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VALUING THE BENEFITS OF A SMALL COMMUNITY SEWERAGE SYSTEM IN THE COASTAL ENVIRONMENT

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RICHARD RALPH MOORE
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Abstract

A community sewerage system is a public good which society derives a wide range of benefits from. Because a community sewerage system is a public good, it is normally provided under the direction and control of a local authority. A local authority contemplating providing a community sewerage system in a small coastal community, must consider whether the welfare of the community will increase as a result. To do this it needs to consider the total economic costs and benefits that the community might incur or gain from building a small community sewerage system. In the coastal environment the value of many of the benefits a community sewerage system would provide can not be observed in commercial markets.

This research aimed to provide local authority decision-makers with a way to value the benefits of a small community sewerage system in the coastal environment. To achieve this the contingent valuation method was used in the form of a mail questionnaire with specific reference to the circumstances of small coastal communities. Application of the questionnaire was illustrated using three small New Zealand coastal communities, Russell, Tapeka and Horeke. The questionnaire was mailed to households and businesses in these communities to solicit their willingness to pay for the benefits of a proposed community sewerage system. An average return rate of 50% was obtained.

The information and results obtained from the questionnaires showed that they can provide valuable information. In particular, information for a decision-maker wishing to determine if community sewerage is economically efficient in a small coastal community. The average value per fortnight that respondents from Russell, Tapeka, and Horeke placed on the benefits of a community sewerage system was \$16.60, \$15.97 and \$9.75 respectively. For each community, the average value was not sufficient to cover the cost of the proposed community sewerage system. Nevertheless, the authority managing the sewerage issues in Russell, Tapeka, and Horeke gained beneficial insights to adopt the best plan of action for sewerage in each community.

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