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Committee Environment Committee
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Biodiversity voluntary change research programme

1. Purpose

To update the Committee about our participation in the national biodiversity project “Improved policy interventions for encouraging the voluntary use by landowners of practices for protecting and enhancing biodiversity.”

2. Background

In 2005, Greater Wellington joined Auckland Regional Council and Environment Bay of Plenty in a national four-year project developed by AgResearch and funded by the Foundation of Research and Technology. The project examines biodiversity issues on privately owned land and the policy mechanisms for addressing them. The research team consists of Dr Terry Parminter (AgResearch), Pamela Kaval (University of Waikato) with support from Kelly Fielding (University of Queensland) and Frank Scrimgeour (University of Waikato).

Using the three participating regional councils as case studies, the project is designed to develop and test policies for encouraging people with a range of personal goals and values to voluntarily take steps towards establishing, protecting, and enhancing biodiversity in their own backyards and communities. One outcome of the project is to help policy agencies develop more effective education, social marketing and communication strategies for private and community conservation actions.

Greater Wellington’s case study focuses on the Ohariu catchment and our work promoting streamside management to protect and enhance aquatic biodiversity. The Ohariu project fits into the work programme for implementing Greater Wellington’s Riparian Management Strategy because it will help us to evaluate the effectiveness of the two methods we are using to promote riparian management on private land. These are to provide free plants and weed control for high priority catchments through the *Streams Alive* programme, and to provide only information and advice to all other landowners. The Ohariu catchment is not a high priority catchment, and so landowners there receive only advice and information.

In our case study of the Ohariu catchment we aim to find out whether people care about biodiversity in general and the stream in particular, and what works in bringing about change in their behaviour, if change is necessary and appropriate.

3. The project so far

The first stage in the project was to establish what the community care about (for example, water quality, natural landscape, social life in the community), and how much of problem there is with biodiversity in the Ohariu Stream. We then shared information about the stream widely through as many ways as possible.

To find out what the community care about, and the value they put on the natural environment in general and the stream in particular, AgResearch sent a survey to all landowners in the Ohariu catchment in October 2006. Points of interest were that nearly half claimed to have done something to improve water quality, and most (74%) thought of themselves as someone concerned about water quality and felt a responsibility to look after it. We plan to repeat this survey at the end of the project to see if there are any changes in people's views or behaviour.

In January 2007 Dr John Quinn of NIWA and Michelle Bird of the Land Management department surveyed eleven stream reaches throughout the Ohariu catchment and two Makara Stream sites to assess current state of the riparian functions that affect stream conditions, and the potential for these to be enhanced through riparian management. They found that there is little active riparian management currently in the catchment and this is contributing to the degraded state of the stream as indicated by poor water clarity, high bacteria contamination and poor invertebrate and fish diversity. They concluded that Ohariu Stream has good potential for restoration of aquatic biodiversity values, having good access to the ocean for migratory fish and with populations in the less developed Makara catchment likely to transfer to Ohariu if conditions were improved. The greatest gains from riparian management would be achieved by planting for streambank stabilisation and shade, rather than for nutrient reduction.

On the same day, Dr Mike Joy of Massey University, accompanied by three members of the Makara-Ohariu community board, surveyed three sites in the Ohariu Stream and one in Makara for fish. Records from the 1960s and 1970s show good species diversity (11 native species – shortfin and longfin eels, giant kokopu, banded kokopu, koaro, inanga, upland bully, bluegill bully, redfin bully, lamprey and koura) and abundance. In January they found only shortfin and longfin eels, non migratory bullies (probably upland), inanga, and brown trout. Recent surveys in the neighbouring Kaiwharawhara Stream – with its better bush cover throughout the catchment – show those same fish, but also giant kokopu, banded kokopu, short jawed kokopu, koaro, common bullies, redfin bullies, and bluegill bullies.

After the fish survey, about 40 members of the Makara-Ohariu community joined us at a barbecue, and heard short presentations about the stream from

Mike Joy and John Quinn. There was considerable interest in the stream from the people who attended.

In June, Greater Wellington hosted a farm field day at a sheep and beef farm in the valley. Displays and discussion by professionals invited for the afternoon covered nutrient budgeting, fertiliser management, feed budgeting, farm plans, environmental risks and stream health. The farm plan had been prepared by Peter Handford and associates and covered development opportunities for improved management as well as protection of high value environments on the farm. Although only the few local farmers attended, all were interested in the information available.

In early September we hosted a Rural Living Day in the valley with Wellington City Council staff and AgResearch. There were ten interest areas aimed at people who live in rural areas but don't necessarily run commercial farms. So along with a veterinarian, fencer, landscape designers and advisors in farm equipment and water treatment systems there were council staff advising on plant and animal pests and on appropriate native plants for the valley environment. Nicola Atkinson from Massey took people fishing and there were extra draw cards of a bouncy castle and face painting for kids and a mystery weekend for two for the winner of the biodiversity challenge quiz. Around 150 people came along, mainly from the Ohariu and Makara communities.

These events have so far been aimed at raising awareness of the stream and biodiversity, and have run alongside a newsletter produced by AgResearch that is distributed throughout the community, as well as an article in Wellington City Council's *Branch Out* and Greater Wellington's *Rural Services Newsletter*.

4. Where to next?

The next stage in the programme is to provide more information to the residents of the valley about how they can improve stream habitat, while continuing to make the links between stream health and people's actions on their own land.

Once we understand more about what motivates people to undertake biodiversity enhancement initiatives on their own land voluntarily, we will be better placed to work out how to deliver programmes effectively. Information from this project will be used in the review of our riparian delivery programmes.

5. Communication

Information about the Ohariu stream project is shared with residents in the Ohariu Valley through a newsletter and the events described above. The media is alerted to events as appropriate and good coverage has been achieved in a range of newspapers.

6. Recommendations

That the Committee:

1. ***Receives the report.***
2. ***Notes the content of the report.***

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