

A BENEFIT-COST FRAMEWORK FOR ANALYZING
WATERFOWL HABITAT RESTORATION

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By

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ABSTRACT

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The purpose of this thesis was to present a benefit-cost framework that both the economist and noneconomist could use to estimate the benefits and costs associated with proposed public projects, such as waterfowl habitat restoration. The rationale for using benefit-cost analysis (BCA) over other environmental decision-making methods was presented, as well as the economic theory underlying BCA. Special emphasis was given to travel cost method (TCM) and contingent valuation method (CVM) for valuing nonmarket goods and services, such as environmental amenities, and for estimating total economic value of nonmarket goods. The reclamation of Lake Christina in northern Douglas and Grant Counties (Minnesota) was used as a case study to demonstrate the value of the benefit-cost framework. The in situ use values of Lake Christina were monetarily quantified. The ratio of quantifiable benefits to quantifiable costs for the reclamation of Lake Christina was 1.09. This suggests a positive net return to society.