Implementation of Environmental Education Programmes in 2002-2003

1. Introduction

This report provides information on the work undertaken in 2002-03 to implement the Greater Wellington Regional Council's environmental education programmes.

2. A Call to Action

The central theme of all of Greater Wellington's environmental education programmes is the notion that the environment will only move towards a sustainable condition if people take action to look after it. The Council cannot achieve a sustainable Region on its own. Consequently, we undertake programmes to encourage community groups, businesses, and children to act for the environment and, in addition, promote changed attitudes to the use of the environment and resources amongst the public generally. Progress in these four areas is described below.

3. Promoting Change in Environmental Behaviour and Attitudes

3.1 Performance Indicator

The performance indicator for this programme in the departmental Operating Plan reads:

"A report will be completed describing the activities of the Department in promoting change in environmental behaviour to the satisfaction of the Council and within budget".

3.2 Implementation

The ways in which we live our lives day-to-day have a fundamental bearing on the environment. While the large industrial pollution spill may grab the headlines, environmental degradation also occurs quietly, yet inexorably, through the accumulated minor impacts of the everyday activities of people and communities. Air pollution from cars and runoff from roads and roofs into streams are examples.

The need to raise public awareness about these issues has been recognised for some time. The Regional Policy Statement (RPS) contains a number of "methods" that talk about raising awareness and educating people to use the environment in a more sustainable way. The Department's role to co-ordinate the implementation of the RPS has meant we have undertaken a number of educational and promotional activities to this end over the years and encouraged other departments to do likewise.

However, the Department's ability to do this is constrained. The task is a substantial one and we are not equipped to put a significant amount of effort into such activity. Our primary foci are the *Take Action, Take Charge*, and *Take Care* programmes. This is where we have put our energies over the last year. With the development of Take 10 a clear framework has emerged for the dissemination of the "messages" that the Council wants people to receive. A corporate approach to social marketing, based on Take 10, is to be used to deliver these broad scale environmental messages, to which the Department will contribute.

Nevertheless, there are a number of ways in which we have been promoting environmental care to the public, other than through our three core programmes. These are described briefly below:

(i) The Ecobus Road show

When the Council's environmental education strategy - A Better Environment - was developed, funding was included for a vehicle to aid the delivery of our educational programmes to children. It quickly became apparent that the vehicle could also serve a useful role raising environmental awareness amongst the public during those times when it was not in use with schools. The concept was of a mobile exhibition or road show that would help raise awareness about the environment and the effects on it of daily living, as well as contribute to the delivery of *Take Action*. This vehicle has become known as the "Ecobus".

The vehicle (a large Transit Van) was purchased in early 2002 and is in operation in its *Take Action* role. During 2002-03 we have continued to develop the vehicle's public education role but progress with this has had to follow the development of the Council's brand and the corporate communications strategy. Independently of the brand development, we had been developing a public education approach for the vehicle based around protecting the Region's quality of life. With the Council brand moving along similar lines, it was necessary to hold this work back to ensure a better fit with the corporate direction.

In the meantime, however, considerable work has gone into developing the theme of the exhibition and the interactive modules that will be used to get across the messages chosen. The central premise of the exhibition is that individual actions for the environment <u>do</u> make a difference and that if we change the way we behave for the better, these changes en masse will provide us with a better quality of life. The exhibition is designed to show that the key decisions about the environment do not take place within Councils or corporate boardrooms, but in individual homes. Our decisions determine what kind of future we have.

The concept for the exhibition that we are exploring is of a "control centre" or "mission control" for daily life. Choosing between varying ways of behaving or living (using a number of interactive modules and passive displays), people are shown the implications of those choices for their quality of life. The twist is that, when they have experienced the exhibition, they will understand that the real "mission control" is in their hands.

The concept has a number of advantages. It is contemporary, implies modernity and technology, and gets away from an alternative lifestyle approach to the good life. It focuses on the way we live our lives, not just how we treat the environment, so is more pertinent to the general public rather than just those who are interested in the environment. It suggests *action* – being a mission controller – and delivers on that by showing what could happen <u>now</u> if the individual does act. It provides an immediate answer to the question, "what's in it for me?" (answer; a better quality of life!) and in so doing, rewards people for taking the time to view and interact with the exhibition.

