Implementation of the Regional Policy Statement in 2000/2001

1. Introduction

The Regional Policy Statement (RPS) contains around 250 "methods". These are commitments the Council has made to act to resolve the Region's environmental issues and to manage the environment in a sustainable manner. Since the adoption of the RPS in mid-1995, the Council has worked hard to implement these methods. This report describes what has been done to give effect to them between July 2000 and June 2001.

Implementing the RPS is not about working on the listed methods so they can simply be 'ticked off' and the Council said to have complied with its statutory obligations. The work that is done each year, by staff in the implementation team in Resource Policy, by others in the Environment, Landcare and Wairarapa Divisions, and by many more across the Council in their normal day-to-day activities, is done for a purpose, to improve the environment. The point of the methods in the RPS, and of our efforts to implement them, is to move towards meeting the environmental objectives and outcomes which the document list as our Region's desired environmental state.

There are, of course, too many environmental objectives in the RPS to report here on how well we are achieving them. In any case, that it is the job of the five yearly State of the Environment Report (SER) and the Annual Environment Report. The SER for the Wellington Region, *Measuring Up*, is an assessment of how well the Region is doing in meeting the environmental objectives of the Regional Policy Statement.

The purpose of this implementation report, therefore, is to describe how we have addressed the environmental problems of the Region by means of the methods in the RPS and how we have worked towards achieving its stated resource management objectives. Since *Measuring Up* is the accountability mechanism for the RPS, it is appropriate to refer to its findings when considering what has been done to implement the RPS and what is proposed for future years. Reference is also made to those areas where the Council has chosen to make added investment in the environment through its most recent Long Term Financial Strategy.

In the following paragraphs the letters and numbers in parentheses denote the relevant RPS method. For example, FW 12, is method 12 of the Freshwater Chapter.

2. Iwi Matters

Measuring Up concluded that, although there are increased opportunities for iwi to participate in resource management, this can be difficult to achieve. The report said that iwi and the Council have a relationship but, at the time of writing, it was at best only "adequate". Much has been done since then to improve that relationship and provide for the involvement of tangata whenua in the management of the environment. Relevant examples from 2000-01 include the following:

- Following the review of the Charter of Understanding last year, a ceremony was held in November 2000 to recognise the completion of the process (Iwi 1);
- Technical workshops for iwi were held to discuss consent conditions that address Maori issues, section 33 transfers of power (Iwi 12 ,13), and water management (Iwi 15);
- Five Councillor training sessions were held on the Treaty of Waitangi and Environment Division staff attended Te Reo and tikanga courses (Iwi 6);
- It was decided to appoint Maori hearing commissioners for every resource consent hearing (Iwi 4[3]);
- A second iwi liaison officer was appointed;
- The first meeting of the Wairarapa Gravel Guardians took place;
- Progress has been made with a number of iwi projects (Iwi 14). These are:
  - Te Runanganui o Taranaki Whanui ki te Upoko o Te Ika a Maui have completed a written project plan and a contract has been negotiated to prepare an Iwi Environmental Management Plan;
  - Ati Awa ki Whakarongotai completed design work for their Iwi policy manual. A proposal to rehabilitate the Whareoa Stream mouth has been discussed and a proposal prepared;
  - The Wellington Tenths Trust completed the first stage of an inventory of Mäori heritage values in the Port Nicholson Block;
  - Rangitaane o Wairarapa have signed a contract for a project to protect the Taueru Urupa;
  - Ngati Kahungunu ki Wairarapa have signed a contract for planting to rehabilitate an urupa; and
  - Ngati Raukawa have negotiated a contract to prepare a tikanga report on the Otaki River; and
- The Council decided to expand the scope of its support for iwi projects to include the building of Iwi administrative capacity.

3. Using Fresh water

Surface Water Use

Measuring Up found that, in general, enough surface water is available to meet community needs but that climatic conditions cause shortages in some areas and the flows in some rivers can fall below levels set to protect them. This is particularly the case in parts of the Wairarapa and the Kapiti Coast. The RPS contains methods to address these problems and they have been a part of the Council's work programme for several years. Initiatives which contribute to the efficient use and conservation of water, which have taken place this year are:

- Involvement in an on-going Wairarapa based irrigation study which aims to foster the growth and development of the area through access to reliable sources of water;
- A water shortage direction was issued for the Waitohu Stream and Waikanae River (FW 7);
- An assessment was made of the options available to the Council for reducing water takes from small streams in times of low flow (Report 01.275);

- Routine monitoring of large water takes and summer low flow monitoring throughout the Region (FW 11); and
- Regular monitoring of rainfall and river levels by the Council's hydrologists.

