

# **Development and Implementation of Best Management Practices for a Rare Shrew in a Highly Urbanized Environment**

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The Pacific Water Shrew (*Sorex bendirii*) is a semi-aquatic species dependent on intact riparian habitat. Its Canadian distribution is restricted to greater Vancouver and the Lower Fraser Valley of British Columbia. The species was listed as Threatened in 1994 by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) based on its restricted range, apparent rarity, and habitat loss. In 2003, a Recovery Team developed a Recovery Strategy with the overall goal of downlisting of the species to Special Concern status within 10 years.

Because the largest threat to *S. bendirii* is loss, degradation, and fragmentation of remaining habitat, Best Management Practices (BMPs) were developed for environmental assessments and habitat management in areas of potential water shrew habitat.

The BMPs recommend a multi-faceted approach to assessing potential impacts, and to protecting habitat. The BMPs include decision-support tools to determine when an environmental assessment is necessary, the type of assessment that should be conducted, a recommended trapping protocol, and recommended management outcomes. Because of the difficulty in assessing presence/absence of this rare species in a non-lethal manner, greater emphasis was placed on assessing habitat capability, and a habitat capability/suitability model was developed for the area. The BMPs have been implemented for several development projects.

We provide an overview of the BMPs, the assessment process, and issues encountered during the implementation of the guidelines. We also present a case study of one project that used the BMPs. This assessment and management protocol can be used as a template for other species at risk.