Funding for the exhibition has been carried over to 2003-04. It is intended that the subject matter of the exhibition will be developed sequentially over a number of years, focusing on those aspects of the social marketing campaign being addressed at any particular time (e.g., water and waste). As the first of these has still not been decided, our work for the first few months of 2003-04 is focusing on audience profiling, branding, and the development of the interactive modules. Funding for adding to the exhibition will be sought in future years from relevant businesses and other sources.

(ii) Working with Business

Increasingly many business organisations are opting to give effect to their environmental responsibilities by contributing to environmental causes and activities. For the Council, involving the corporate sector in our work:

- provides an opportunity to get our message across to a wider audience;
- enables significant progress to be made on a project through an intense application of effort;
- reduces the cost of projects that would otherwise be funded from rates; and
- allows us to encourage people to get involved in caring for the environment;

In 2002-03 we made a study of the potential for businesses to get involved in our ecological restoration work. We have devised and implemented an approach, resolved the liability issues, and purchased the equipment needed to stage events in a thorough and professional manner. The following businesses and organisations undertook this sort of work in 2002-03:

- Deloittes Consulting, at Otaki Beach and Waitohu Stream
- Westpac, at Pauatahanui Inlet

- ANZ Bank, at Kakaho Stream
- ERMA at Pauatahanui Inlet
- Hutt Valley Polytechnic, at Horokiri Stream.

We intend to continue to run at least 5 events per annum for large organisations or businesses to participate <u>directly</u> in caring for the environment. This could include planting, weed removal, nursery work, litter clean-ups, and so on. We will undertake the planning, and provide the materials and logistical support for these days so that they are fun, safe and well managed.

These events will take place at sites where there are care groups operating or Greater Wellington has a major involvement (e.g, Pauatahanui, Waitohu, Waiwhetu) so that those involved can gain an appreciation of the work we and the care groups do, and of the community to which they are contributing.

Where possible they will be "signature events", falling on particular days set aside to celebrate some aspect of the environment or conservation (e.g., World Environment Day). This will allow the Council to also obtain publicity from the event, and help us be seen to be proactive on these celebratory days.

A number of businesses have supported care groups and restoration projects in the past year, either financially, or through the provision of labour or materials. Many of these businesses seek little or no recognition for their efforts. On the lower Kaiwharawhara project two of the major corporate businesses in the area (Centreport, and the Ferry Terminal) have provided generous contributions. We will continue to foster these kinds of associations with our care groups and will continue to seek sponsors for these kinds of activities.

(iii) Council Waste Reduction Programme

As well as seeking to influence behaviour outside Greater Wellington, we have also worked towards changing attitudes within our organisation. In May we set about establishing an effective recycling and waste minimisation programme in Greater Wellington's offices and facilities.

There were a number of reasons why this was done:

- Waste reduction is an essential element of Take 10 and "quality for life." One of the Targets in "Towards A Sustainable Region" is a reduction in this organisation's waste by a half.
- Waste is a significant environmental issue. The regional community is more concerned about waste than any other environmental issue (WRC survey 2001).

- In order to hold our heads high on the management of the environment, Greater Wellington needed an effective waste minimisation programme. We could not ask others to reduce their waste through *Take Charge* if we were not doing so ourselves.
- The New Zealand Waste Strategy expects Councils to play a major role in reducing waste and requires them to have a procedure for waste minimisation across all "facilities and assets" by 2005.

The approach adopted used information to justify the need for a change and to inform people how they could recycle, whilst making it easy to recycle but otherwise difficult to get rid of solid waste. This was achieved by replacing our rubbish bins with recycling boxes for paper and centrally placed "recycling stations".

At the main offices of Greater Wellington there has been a very positive response and a marked increase in recycling. When the system is bedded in we will be able to quantify the extent of the reduction. In the Wairarapa office, where the same scheme has been running for a number of months, a reduction of 55% in waste going to landfill has been achieved.

(iv) Other promotional and educational activities

Staff attended a wide range of events through the year to promote the Council, our programmes, and our environmental education messages. These included the Hutt Valley household hazardous chemical collection, Children's Day (in the Hutt Valley), Conservation Week and the Green Ribbon Awards, Project K planting days, and Waitangi Day celebrations.