The importance of the Council's monitoring and investigation of rainfall, and river and aquifer levels was underscored by drought conditions in various parts of the Region (particularly Wellington) over the course of the year.

The Water Group promoted its water conservation message once more this summer (FW 9).

Groundwater Use

The verdict of *Measuring Up* on groundwater use is that Lower Hutt groundwater is over allocated and abstraction volumes in several other groundwater zones, especially in the Wairarapa, are increasing. The SER also sounds a warning that the quality of some shallow aquifers is being affected by surrounding land uses.

In the Hutt Valley, work continued to redefine the sustainable yield of the Lower Hutt Groundwater Zone (FW 13). A significant finding of the previous year's bore project was that the Waiwhetu artesian aquifer is actually two distinct aquifers separated by an aquiclude. A report on the pressure needed in this system to avoid seawater intrusion is presented elsewhere in this Order Paper.

During 2000 the condition of groundwater in the Region was generally healthy with levels and quality within recorded minima and maxima. However, the drought in 2001 reduced water levels in many aquifers to record low levels. Around the Region, aquifers came under pressure as landowners sought more certain water supplies. Significant increases in allocation occurred on the Kapiti Coast, in the lower Wairarapa Valley, at Te Ore Ore and at Rathkeale (north of Masterton). A total of 100 bore permits were issued by the Wairarapa office in 2000-01, a 50% increase on the previous year.

Work has continued on improving our knowledge of groundwater use in the Raumati-Paraparaumu area (FW 13). Monitoring of water levels showed shallow aquifers to be well down. Efforts were made to get people to register their bores so that a more complete picture could be drawn of the demand on the resource. There is evidence to suggest the existing KCDC record could be only 50% complete (Report 01.166).

Elevated nitrate levels were detected in groundwater under the Hautere Plain on the Kapiti Coast. Nitrogen isotope sampling and groundwater dating was undertaken to determine the source of the contamination. To address the potential for septic tanks to contribute to groundwater contamination, guidelines for territorial authorities for managing on-site sewage treatment systems were published by the Council. A series of septic tank pamphlets for homeowners was also completed and distributed widely. The Council supported the Kapiti Coast District Council's District Plan proposals for effluent disposal while, in the Wairarapa, officers worked hard to ensure that effluent disposal proposals for new subdivisions or developments were up to scratch (42 comments/submissions in 2000-01).

5. Water quality

The RPS puts considerable emphasis on keeping rivers and streams clean and in good ecological condition. *Measuring Up* concluded that, overall, freshwater quality is generally good and suited for its stated purpose (as determined by the RPS and Regional Freshwater Plan). By way of example, the summer recreational bathing survey of the Waingawa, Waiohine, and Ruamahanga Rivers showed water that was suitable for contact recreation (Report 01.281). Progress is being made, with the effects of major discharges decreasing as their resource consents are renewed. However, the SER points out that water quality in some places is still deteriorating due to stormwater and non-point source discharges (runoff from urban and rural land uses) and the worst affected water bodies are not improving significantly.

The latest Annual Freshwater Quality Report (for the 1999/2000 year) (Report 01.29) confirmed this by revealing a picture little different from the year before. The Waitohu, Ngarara, Porirua, Makara, Karori, Ngauranga, Waiwhetu, and Mangaroa Streams still have the poorest water quality in the Region.

Nevertheless, improvements are occurring in some areas, and the actions we are taking now should lead to greater improvements in time. The need to take more concerted action to clean up our worst rivers was considered as part of the Long Term Financial Strategy and additional funding allocated in a number of areas. (Some of this has gone towards better equipment to get a better picture of what is happening to our waterways by monitoring continuously and observing diurnal changes). Major actions taken this year to improve the quality and ecological health of waterways are detailed below.

Mangapouri Stream

Two investigations were made into the faecal contamination of this stream at Otaki (FW 22).

Waikanae River

The Friends of the Waikanae River have carried out a number of activities to look after the river and its margins. The group receives funding from the *Take Care* (Environmental Care Group) fund. The Friends have set about restoring the river ecosystem by clearing unwanted weeds and trees, planting native trees, and surveying existing native species (FW 32, Eco 14).

