

## caring about you & your environment

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Report to Environment Committee from John Sherriff, Manager Resource Investigations

### **Science and Research Support Summary**

## 1. **Purpose**

To inform the Committee about how the Division's Science and Research budget has been used over the past two years.

# 2. **Background**

In the last Long Term Financial Strategy (LTFS) the Council included \$20,000 in the budget from 200/01 to 2009/10, to support science and resource projects undertaken by outside agencies.

The Council receives a large number of requests each year to support projects. These range from students undertaking theses, to research institutes and consultants seeking contributions to support applications from the Ministry for the Environment's Sustainable Management Fund. MfE generally require contributions from end users before committing funds from their budget.

Previously we have found it difficult to support worthy projects from existing budgets. The \$20,000 was provided with the idea that four to five projects could be supported each year. This is consistent with approaches taken by other Regional Councils.

## 3. **Project Assessment**

As part of the preparation for the last LTFS, staff developed a list of science and research needs for the Division. This list provides the basis for assessing the worth of proposals received by the Council. When a proposal is received it is reviewed by a relevant staff member and they assess its benefit to the Council's work programme.

Assessment is made on a wide range of criteria including:

- the relevance of the project to our role, responsibilities and our strategic directions;
- the creditability of the science provider;
- the methodology, outputs and timeliness of these outputs; and
- the costs and benefits to the WRC

Funds are allocated on a first come first serve basis.

# 4. **Projects Supported to Date**

The following projects have been supported in the two years since the inception of the science and research support budget.

Project: The Sustainable Households Programme,

Provider: Marlborough District Council,

WRC Contribution: \$500

The programme aims to help households work together on actions for the environment at home and record their impact. It presents responsible choices to households through everyday decisions and shows how to achieve resource efficiency and money savings.

The programme is currently being trialled around New Zealand. A trial has occurred in Hutt City Council.

Project: Roof and Building Surface Run-off Quality

Provider: Kingett Mitchell, WRC Contribution: \$2,500

This project sought to identify what contribution run-off from roof and building surfaces made to urban stormwater contamination loads. Run off from buildings can contain lead, zinc and pesticide contaminants. This project has relevance to our wider stormwater project. If it becomes necessary to take steps to improve the quality of stormwater being discharged into our waterways we need to know where the contaminants are coming from.

Project: Methods for Determining the Effects of Pollution on Fish

Provider: Forest Research / Landcare Research WRC Contribution \$7,000 (over two years)

The objective of this project is to identify the effects on short finned eel and other native fish species when they are exposed to a variety of contaminants. e.g. sewage, discharges from paper mills etc. The information arising will enable more accurate assessments of effects of these pollutants on ecosystems. This will provide benefits in designing monitoring programmes and assessing effects of resource consent applications.

In our Region two sites will be investigated, one in Waiwhetu Stream the other in a pristine environment. The selection of Waiwhetu Stream complements the work being

done through the Waiwhetu Action Plan. The outputs of this study are expected by November 2003.

Project: Water Resources Information Catalogue Provider: New Zealand Hydrological Society WRC Contribution: \$5,000 (over two years)

The New Zealand Hydrological Society is developing a Water Resource Information catalogue. This will provide an on-line resource making it easier to identify and access the wide range of information available about groundwater and surface freshwaters in New Zealand. The outputs of this project are due in 2003.

Project: Reducing the Impacts of Vegetable Production on Groundwater Quality

Provider: Vegfed

WRC Contribution: \$10,000 (over two years)

Through this project Vegfed will investigate and develop guidelines for reducing the levels of nitrate occurring from vegetable growing businesses. This has particular relevance to the Kapiti and Wairarapa parts of our Region where nitrate contamination of groundwater has been identified as an issue. The outcomes of this project are expected in June 2003.

Project: Purchase of the AgriDatabase

WRC Contribution: \$6,000

A contribution was made towards the purchase of the Agribase Database. This provides up to date information about farms in our Region, including ownership, size, location, stocking rates, herd sizes, and landuse.

This information is useful for a wide range of Council activities including: soil quality monitoring, riparian planting, biosecurity and water quality.

Project: National Groundwater Database

Provider: Institute of Geological and Nuclear Science

WRC Contribution: \$3,000

For several years now the Institute of Geological and Nuclear Science has co-ordinated the national groundwater database. This work was previously subsidised by the Sustainable Management Fund (SMF). Due to changes in SMF priorities the subsidy is no longer available through this funding mechanism. However, the worth of the project is recognised and it appears that in the long-term funding may be available through the Foundation of Research, Science and Technology (FRST). Assistance was needed to maintain the national programme while changes in funding were being negotiated.

Project: Effects of In-Stream River Work on Macroinvertebrate Communities

Provider: Massey University WRC Contribution: \$3,000

Little is known about the rate at which river ecosystems recover after major river gravel extraction works. This project will help to develop a better understanding of the rates of

recovery. The information will be useful for assessing resource consent applications and may help rivers' engineers undertake their work in a manner which minimises the effects on the ecosystem.

This work is being undertaken in conjunction with the Council's Flood Protection Department and will be based on the Waikanae River.

Project: Comparison of Water Quality Monitoring and Maori Matauranga in

Mangapouri Stream

Provider: Caleb Royal, Te Wanaga-o-Raukawa

WRC Contribution: \$3,000

An outcome of the iwi technical workshop held in October last year was the identification of a need for greater understanding of the relationship between measurements of scientific water quality and "maori matauranga", the cultural values placed on water. This project seeks to draw a comparison between these two systems of measurement. Mangapouri Stream will be the focus of this project. A stretch of Mangapouri Stream adjacent to Te Wanaga-o-Raukawa will undergo riparian planting and the consequent effects on water quality will be measured using both the scientific and cultural perspective approaches.

Result will be available in June 2003.

#### 5. Communication

No further public communication is necessary for this report.

#### 6. Conclusion

The provision of funds to support science and research has enabled us to help in a wide range of projects which will ultimately benefit the Council in its management of the Wellington environment.

#### 7. **Recommendation**

That the information be received and noted.

Report prepared by: Approved for submission:

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