

AN ECOLOGICAL ASSESSMENT OF INVASIVE PLANT SPECIES IN A CONSTRUCTED STORMWATER WETLAND IN MARKHAM, ONTARIO, CANADA

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ABSTRACT

It is generally assumed that increased plant biodiversity will enhance the efficiency and effectiveness of the pollutant removal processes in wetlands constructed for stormwater management and will provide ancillary benefits for wildlife and the general public. However, the development of a diverse plant community may be jeopardized by colonization by invasive species. This study reports on a detailed assessment of the changes in plant species composition in a wetland complex constructed for stormwater management in Markham, Ontario, Canada. The research presented focuses on the relationship between the presence of invasive species, the lack of development of native species diversity, and the environmental factors that may be associated with the presence and distribution of invasive plants. Today, vegetation diversity of the wetland remains extremely poor and there has been significant establishment of invasive species, especially *Typha angustifolia*. Despite the complexity of the site, there are few environmental determinants for plant growth.