Waiwhetu Stream

An Action Plan (community vision) has been completed by the community group managing the rehabilitation of the stream. Landscape and ecological designs are in progress, and the contaminated sediments have been analysed (FW 22). The results of this analysis are reported elsewhere in this Order Paper.

Porirua Stream

A targeted investigation has been made of the water and sediment quality of the Porirua and Takapu Streams, primarily for heavy metals. These results are also reported separately in this Order Paper (FW 22).

Waitohu Stream

The Council continues to support a community care group working on the Waitohu. The group has achieved a considerable amount in a year, including regular monitoring of the stream's health (see my Manager's report in this Order Paper) (FW 22, Eco 14).

Kaiwharawhara Stream

On the lower Kaiwharawhara Stream in central Wellington another ecosystem and water quality enhancement project has continued to develop over the year (FW 22). The major achievement has been the production of a landscape plan and concept designs for the stream which are now being considered by interested parties.

Further upstream two more care groups are working and have been supported by the Council. These are the Trelissick Park Group and the Otari – Wilton's Bush Group. The latter has cleared (with help from the Biosecurity Department) and replanted a section of the stream and proposes further work over the next three years.

Stream and Wetland Restoration by Community Care Groups

In addition to these care groups and others mentioned elsewhere in this report, the Council has supported a number of stream restoration projects through the *Take Care* Programme. These projects are located on:

- the Waimapehi Stream in Pukerua Bay;
- Fensham Wetland in Carterton;
- the Moehou Stream in Moehou Reserve, Upper Hutt;
- a stream and wetland in Manuka Street Reserve, Masterton;
- Wharemauku Stream at Kaitawa;
- the Waikanae River (Friends of the River),
- the Queen Elizabeth Park Wetland;
- the freshwater wetland at Pauatahanui;
- the Shandon Wetland in Lower Hutt; and
- Greendale Stream in Paraparaumu.

Motuwaireka Stream

A sanitary survey to determine the source of the pollutants in the estuary of the Motuwaireka Stream at Riversdale was carried out last financial year, and reported this year (FW 23 and 24). It recommended reducing stock access to the stream, machine cleaning the lagoon, and a community wastewater treatment facility (FW 22). A public meeting was held at Labour weekend and work commenced towards a community sewerage scheme, with the Council helping in an advisory capacity. A hydraulic study of the lagoon was carried out in March to look at ways of improving the passage of water through the system.

Wairarapa River clean-ups

During Clean Up New Zealand Week Wairarapa staff assisted with clean ups of a number of small water courses around Masterton.

The influence of stormwater

Measuring Up pointed the finger of blame at stormwater and the Long Term Financial Strategy funded several initiatives. The two most significant are the Riparian Management Programme for (mostly) rural areas and a two year project to quantify the environmental effects of stormwater in all environments. Progress with the latter in 2000-01 is reported elsewhere in this Order Paper.

Riparian management

It is pleasing to report a draft strategy for the implementation of Riparian Management has been completed, and trials commenced on three streams – the Karori, the Kakariki (a tributary of the Ngarara), and the Enaki (a tributary of the Mangatarere) (FW 31, 32, 33, Soil 7). These trials will be extended over the next two years and it is hoped that an additional site will be added, most likely in the Wairarapa. Riparian management has been a concern of the RPS implementation team for a number of years.

As in previous years, the Trees for Survival programme continues to contribute to the Council's Riparian Management goals, as well as reducing bank erosion (Soil 7) and teaching young people about water care (FW 21). The Council now provides the programme for 12 schools across the Region, with the principal sponsorship of each school resting with a local Rotary Club. Other streamside plantings have also been carried out in Regional Parks and river corridors by the Landcare Division (e.g., Arbor Day).

Educating the public about water and its care

Considerable effort goes into education and information to encourage better attitudes towards rivers and streams. Much of the work of the pollution response services in both parts of the Region has to do with showing people how to look after water (FW 28). It is interesting to note there were 86 complaints about stormwater pollution in 1999/2000 but, of course, this is only the tip of this particular iceberg. More generally, staff have attended field days and addressed groups, provided information to schools, written articles for the media, and continue to check on how resource users are exercising their consents (FW 21 and 28). As reported in the Environmental Education Annual Report (01.410), the *Take Charge* and *Take Action* programmes for small businesses and school children have been developed and focus on water and how to care for it (FW 21 and 28).

