

Biodiversity

Six month review

31 December 2007

Biodiversity Coordinating Group

FOR FURTHER INFORMATION

Greater Wellington Regional
Council
Wellington PO Box 11646

T 04 384 5708
F 04385 6960
W www.gw.govt.nz

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1. Significant biodiversity projects

1.1 Regional Policy Statement

Provisions relating to indigenous ecosystems were finalised for the draft Regional Policy Statement following feedback from stakeholders.

1.2 Iwi consultation on biodiversity

In November a workshop was held with Ara Tahī to discuss the Biodiversity Implementation Plan, the Coastal and Marine Biodiversity Action Plan and the Lowland Forest Action Plan. The workshop participants requested that the plans reflect a partnership approach between iwi and Greater Wellington. To achieve this end, staff met with each iwi to discuss how the plans can become more collaborative documents that share with iwi the common purpose of restoring biodiversity in the region. Suitable wording has now been developed for inclusion in the documents.

1.3 Pauatahanui Inlet Catchment project

Funding has been secured from the Ministry for the Environment's Sustainable Management Fund to engage a Catchment Co-ordinator. The application was made by the N.Z. Landcare Trust and the appointee will be an employee of the Trust but working to a work plan agreed between the Trust, Greater Wellington and Porirua City Council. This externally funded appointment will allow the project budgets of the two councils to be applied to "on the ground" catchment projects. It will also allow the project to draw upon the not inconsiderable experience of the Landcare Trust in integrated catchment management. Interviews for the position were held in November but no appointment resulted. The position has been re-advertised and interviews are scheduled for the end of March.

The position continues to be filled on a temporary basis by Peter Handford, jointly funded by Greater Wellington and Porirua City Council. Peter has continued to work with private landowners in the catchment to retire erosion-prone land and undertake riparian planting. A further two property plans have been completed and implementation of these will start this autumn.

1.4 Streams Alive

This programme is progressing well with work again concentrated in the Otaki, Waitohu and Mangaroa catchments. A limited amount of work has been carried out in the Upper Ruamahanga and Waihora catchments. These five catchments are part of the Streams Alive programme which covers eleven selected catchments throughout the region. Little work has been carried out in the other seven catchments.

The review of the Streams Alive programme is nearing completion. A postal survey and two focus group meetings will form the main sources of feedback. The review will be

completed by March 2008 and will assist in preparing new options for riparian management throughout the region to be considered in the next LTCCP.

1.5 Biodiversity voluntary change research programme

This project is part of a four-year national project funded by central government to develop policy designed to encourage private landowners to protect and enhance biodiversity on their land without the use of financial incentives. Two other regional councils are involved, Environment Bay of Plenty and Environment Waikato. The project is led by Dr Terry Parminter, a social researcher with AgResearch and funded by the Foundation of Research and Technology.

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.

The approach taken has been to:

- Undertake a survey to determine what the community care about and the value they put on the natural environment and the stream, in particular. 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.
- Survey 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.

- Invite members of the Makara-Ohariu community board to witness electric fishing in the stream to determine the fish species present. 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 scientists Mike Joy and John Quinn. There was considerable interest in the stream from the people who attended.
- Hold 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 a 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*.

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.

1.6 Parks and Forests

The Environmental Asset management Plan delivers pest control and monitoring activities to the Council's parks and forests. A major pest control project was completed in the first half of the financial year –this was the Akatarawa Forest 1080 operation. The operation was successful, as the post-operational monitor showed possums to be at 0.4% residual trap catch (RTC). In East Harbour Regional Park, bait stations in the 300ha mainland island site were re-filled every two months, as planned. A goat control contract completed in Kaitoke Regional Park netted 8 goats and 8 pigs. There have been some delays in the bait station filling associated with ongoing possum control operations in Belmont Regional Park, because of a loss of contractors. The four-monthly bait station fills have now restarted. A four person "weed team" has been hired and are working well targeting large infestations on Council land. Pest plant infestations being controlled by this team include; climbing

asparagus in East Harbour Regional Park, holly in Battle Hill Farm Forest Park and buddleia in the Wainuiomata Recreation Area. Contractors have controlled tradescantia in the Wainuiomata Recreation Area and boneseed beyond Burdan's Gate in East Harbour Regional Park. Pest plants are tackled on an ongoing basis in Queen Elizabeth Park.