The budget for all the general educational work described above was \$33,000 and expenditure was \$23,000.

4. Take Action

4.1 **Performance Indicator**

The performance indicator for this programme in the departmental Operating Plan reads:

"A second environmental education programme for school children will be scoped and the *Take Action for Water* programme (an environment education programme for schools) will be carried out to the satisfaction of the Council, within a budget of \$153,000"

4.2 Implementation

(i) Schools and Action Projects

During the second year of *Take Action for Water* 39 classes and 1150 students undertook the programme. Eleven schools undertook the guided programme, but only five schools did the programme self-guided, a decrease on the first year. This lower than expected number of self guided schools is due to several schools opting to wait for a space on the popular guided programme during 2004. Staffing resources have been increased primarily to assist in offering more support to self-guided schools in the region.

The guided schools in 2002-03 were St Marks, St Pius, Evans Bay Intermediate, Mangauraki, Raumati, Porirua, Titahi Bay Intermediate, Mt Cook, Holy Cross, Berhampore, and Pukeatua (Wainuiomata). The self-guided schools were St Benedicts, Island Bay, Raroa Normal Intermediate, Wainuiomata Intermediate, and Opaki Primary.

Action projects to help the environment were undertaken by all of the schools, but are too numerous to list here. By way of example, however, Mt Cook School students were particularly active and completed a number of projects. They raised funds for a worm farm and developed a school garden, sent "don't pollute our streams" fliers to the homes of all students, gave presentations on their findings, and invented antipollution games for the younger children in the school. A large anti-pollution message was painted on the wall of the school for all of the surrounding Tory Street businesses and passers-by to see.

(ii) Take Action in Te Reo Maori

One aspect of *Take Action for Water* that we are particularly happy to report is the translation of the resources into te reo maori and their subsequent publication in a form that can be widely distributed to children. It is now possible to do the entire programme in Maori. Pukeatua School's whanau unit did this in the second term of 2003. We are grateful for the assistance of two former teachers, kaumatua Jean Puketapu and Parae Wirepa, who lead the programme for this school.

(iii) Second Take Action Programme

A report outlining the *Future of Take Action* was presented to the Committee on 1 May 2003 and its direction approved. Rather than developing a new Take Action theme every second year as originally proposed, the decision has been taken to develop only two programmes. One of these will focus on the natural environment (i.e., *Take Action for Water* – with some additions), the second on the issues and concepts surrounding society's energy and transport use (including such matters as household energy use, air pollution and climate change). To achieve the first, it is necessary to flesh out *Take Action for Water* somewhat, so teachers can use it to explore a range of ecological issues more completely. This can be done quite simply,

by providing additional support materials for teachers leading their students through the action project stage. The action projects most in need of support and the format of the teachers' resources have been identified. These resources will be completed for use in schools between January and June 2004. The topics to be covered include:

- How to produce successful composting and worm bin projects.
- How to reduce, reuse and recycle in schools.
- Riparian and in-school plantings.
- Coastal restoration projects.
- Spreading an effective message.
- Water conservation

These resources, together with funding for action projects, will be used to encourage more schools to take part in the self-guided programme.

To assist with the delivery of the programme a number of works were undertaken by the Parks and Forests Department in the regional parks, the most significant of which has been the construction of the Pakuratahi Bridge at Kaitoke, and the upgrading of the bush track to the Rivendell site. This will provide for an enhanced experience for children doing Take Action at Kaitoke. It gives us easy access to an excellent combination of a stream of high quality and a short walk through bush of considerable diversity and age (bush of this quality is lacking from some of the other major sites that we use). Our use of the parks remains a vital component of Take Action. The trail section of the programme continues to be very popular, with the education centres at Belmont, Battle Hill and Wainuiomata being regularly used.

The budget for Take Action for Water was \$153,000 and expenditure was \$150,000.

5. Take Charge

5.1 Performance Indicator

The performance indicator for this programme in the Annual Plan reads:

The *Take Charge* programme (an environmental education programme for business) will have progressed to the satisfaction of the Council, within a budget of \$137,000.

5.2 Implementation

In the 2001/2002 financial year the uptake of the *Take Charge* programme was low, with only 19 businesses participating. This was primarily due to our inability to deliver the programme because of a lack of staff time.