Other activities

Finally, in reporting on specific projects directed at particular problems, the day-to-day impact of many of the Council's activities on the use or health of rivers, streams, and wetlands can be overlooked. Activities such as consent granting, plan writing, hydrological and water quality monitoring, river works, compliance monitoring, and pollution response all contribute to the implementation of the RPS's freshwater provisions (FW 1, 2, 13, 17, 29, 30, 34, 43, and 46). One development of note is the new approach to runoff from roading developments which showed reduce silt discharges to water courses (Report 01.366)

6. Soil

Measuring Up says that, despite the fact that more people are adopting sustainable land use practices, there is still a need for a more sustainable approach to land management and that some severely erosion prone land is not under active control (about 10% of the Region's erosion prone land). Lack of information about the quality of our soils was also seen as a problem.

Sustainable land management

Sustainable land management is a relatively new concept which did not have a common currency when the RPS was written. Hence, there is little mention of it. Fortunately, this has been remedied by the Regional Soil Plan. The Soil Plan became operative in October 2000, completing the suite of operative plans for the Region. In the Wairarapa forest harvesting has been the predominant activity affected by the Plan, with lesser call to issue consents for roading and tracking and soil disturbance on erosion prone land.

Forest harvesting is a permitted activity under the Plan, as long as the Council is notified of the activity. Since the Plan was proposed in 1998 a total of 33 specific operations have been given permitted activity status. Compliance monitoring has been completed at 8 of these sites. In the last 12 months notification of 9 operations has been received.

Erosion control and soil conservation

The methods in the Soil Chapter of the RPS are directed primarily at erosion control and the management of flood risk and riverbeds. As such, they describe much of the work that is carried out by the Wairarapa Operations Department and the Flood Protection Departments of the Western Region.

The Council continues to bring erosion prone land into active management and to provide incentives for soil conservation works under the Soil Conservation and Rivers Control Act 1941 (Soil 3). These include the preparation of property conservation plans and sustainability plans for the control of hill country erosion and wind erosion, and annual works programmes in support of these plans.

Throughout this year, soil conservation programmes have been completed on 130 properties. The afforestation work has been completed on 200 hectares (Soil 8). A further 250 hectares have been space planted with poplar and willow species to control erosion on land that can sustain pastoral land uses. In addition some 7 km of shelter belts have been installed to protect vulnerable soils from the effects of wind erosion. Soil conservation advice and guidance for land owners remains a significant activity (Soil 5).

In consultation with the major forestry groups of the Wairarapa, a set of guidelines has been developed for the management of riparian zones within production forests that have a high risk of erosion (Soil 4). Typically these zones exist on farm land that has been purchased for afforestation. Their inherent instability means that in many cases

the blanket planting of *pinus radiata* is inappropriate. The Council's commitment to biodiversity means we will need to consider indigenous species as effective stabilising vegetation in these fragile zones.

River management

Soil methods 14 to 19 describe the Council's on-going river management activities. These are reported on regularly through the Landcare and the Wairarapa and Rural Services Committees. In the Western Region, perhaps the most significant tasks have been the completion of the draft Hutt River Flood Plain Management Plan (Soil 14) and the 1998 and 2000 flood damage repairs.

In the Wairarapa, the river schemes on the Waiohine and Waipoua rivers were reclassified during the year. In developing these new classifications floodplain management and hydrological studies were undertaken (Soil 15,16). Each river scheme has an advisory committee reflecting the beneficiaries of the scheme. Annually there is usually at least an inspection, committee meeting and newsletter circulated. The annual meeting approves the completion of the year's work programme and the next year's works programme. It also recommends any rates rise to achieve the proposed works programme. Reclassification causes an increase in the number of meetings, circulation of pamphlets and newsletters, and public displays to ensure all ratepayers have an understanding of what is proposed. Both the Waiohine and Waipoua Rivers scheme reclassifications were approved without any objections, despite rates increases of up to 100% for some ratepayers.

A new method for managing the extraction of river gravel was also instituted in the Wairarapa (Report 01.543). This will obviate the need for resource consents for extractors. To ensure that gravel is being extracted at a sustainable rate, a riverbed monitoring network has been developed. River bed surveys will be completed at frequencies varying from 6 months to five yearly intervals depending on the pressure on the gravel resource in specific reaches (Soil 18, 19).

Soil health information

Our lack of information about the quality of our soils was considered by Councillors as part of the Long Term Financial Strategy and funding proposed to remedy this situation.

