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| 2 July 2003  |
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Committee Environment Committee Author John Sherriff Manager, Resource Investigations

# Science and research support summary 2002/03

#### 1. Purpose

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

#### 2. Background

In the last Long Term Financial Strategy (LTFS) the Council included \$20,000 in the budget each year to support science and resource projects undertaken by outside agencies that would enhance the Council's own work.

Greater Wellington 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 Greater Wellington. When a proposal is received, it is reviewed by a relevant staff member and they assess its benefit to Greater Wellington'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 GWRC

Funds are allocated on a first come, first serve, basis.

#### 4. Projects supported last year

The following projects were supported last year.

| Project:                   | Best Practice Guidelines for Farm Wastes |
|----------------------------|--|
| Provider:                  | New Zealand Agricultural Education Trust |
| <b>GWRC Contribution :</b> | \$2,500                                  |

The objective of this project is to develop sustainable methods for disposing of waste plastics occurring from farming activities. These include wastes such as empty agrichemical containers and silage wrap.

The project is being done in conjunction with farmers, growers, central and local government, plastic recyclers and the plastics and agrichemical industries.

| Project:                   | Forest Monitoring and Assessment Kit (FORMAK) |
|----------------------------|---|
| Provider:                  | Peter Hansford & Associates                   |
| <b>GWRC</b> Contribution : | \$4,000                                       |

We have provided funding to support the development of a forest monitoring and assessment kit. This is a kit will provide landowners, landcare groups, and community groups with a simple tool for assessing the condition of native forest ecosystems. The kit will complement the Native Forest Monitoring guide.

The FORMAK kit will be a useful tool for care groups and private landowners within our region.

| Project:           | Massey University                     |
|--------------------|---------------------------------------|
| Provider:          | Analysis of macroinvertebrate samples |
| WRC Contribution : | \$3,000                               |

In 2002, Massey University undertook a freshwater fish survey across the Wellington region for the Resource Policy Department. While conducting the field work, they also took a large number of macroinvertebrate samples. These were not analysed at the time, as this work was beyond the scope of the project.

Funds were provided last year to undertake the analyses of these macroinvertebrate samples. This information provides baseline environmental data, which can be referred to in the future to assess, and report on, changes in the state of our rivers and streams.

| Project:          | Pesticides Risk Analysis                 |
|-------------------|--|
| Provider:         | New Zealand Agricultural Education Trust |
| WRC Contribution: | \$2,500                                  |

The objective of this project is to develop and implement industry specific risk reduction practices to protect soil and groundwater resources from pesticides use. It is driven by broad concerns about the environmental impacts of pesticides' use and increasing requirements to provide markets with assurances about the sustainability of production systems.

In the first year the project will collate information on:

- pesticides use for each crop/industry type;
- soil and agrichemical properties that influence the amount of leaching or build up in the soil;
- the main types of soils used for specific crops across the country; and
- details of typical spray practices.

The outputs of this project will complement our existing groundwater and contaminated sites management programmes.

A large number of Regional Councils and industry organisations are contributing to this project.

| Project:          | Roof Runoff Quality  |
|-------------------|----------------------|
| Provider:         | Kingett Mitchell Ltd |
| WRC Contribution: | \$5,000              |

The objective of this project is to further develop our understanding about the nature and quantities of contaminants entering stormwater from run-off from roofs. If the contaminant load from this source is significant then we may have to consider implementing controls to minimise environmental effects on receiving environments.

The two major sources of stormwater in urban areas are run-off from roads and roofs. Quite a bit of effort has been put into identifying the contribution of road run-off to stormwater pollution, but little work has been done to quantify the contribution from roofs.

A wide range of materials are, or have been, used for roofing purposes in our towns and cities, e.g., asbestos, galvanised steel, bitumen. Collectively, roofs in an urban area create a large surface area which gather contaminants, ranging from the materials they are made of (e.g. asbestos, lead, and galvanised iron) to the substances applied to them (e.g., moss killer and paint) and the material deposited on to them (e.g., bird droppings, and fall out of air borne contaminants). When it rains these contaminants are washed off the roofs into the stormwater system.

Auckland Regional Council, North Shore City Council, Manukau City Council, Christchurch City Council and Metrowater also contributed funding to the project.

| Project:          | Stormwater Management Resources Project |
|-------------------|---|
| Provider:         | New Zealand Water Environment Research  |
|                   | Foundation (NZWERF)                     |
| WRC Contribution: | \$2,950                                 |

This project involves the development of a range of stormwater management resources. The information will be available for people working on all aspects of stormwater management, ranging from designing stormwater management structures, to monitoring.

The project outputs should provide a valuable resource for implementing our regional stormwater management strategy once it is completed.

## 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 that will ultimately benefit Greater Wellington in its management of the Region's environment.

# 7. Recommendation

It is recommended that the Committee:

- 1. receive the report; and
- 2. note the contents.

Report prepared by:

Report approved by:

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