservation ranking of threatened or endangered, and nine additional species with a conservation ranking of "special concern" (Brunton, 2008).

The City of Ottawa has protected 400 ha of the South March Highlands as the South March Highlands Conservation Forest (Figure 2). However, urban development has occurred in the past in the SMH and continues. In the past thirty years, consistent population growth in Kanata has created an increasing demand for land to accommodate commercial and residential development. Development planning within the urban portion of the SMH is partly constrained by a legal agreement and OMB decision establishing the ratio of developable land to "greenspace" land at 60/40. In 1983, the Ontario Municipal Board (OMB), in response to a development application, was asked to consider the impact of the Kanata Lakes (KNL) development on natural areas, primarily the Kizell Wetlands and the associated forest lands. The OMB decided that 40% of the Kanata Lakes land holding was to be protected permanently as Natural Environment, and that the remainder could be developed for residential housing and associated infrastructure (OMB, 1983). This decision was reinforced in a 2006 decision by the OMB, which ordered that the draft plan of subdivision should proceed as proposed (OMB, 2006). Major municipal infrastructure developments like the expansion of Terry Fox Drive (TFD), electricity transmission corridors and the planned realignment of Goulbourn Forced Road (GFR) have relied on the 40% rule to define the developable land limits, their spatial layout and zoning composition since the 1983 decision.

The Kanata Lakes development has proceeded as planned on the south side of the Kizell Wetland. However, the draft plan of subdivision for the areas north of the Kizell Wetland – KNL Development Inc., Phases 7, 8 and 9 – has been delayed by environmental concerns. The 2006 draft plan proposed to divert most of the surface water drainage (i.e., stormwater) on Phases 7 and 8 from the Shirley's Brook subwatershed to the Kizell Wetland – Watt's Creek subwatershed, to alter the Kizell Wetland to accommodate additional stormwater, and to relocate a long section of Shirley's