This year a start has been made on a Soil Quality Monitoring Programme. We have sampled 29 representative sites throughout the Region. This is part of a three-year programme to sample a total of 75 sites. Every five years the sites will be revisited to assess trends. The 75 sites cover some 15 different soil types and a range of varying land uses across each soil type.

7. The Coastal Environment

Measuring Up identified the loss of the "naturalness" of coastal areas as a growing problem. In both remote and peri-urban areas, the open, wild nature of this environment is being lost to creeping subdivision and increased development. The

SER also identified a lack of information about changes in the marine ecosystem, but said that coastal water is generally of good quality.

Coastal developments and natural character

The decline in the naturalness of coastal areas has been addressed on both the Wairarapa and Kapiti coasts. Following last year's concerns about sporadic subdivision in the Wairarapa, a coastal forum was held, out of which came the need for a Wairarapa coastal strategy. We are contributing to this (Coast 3[1]). Wairarapa staff have also been involved in the Castlepoint community's landscape project and submitted against coastal subdivisions at Whangamoana and Riversdale (Eastleigh). Fourteen new consent applications for coastal subdivisions or developments on the Wairarapa coast were commented on during the year.

On the Kapiti Coast, the District Council has been doing work on a landowner's guide for subdivision, planting, effluent disposal and related matters in coastal areas. We consider this to be a very worthwhile initiative and will be providing further support to the project in 2001-02.

Coastal ecosystem projects

The loss of open space and indigenous species that is "natural character" also places coastal ecosystems in jeopardy. The importance of coastal ecosystems and their rapid disappearance was recognised in the State of the Environment Report's assessment of regional biodiversity. Coastal habitats contain a higher number of threatened species than any other form of habitat. For this reason, *Measuring Up*, identified *estuaries, dunes and coastal escarpments* as priority ecosystems for action.

The Council has been active to protect and enhance examples of these ecosystem types, with the Pauatahanui Inlet estuary project the most well known. This year the community driven Action Plan for the Inlet has been completed, research needs distilled, a communication/education strategy commenced, and the framework established for an enduring community body (a charitable trust) to oversee the Inlet's management (Coast 3[2], Eco 11,12, 14). Work has also continued (enhanced by funding from the Pauatahanui Inlet project) on the restoration of two small river *estuaries* which flow into the Pauatahanui Inlet, namely the Kakaho and Horokiri Streams (Eco 12).

A joint Porirua City Council/Wellington Regional Council project on earthworks and sediment control should also help the Inlet in due course. The investigation said improvements were needed in consent processing procedures, monitoring, and communication between parties involved in large-scale earthworks. It also sought the updating of the Regional Council's silt guidelines (FW 24). The guidelines have been withdrawn and work commenced on a new set.

On the Wairarapa Coast, assistance has been given to the Riversdale Dunecare and Castlepoint Beachcare Groups (Eco 14), and on the Kapiti Coast, the *dune* restoration activities of the Waitohu Care Group continue to be supported. At Pukerua Bay, the Council is helping another care group with the restoration of the Waimapehi Stream, whilst at Evans Bay, another group is creating Little Blue Penguin habitat with Council assistance.

At Queen Elizabeth Park, the last relatively unmodified *dunes* on the Kapiti Coast are a valuable regional asset. A project to restore the dunes commenced in 2000-01, with assessments by an ecologist and coastal processes expert, and detailed weed and plant surveys. The restoration will get underway in the new financial year.

Other coastal activities

- Once again we provided regional co-ordination for Clean Up New Zealand Week and Sea Week (Coast 3[2]), and undertook a clean-up of the coast (Houghton Bay to Lyall Bay).
- Coastal water quality monitoring has continued. On the Wellington side, this has been reorganised for a better fit with similar monitoring undertaken by territorial authorities. In the Wairarapa the annual summer water quality survey found all sites in compliance with the Recreational Water Quality Guidelines (Coastal Policy 5).
- Samples have been taken of shellfish from Wellington Harbour, Pauatahanui Inlet, and the Kapiti Coast to test for faecal, heavy metal, and organic chemical contaminants. This ecological monitoring will add to our understanding of the impacts of land based activities on marine ecosystems.
- Access to the coast in the Wairarapa has been promoted through a contribution to the South Wairarapa Reserve Management Strategy (Coastal Policy 4).

Marine Biodiversity

The Council's role in marine biodiversity protection was considered by Councillors at a workshop in June, backed up by qualitative and quantitative research into how regional residents feel about this issue.