Birds have been monitored during spring in all the parks and both of the current water collection areas. The kereru counts in Kaitoke Regional Park are showing good increases over time, due to the 1080 operations that have been completed in the area. Increases in bird abundance are also being seen in the Korokoro Valley. In East Harbour Regional Park, rodent/mustelid monitoring completed in the mainland island area is showing a decrease in the number of these pests. Rodents were also monitored in Battle Hill to assess the success of the ongoing pest control in the bush remnant. Other monitoring undertaken over the last half of 2007 includes rata foliar browse measurements in East Harbour Regional Park and health assessments of the rare red-flowered mistletoe in Kaitoke Regional Park.

In the water collection areas, pest control and some of the monitoring is undertaken as part of the Water Group contract. Pig and goat control contracts in the Wainuiomata/Orongorongo water collection area netted 28 pigs, 33 goats and 7 deer. A 1080 operation was planned for the Hutt water collection area in May 2008. This operation was to include Kaitoke Regional Park and Akatarawa Saddle. Pre-operational monitoring results obtained in November show that this operation should be delayed for a year. Rata digital photography and photo-point re-measurements were also completed in the water collection areas.

1.7 Wainuiomata Mainland Island

Wainuiomata Mainland Island is progressing well. Three bait fills and trap checks have been completed and a major ungulate hunt carried out (19 pigs, 2 goats and 2 deer). A possum trend monitor showed possums to be at 0.5% RTC in the mainland island and 1.9% RTC in the non-treatment area. Rodent/mustelid monitoring was completed as planned and the results show the pest control techniques are working well, as rats are at much higher levels outside the mainland island (99%), than inside (7%). Photo-points have been established and measured inside and outside the treatment area. These will be useful to show differences over time. Bird monitoring was completed in spring. It was found that there were increases in bird numbers since pest control began in 2005. Differences could not be seen as yet in bird abundance increases between the mainland island site and the non-treatment site.

1.8 Wetlands programme

In the period under review, twelve landowners joined the Wetlands Incentive Programme making a total of 115 landowners since the programme started. Subsidised fencing and weed control remain the most popular ways to use the incentives offered.

Assistance was given to the Biosecurity Department for a weed survey of Te Harakiki Wetland in Waikanae and a ground survey of the greater Nga Manu wetland complex. The latter will extend a weed survey that has been completed on the land owned by Nga Manu Sanctuary.

The review of the Wetland Action Plan is nearing completion. A big part of the review is a survey of landowners that have been assisted through the Wetland Incentive Programme. A good proportion of surveys (approximately 20%) were returned and the data has been analysed. Analysis of expenditure through the Wetland Incentives Programme has also been undertaken.

1.9 Biodiversity Implementation Plan (BIP)

A Biodiversity Implementation Plan for Greater Wellington is now in a final draft form and has been approved by the Executive Management Team for submission to this committee in April.

2. Looking ahead

- Appointing a Catchment Coordinator for the Pauatahanui Catchment Project
- Reviewing resource needs for biodiversity programmes ahead of the next LTCCP
- Working with the Wairarapa TAs on a Wairarapa Biodiversity Strategy
- Completing the reviews of the wetland and riparian programmes
- Commencing the Waiwhetu contaminated sediments clean up programme trial