Since then, a thorough look at how we deliver and market the programme has been taken. We have also tested the programme internally with the Mabey Road, Otaki and Wairarapa Depots. This exercise proved valuable and has enabled us to refine the programme, and create standardised reports, checklists etc. Overall this has lead to an approach which is consistent and accurate.

Take Charge has made major inroads in the 2002/2003 financial year. The approach taken this year has been to target specific industry types. A list of priority industries was established based on a number on factors, for example, industries that have a high level of environmental risk, and/or a high number of pollution incidents.

Take Charge commenced in March 2003 and is now fully operational. The first industry group to be targeted has been service stations. The programme was marketed initially to the oil industry head offices. Meetings were held with Shell, Mobil, BP, and Challenge to gain their support for the programme and, encouragingly, they have all given their full support.

In total there are 137 service stations in the Wellington Region that have agreed to participate in the *Take Charge* Programme. The programme involves a visit to the site, discussion of how the business works, the carrying out of a complete site check and then, at a later date, the delivery of a written report which outlines the findings and recommendations.

Over the four months to the end of June, 60 service stations have been visited, and the remainder will be visited by the end of September 2003. All 60 have now received their final reports from the *Take Charge* team.

Follow-up visits are also being carried out with the 19 businesses that originally participated in the programme during 2001/2002. Encouragingly, a small number of new businesses have also directly contacted us wanting to participate in *Take Charge* or to seek advice about other aspects of their business such as waste reduction, energy use, and "greening" their offices.

Based on feedback from participants, it appears that *Take Charge* is being well received and we expect it to continue to develop and improve in 2003-04. We now have an established base to work from and we will be well placed to encourage a much wider group of businesses and industry groups to participate.

Firstly, we intend to target vehicle maintenance workshops. These are both industries that have a high level of environmental risk, and a high number of reported incidents. Vehicle maintenance workshops are also a natural extension to the assessments done at service stations. We also intend running the programme with some of the businesses that currently supply or offer a service to Greater Wellington. This is to ensure that suppliers we use are environmentally responsible and will contribute to the achievement of the waste targets in Take 10.

Take Charge cost \$112,000 to deliver in 2002-03, against a budget of \$137,000.

6. Take Care

6.1 **Performance Indicator**

The performance indicator for this programme in the Annual Plan reads:

"Together with the Resource Policy Department, at least five Care Groups will be maintained and two new Care Groups established and assisted in providing local environmental care, to the satisfaction of the Council and within budget"

In this, the third year of *Take Care*, 17 existing groups and four new groups have been assisted to carry out local environmental care activities (from the *Take Care* budget). In addition, there are two new groups that have been supported as RPS implementation projects (and are funded from that source). They join five existing groups that are funded as RPS implementation projects. In total, therefore, there are 28 groups that are funded by the Council, assisted by staff from three Divisions of the Council. Between them, the groups put around 80,000 plants into the ground, up from 55,000 the year before. All of the groups are working on the rehabilitation or improvement of ecosystems which are under threat in the region – wetlands, streams and their margins, dunes, estuaries and adjoining coastal areas. At this stage, *Take Care* does not provide for forest re-vegetation projects.

The six new groups that commenced this year are working on:

- The lagoon at Riversdale;
- Hull's Creek at Silverstream;
- The O Te Pua Wetland, north of Otaki;
- Water quality monitoring around the Pauatahanui Inlet;
- Sand dune restoration at Eastbourne; and
- Henley Lake Wetland in Masterton.

These, and other groups have made considerable progress has been made this year. The major achievements include the following:

