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Preserving the Whangamarino Wetland - An
Application of the Contingent Valuation Method

A Thesis presented in
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for the
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ABSTRACT

This thesis essentially describes the principal competing uses of the Whangamarino Wetland and derives estimates of the national economic benefit provided by each use. The wetland is a large swamp area in the upper North Island of New Zealand and provides an important wildlife habitat for many varied plants and animals. The wetland also has significant potential for agricultural and horticultural development as well as providing benefits in the form of fishing revenues and flood control.

This study describes the major uses of the wetland in detail and goes on to apply economic evaluation techniques to each of them. Particular emphasis is placed on applying the Contingent Valuation Method (CVM) to evaluate the non-market benefits from preserving and improving the wetland as an environmental amenity. The CVM is discussed in detail with its theory, strengths, and weaknesses highlighted.

A commentary on the methodology used in applying the CVM proceeds to outline the derivation of the national sampling frame, the design and implementation of the postal survey questionnaire and the results obtained.

Information collected in the postal survey is examined to derive an understanding of how much and why, people value the wetland. A socio-economic profile of the respondents to the survey is generated in order that a judgement can be made on whether the postal survey technique has validly captured a national opinion.

The study proceeds to aggregate the national economic benefits of the wetland in the form of Net Present Values (in January 1987 dollar terms, using a 10% discount rate). These values are then compared to illustrate how preservation of the wetland is likely to provide significantly greater social benefits than agricultural development benefits.

The study continues by discussing national preferences of wetland use and making recommendations on wetland management

in the future. A critique on applying the CVM in a New Zealand context is presented as a conclusion to the thesis.