3. Business Plan Performance Indicators

3.1 Environment Management Division

| Performance Indicator | YTD Actual (000's) | FY Budget (000's) | Progress |
|---|-----------------------|----------------------|---|
| <p>Activity: Manage resources</p> <p>Activity: The following programmes and plans will be implemented and a progress report will be approved by Council, within budget:</p> <p>QEII National Trust covenant assistance programme</p> <p>Freshwater ecosystems programme</p> <p>Kaiwharawhara Stream Plan</p> <p>Waiwhetu Stream Action Plan</p> <p>Pauatahanui Inlet Action Plan</p> <p>Coastal and marine ecosystem programme</p> <p>The Council will assist landowners wishing to enter into perpetual covenants to protect biodiversity on their land. Funding assistance is available to cover part of the costs of fencing and survey and, in some instances, for one-off pest control.</p> | 143 | 601 | <p><u>Wetland Action Plan</u> – see commentary under significant projects</p> <p><u>QEII National Trust private land protection programme</u></p> <ul style="list-style-type: none"> Six new covenants were established in the period protecting 30 hectares of lowland forest or wetlands. The most significant is the 22 hectare Jones property adjacent to the Karori Wildlife Sanctuary. As a result of the legal protection pest animal control has now commenced targeting goats and possums. <p><u>Freshwater Ecosystems Programme</u></p> <ul style="list-style-type: none"> We have begun working with the Friends of Owhiro Stream on a fish pass project on the Owhiro Stream. The Friends of Owhiro Stream are a care group that Greater Wellington supports. The project will involve improvements to fish passage at three locations in the stream – culverts are located at two sites and a weir at the third. The first stage of the project is to obtain resource consents for the work. Design work for the fish passes has begun. Once designs are drafted, we will consult with adjacent landowners. As well as landowners |

| Performance Indicator | YTD Actual (000's) | FY Budget (000's) | Progress |
|-----------------------|-----------------------|----------------------|--|
| | | | <p><i>and Friends of the Owhiro Stream, we are working with Wellington City Council who own the land the passes will be built on.</i></p> <ul style="list-style-type: none"> • <i>A fish pass constructed at Hulls Creek in August. The fish pass was a joint exercise with the Silverstream Care Group who obtained most of the funding from central government's Sustainable Management Fund.</i> • <i>A hydrological investigation of how the Pencarrow Lakes are linked to the sea was commissioned because there are concerns about whether there is adequate fish passage through the existing culverts. Both lakes and their catchments have valuable native fish habitats. The modelling work showed that there may be some problems with the current functioning of the culverts out of Lake Kohangapiripiri.</i> <p><u>Kaiwharawhara Stream Plan</u></p> <ul style="list-style-type: none"> • <i>Work with care groups and Wellington City Council in the Kaiwharawhara catchment is ongoing. Greater Wellington has provided input to Wellington City Council's review of approaches being taken in the Kaiwharawhara catchment.</i> <p><u>Waiwhetu Stream Action Plan</u></p> <ul style="list-style-type: none"> • <i>A funding formula for the clean up of the contaminated sediments in the lower reaches of the stream has been arrived at between the Crown, Hutt City Council and Greater Wellington. In rounded terms the \$6 million cost</i> |

| Performance Indicator | YTD Actual (000's) | FY Budget (000's) | Progress |
|-----------------------|-----------------------|----------------------|---|
| | | | <p><i>will be shared as follows:</i></p> <p><i>Crown: \$3 million</i></p> <p><i>Hutt City : \$2.5 million</i></p> <p><i>Greater Wellington: \$0.5 million.</i></p> <p><i>Work has commenced with officers from the Ministry for the Environment to define suitable milestones and payment schedules for the funding deed.</i></p> <p><i>At their meeting of 10 December, the Waiwhetu Stream Advisory Sub-committee requested that officers proceed to undertake a trial of the remediation technique this summer. A tender brief was prepared and five contractors known to Greater Wellington as competent and capable of such work were invited to tender. Three did so, with Brian Perry Civil Ltd (a Fletcher Construction company) being selected as the preferred tenderer subject to final negotiations on price and technique details.</i></p> <p><i>A non-notified consent for the trial work was lodged with Greater Wellington's Environmental Regulation department in mid December and assuming the consent is granted the contractor will commence work on 11 February.</i></p> <p><u>Pauatahanui Inlet Action Plan</u> – see commentary under significant projects</p> |