- The O Te Pua Group has completed the first stage of a willow control programme and all but one landowner has now covenanted their part of the wetland.
- The NIWA penguin enclosure project has been completed. Penguins have been seen in the enclosure.
- The Moehau Park (Upper Hutt) group is continuing to clear weeds at the site, while waiting for plants to be grown at Rimutaka prison. These will be planted later in 2003.
- The Waikanae Forest and Bird nursery project has been successful. Very little Greater Wellington funding was required in the end due to additional funding being obtained from the Greenwood Trust. The nursery has contributed plants to a number of Council sponsored projects on the Kapiti Coast.
- Fensham wetland group has planted and maintained over 1000 native plants, monitored the mudfish population, upgraded fencing, and experimented with weed control methods.
- The Waimeha wetland group has planted 600 plants, monitored bird life, and carried out comprehensive pest control. The Biosecurity Department also contributes to this group's pest management activities.
- The Otari-Wilton's Bush group has put some 6000 plants into the ground at regular Saturday events. This project is also supported by the Biosecurity Department, which undertakes weed clearance and participates in the after care required to ensure good plant survival. 2000 additional plants will be put in this planting season.
- At Glenside 1000 plants have been planted at the debris arrestor site on the Porirua Stream, and work continues at this site.
- The Waimapehi Stream (Pukerua Bay) group has made progress constructing an information platform and a shade house for growing plants.
- The Te Horo group had a successful planting day on the Mangaone Stream in June. Community support for the project is developing strongly.
- At Silverstream, the restoration of the lower portion of Hull's Creek is proceeding well. A concept plan has been prepared, weeds have been removed, the wetland replanted, and stream-side planting has commenced.
- At Otaki Beach/Waitohu Stream, the community care group is making sustained progress on its beach and stream restoration project. The foreshore sand dunes are now over 1.5m high and 2200 spinifex and pingao have been planted on the new

dune. The wetland has been fenced and buffer plantings around it have commenced. The nursery produced 6000 plants during the year, some of which have been given to farmers and Keep Otaki Beautiful to plant upstream. A report has been prepared by Caleb Royale on the water quality of the Mangapouri Stream, which flows into the Waitohu Stream. The local iwi has started planting along the Waitohu Stream on the Otaki and Porirua Trust Board dairy farms.

- Much of the restoration of the Eastbourne (Day's Bay) sand dunes has been completed. The dunes have been shaped and planting and landscaping has taken place. Additional plants and signage will be put in over the next three months.
- In Masterton the Henley Lake Wetland group has prepared a management plan and a small planting has taken place.
- The Guardians of Pauatahanui Inlet have maintained a regular water quality monitoring programme on the streams in the Pauatahanui area.
- The freshwater wetland restoration project at Pauatahanui Inlet has been completed, and has required only occasional support from our staff.
- At Pukerua Bay, the Coastal Guardians completed two of the four areas identified in its concept plan, with plants, rocks, and mulch now in place. This group has now disbanded and will not be continuing with the remaining areas, as community support for the planned works has dissipated.
- The Greendale Reserve Care Group (Kapiti) continued its work of planting and maintaining the reserve, kahikete stand, and stream banks. This group adopted a programme of mulching all plantings and consequently lost very few plants over the summer dry period.
- The Manuka Street Care Group (Masterton) has planted and carried out maintenance work throughout the reserve. School classes have taken part in three of its four planting days this year. The group's actions have transformed the area.

One of the objectives of *Take Care* is to involve communities in caring for the environment through the efforts of the groups. It is hoped that the efforts of group members will spur other friends and neighbours to greater environmental involvement. It is, of course, difficult to measure this effect. However, the figures on the performance of the groups over the past year show a considerable amount of activity and the involvement of others beyond the group membership. Nigel Clarke (*Take Care* Co-ordinator) estimates that:

• 1200-1500 people are directly involved in groups.

- Approximately 4000 people have been involved or come in contact with aspects of the programme in one way or another (planting days, community awareness raising, education and training).
- 48 major planting days have occurred.
- Five initiatives have taken place to reduce recreational conflicts and damage to the environment.

Another objective has been to equip group members with the skills needed to carry out projects without Council support in the longer term. In the last year five training sessions have been run, with some of the topics being weed and pest management and setting up a nursery. Over 200 people attended the Restoration day (a day where training, information exchange and networking is provided for). The majority of people attending were from groups that we support. As Councillors will also be aware from the last Order Paper, we have moved to smooth and lengthen the funding for groups in an effort to enhance their productivity.

This programme came in under budget for the year. The actual spend was \$145,000, against a budget of \$205,000. The reasons for the under spend were less time being given to the project than was budgeted for (through staff vacancies and leave), and groups not spending their full entitlement. A sum of \$13,000 has also been carried forward to assist some of these under-spending groups.