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Report to the Environment Committee
from Geoff Skene, Manager, Environment Co-ordination

Implementing the Water Conservation Provisions of the Regional Policy Statement: A Progress Report

1. Purpose

To report on progress in implementing some of the methods in the Freshwater chapter of the Regional Policy Statement (RPS) which provide for water conservation for streams and rivers.

2. Background

When river levels drop in dry conditions, the need to conserve water can become of prime importance. This occurred most recently in the Wairarapa drought of 1997-98. Water shortages cause competition amongst users. The conservation and efficient use of water helps to reduce conflicts and increases water availability for consumptive uses. Using only what is needed and not over-extracting is also good for the aquatic ecosystem, leaving more water to cushion the twin blows of extraction and discharge which affect the ecology of many of our rivers.

The need to reduce surface freshwater use in some places and at certain times was identified as an issue in the RPS. It addressed the issue, both in policy terms, and through a suite of methods. These methods (numbers 7 to 12 of the Freshwater Chapter) are directed at two major classes of water user: the urban dwellers of the Region through their territorial authority suppliers and water users in rural areas. It is the latter group that this report is concerned with. This is primarily because substantial efforts have been made to promote water conservation by Utility Services and by the cities of the Region.

3. Research into Water Conservation Options

Last year, to give effect to some of these methods, staff from the Wairarapa and Environment Divisions prepared an internal working paper examining options for managing rural water-short areas. This report, authored by Matthew Morgan, is available should Councillors wish to receive a copy. The dry summers of 1997/98 and last summer underlined the need for this type of investigation and provided practical evidence of landowners' needs and reactions to decreasing water availability.

The report identified a number of "tools" that could be used to encourage water conservation and manage water shortages and analysed their applicability to the hydrological conditions, water needs, and characteristics of specific catchments. This is summarised in a matrix (see Attachment 1). The matrix shows those rivers and streams where water shortages can occur, the usefulness of each tool and the relative priority of the application of the tool to each river.

The "tools" assessed included both *management measures*, to alter or influence the behaviour of users (e.g., information provision, consumption targets, transferable water permits, meters, user committees) and *administrative and investigative measures*, to further our understanding of the resource and administer it more effectively (e.g., low flow monitoring, quantifying permitted uses, consent conditions, common expiry dates).

This investigation concluded that the use of a combination of tools would present the best chance of managing water shortages effectively. The most significant and potentially useful of these are to:

- Employ *common expiry dates* for consents within a catchment where possible. This is a long term measure but provides probably the best means of managing catchments as a whole. A Council guideline will need to be developed.
- Encourage the *taking of lesser and more realistic quantities* when consents are obtained or renewed and provide practical advice on how water can be used more efficiently.
- Develop "*step-downs*" for stressed catchments which do not have them and refine and use those already in existence. "Step-downs" refers to the gradual imposition of restrictions as river flows reach critical thresholds. This requires accurate flow measurements and in some cases "real time" flow information from sites which currently do not have on-line recorders.
- Provide *water conservation advice with compliance visits*. Provide farmers with advice on crop water requirements and ways to reduce their water usage through consent compliance inspections and general advice.
- Develop and apply *consumption targets*, or recommended volumes of water needed for specific crops at particular locations (see below for more details).
- Provide *information and advice* through the Consents Newsletter, catchment-specific information, and "education" programmes.
- Establish *user committees* in specified catchments. Potential catchments are the Waimanu, Mangaone, Kopuaranga, Waipoua, Mangatarere, Otakura, Parkvale, Makoura, and Makakaha.

4. **Progress in Implementing Water Conservation**

(i) **Common Expiry Dates, Step-downs, and Renewals**

We have continued to work at implementing a number of these methods. As a matter of course, consents officers endeavour to encourage applicants and those seeking renewal of water takes to think realistically about their needs.

During the summer, fieldwork has been undertaken and hydrological and habitat modelling carried out, on the Upper Ruamahanga and Kopuaranga Rivers to refine their step-down thresholds and prepare for the renewal of the majority of consents in the next two to three years. Common expiry dates have been sought for Wairarapa consents over a number of years, with the result that in some catchments most water takes come up for renewal at about the same time. Consents on these rivers have largely co-terminus expiry dates. Low flow monitoring on the Wellington side of the Region has also continued.

(ii) **Crop Water Requirements and Compliance Visits**

The need for farmers to have access to irrigation information, and the significance of our compliance officers in supplying it, was accentuated by the dry summers of the last two years. There is a demand for this sort of information. Moreover, none of the farm advisory services we contacted provide it.

However, this should soon change as information about crop water requirements in the Wairarapa becomes available (it exists already for the Kapiti-Te Horo area). The Council was approached by Victoria University at the end of 1998 with a proposal to determine the irrigation and moisture needs of different land uses and crops on the Wairarapa plain. Although essentially a University initiative, we decided to join in the research for the very significant benefits it will provide and its fit with our strategic objectives for water conservation. Field work is in progress at Greytown assessing various irrigation types (surface, spray, trickle) and soil types. A temporary climate monitoring site has also been established as part of the study. The research is expected to be completed by March 2000.

The information we obtain will enable the Council to argue persuasively for realistic consent allocations, provide sound advice in the field, encourage farmers to cut back on unnecessary use, and plan for potential future uses. When the time comes this information will also place us in a much stronger position to foster and counsel user groups and encourage these groups to make their own decisions about allocation and use.

(iii) **User Committees**

These groups are a less significant “leg” of our water conservation initiatives at the moment but they have the potential to become very useful. Catchment based groups are growing in popularity in other parts of New

Zealand as a way of addressing a number of communal issues, of which water allocation is just one (e.g., riparian management, sustainable land management, pest management, and even social issues such as rural schools and alternative forms of economic development). We have put off promoting this idea for the time being, seeing the Council's proposed education initiative as the most appropriate means of developing such groups.

5. **Conclusion**

In summary, we are continuing to make progress in implementing this aspect of the Regional Policy Statement. While, under the Resource Management Act, the Council cannot *instruct* consent holders how to use the water they are allocated, it can provide help and guidance through "non-regulatory" means such as those listed in this report in the expectation that all users (the aquatic ecosystem included) will benefit.

6. **Recommendation**

That the report be received and the information noted.

Report prepared by:

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Attachment.