| Performance Indicator | YTD Actual (000's) | FY Budget (000's) | Progress |
|--|-----------------------|----------------------|---|
| | | | <p><u>Coastal and marine ecosystem programme</u></p> <ul style="list-style-type: none"> As part of the coastal monitoring programme, coastal and marine consultants (Wriggle Inc.) have prepared reports on the biological health of Lake Onoke and an analysis of the most likely sites for long term coastal and marine monitoring. The information from these reports will become part of the coastal monitoring strategy for the region. |
| <p>Activity: <i>Take Care</i> programme</p> <p><i>Through the Take Care community environmental education programme, five new Care Groups will be established and assisted to care for degraded local ecosystems and existing Care Groups will be maintained, within budget.</i></p> | 149 | 237 | <ul style="list-style-type: none"> Thirty six care groups are working at sites across the region. In the last quarter groups completed their winter planting activities and began spending more time on weed management, general maintenance, and building membership. Dry conditions in November and December required more watering but there have been no reports of significant losses. <p>One of this year's new groups making excellent progress is the Albemarle Stream group in Northland. In six months members have mapped weeds and prepared a planting plan, sprayed weeds and removed blackberry, created a 700m walking track and held planting days involving residents and the local school – all this in difficult territory.</p> <p>The Greater Wellington Environmental Awards were held in December. Nga Uruora – Kapiti Project won the Rata Community Partnership Award for their outstanding effort in restoring native forest between Pukerua Bay and Paekakariki.</p> |

3.2 Catchment Management Division

| Performance Indicator | YTD Actual | FY Budget | Progress |
|---|------------|------------|--|
| Activity: Riparian programme | | | |
| Five kilometres of riparian management, focusing on increased biodiversity along stream banks, will be implemented, within a budget of \$190,000. | 97 | 196 | <u>Streams Alive Programme</u> – see commentary under significant projects |
| Activity: Key Native Ecosystems programme | | | |
| Implementing the relevant section of the Regional Pest Management Strategy | | | <ul style="list-style-type: none"> • <i>KNE operations are undertaken at 90 sites throughout the region – 18 in the Eastern Zone and 72 in the Western Zone.</i> • <i>Evaluation of the KNE programme</i> <p><i>A review of the KNE programme is overdue, having not been completed before. An initial meeting with Ray Clarey (Strategy Animals), Richard Grimmett (Strategy Plants) and Murray Hudsonf (Monitoring and Investigations) has taken place to set up the framework/structures for a process driven evaluation of the KNE programme. This review will look at all component parts of the KNE programme, including metadata, resourcing, data-bases, goal setting and priorities, people involvement, where have we come from, where are we heading etc. The evaluation should form the driver for improving the existing programme (if required), ensure adequate resourcing and resource allocation and for developing and adapting strategic thinking/plans. Such a review should feed into the LTCCP by helping define where needs are greatest. Resourcing has not yet been defined. There is no direct financial funding for this evaluation.</i></p> |

3.3 Water Supply, Parks and Forests Division

| Performance Indicator | YTD Actual | FY Budget | Progress |
|--|------------|-----------|---|
| Activity: Regional Parks and Forests | | | |
| Environmental assets and settings within the regional parks and forests will be managed in accordance with the Parks and Forests Environmental Asset management Plan service levels. | 263 | 733 | – see commentary under significant projects |
| Activity: Water Group contract | | | |
| An annual report will be submitted to the Divisional Manager, Water Supply on the forest health and pest control activities undertaken in the current and future water catchments. | 40 | 306 | <i>Ungulate control contracts successfully completed in the Wainuiomata/Orongorongo water collection area. In the Hutt water collection, possums were monitored, but the result was lower than the target RTC of 5%. The operation planned for may 2008 will be delayed for a year. As a consequence of this, \$165,000 will be carried over to next financial year. Rata digital photography and photopoint re-measurements were completed in both water collection areas show positive results.</i> |
| Activity: Wainuiomata Mainland Island | | | |
| An Annual Report will be produced on the mainland island detailing the work undertaken and the results obtained from monitoring | 46 | 79 | – see commentary under significant projects |