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Report to the Rural Services and Wairarapa Committee from Colin Wright, Divisional Manager, Wairarapa

# Wairarapa Irrigation Study – Progress Report

### 1. Purpose

To advise the Committee on progress to date with the Wairarapa Irrigation Study.

# 2. Background

Last year a proposal was assembled for a comprehensive study into irrigation possibilities in the Wairarapa. The catalyst for this study was a new form of government grant for water related investigations in drought prone areas of New Zealand, including the Wairarapa.

The Wairarapa Study is being funded by a \$50,000 government grant plus contributions from the Wellington Regional Council and the Masterton, Carterton and South Wairarapa District Councils. A steering committee is overseeing the project and this committee has representatives from the four councils, Masterton Business Enterprise, South Wairarapa Enterprise Board, Federated Farmers, and other industry representatives.

The detailed study is being undertaken by Lincoln Environmental, a water resources consultancy company owned by Lincoln University. The Regional Council has provided most of the background data for the study, and the Divisional Manager, Wairarapa is the project leader.

### **3. Progress to Date**

The study is divided into five stages. The first two stages were completed early this year and reported in some detail to the steering committee at a February meeting.

The first stage aimed to determine the demand for water if all suitable areas in the Wairarapa were irrigated. The study has indicated that approximately 122,000 hectares would benefit from irrigation. This would require a peak water demand of 42 cubic metres per second. These figures are based upon the irrigation requirements for pasture. Grapes require approximately a quarter of the water that pasture does, while other crops typically require about 75% of that for pasture.

The second stage was to identify areas where obtaining a reliable irrigation supply is unlikely to be economic or practical for individual enterprises. This part of the study determined that there was sufficient groundwater available in the Wairarapa to provide the total volume required on an annual basis. However, the groundwater availability in particular areas is often limited by the specific capacities of individual bores and wells. In many areas of the Wairarapa the specific capacities are generally low and this therefore limits the amount of irrigation that can be undertaken in a number of localities.

In addition, the study has looked at the possibility of supplying irrigation water from several of the major rivers in the Wairarapa. This has necessitated computer analysis of 30 years of river flow records to determine the overall situation, particularly during the critical summer/early autumn period.

Several maps and diagrams will be presented at the Committee meeting to illustrate the findings to date.

#### 4. Next Stages

The third stage is to develop conceptual designs for possible community irrigation schemes to serve those areas where individual enterprises are unlikely to be able to obtain water on their own. The consultants are working steadily on this aspect and have recently inspected a number of potential sites for possible storage of irrigation water for those times when river flows are inadequate.

The final two stages involve making a preliminary assessment of the feasibility of each community irrigation scheme concept, and then the final reporting and recommendations. The project is scheduled to be completed by June 2001.

### 5. Communication

The Wairarapa Irrigation Study has already been the subject of articles in the Regional Council's newspaper Elements and also in the Regional Outlook publication on the Wellington regional economy. Further communication opportunities will be taken as the project proceeds further.

#### 6. Recommendation

That the report be received and the information noted.

Colin Wright Divisional Manager, Wairarapa