8. Air Quality

Motor vehicles and domestic fires are the two main causes of air quality problems in the Region, according to *Measuring Up*. In some confined areas, and under certain weather conditions, air pollution from these sources reaches levels set to protect the environment. However, the SER observed that we did not yet fully understand the extent of these problems in the Region. It also noted that, like the rest of the world, we are suffering from the effects of climate change.

The need to extend air quality monitoring to a network of stations was recognised in the Long Term Financial Strategy and provision made for the purchase of three additional stations. The first permanent station was purchased this year and is now in place in Lower Hutt (Air 3[1]). Autumn and winter readings have shown the "alert" level for NO2 to have been reached on some days. The existing mobile station was in Upper Hutt, where it recorded occasional high levels of particulate matter in the winter, most probably from domestic fires.

The Emissions Inventory was also completed and its findings communicated to the Committee (Report 00.527). This identifies the relative contribution of various types of emissions to the Region's overall pollutant loadings (Air 3[2]). A strategy has

been devised for air quality monitoring over the next five years based on the Emissions Inventory and what we already know about the air in the Region. It proposes Lower Hutt, Masterton, Upper Hutt, Petone, and Wellington City as possible sites for permanent stations, and a handful of other sites for "screening surveys", where air pollution is suspected.

The Emissions Inventory concluded that industrial emissions are a minor contributor to the overall regional picture, although they may have significant localised effects. Motor vehicles and domestic fires are identified as the main culprits in the inventory. This has a bearing on the provisions of the RPS and how we implement them, this will need to be examined. By and large, the RPS's Air policies and methods are directed towards industrial emissions and the general impacts of motor vehicles. Yet the inventory and the results obtained thus far from the stations indicate a need to address *households* and domestic fires in specific locations. Combine this with our use of cars, and there seems to be a need for an educational approach to air quality for the wider community, in addition to a regulatory approach for business.

Two studies were made of the incidence of particulate (dust) during the year. One used special techniques to analyse the "source" of the particulate and confirmed domestic fires as the main source in Masterton during the winter months (Report 01.48). A second found dust and salt levels on the Kapiti Coast to be slightly higher than might be expected but not significantly so. This will help with the assessment of dust generating activities and public complaints about dust that might arise in this district (Air 3[3], 4).

The Regional Air Quality Management Plan became operative in May 2000. Work continued this year on its implementation. The Plan gives effect to the RPS's Air Quality objectives by implementing a number of methods (e.g., Air 1, 2, 4, 6, 7, 14). In the Wairarapa efforts have been made to ensure any activities that might be subject to the provisions of the plan have the appropriate consent.

Climate Change

The view taken by the RPS of climate change and greenhouse gases is that this is a national issue and that the Council should support relevant government initiatives. However, it also stressed the importance of regional efforts. This issue has attained a higher profile this year through central government's increased attention and international developments relating to the Kyoto Protocol. Regionally, we made a submission on climate change to a Parliamentary Committee considering the issue (Air 11), and assessed the regional sources of greenhouse gases in the Emissions Inventory (this pointed up methane from sheep and cattle as an important contributor to the overall regional picture). Climate change is likely to become increasingly important and something the Council may have to reconsider its contribution to.

The Regional Land Transport Strategy is listed as a Method in the RPS. It contains a number of measures designed to reduce greenhouse gas emissions from motor vehicles and it promotes the use of public transport, cycling, walking, and other measures designed to reduce the need for vehicle trips (Air 10 [5] and Air 12). Air quality monitoring has also been carried out near roads to determine the extent of pollution caused by vehicles (Air 3, En 6).

Amenity and Odour

As in previous years, odour remains a significant source of complaint from the public and takes up much of the time of the Pollution Response Service (e.g, 115 of 150 complaints in April-May). Odours from landfills, abattoirs, an asphalt plant, and sewage systems were commonly reported by the public.

9. Ecosystems

With substantial new funds from the Long Term Financial Strategy, the implementation of the RPS's ecosystem provisions increased in tempo this year.

Council's proposed ecosystem programme

Measuring Up's survey of this Region's ecosystems helped identify those places where natural biodiversity has been lost and where our management and protection efforts need to be directed. These are:

- Lowland bush;
- Wetlands;
- Rivers and their margins;
- Estuaries;
- Coastal escarpments
- Dunes; and
- Marine ecosystems

Comment has already been made with regard to dunes, estuaries, and marine ecosystems. For the other ecosystems on this list (and in some respects dunes also), the following has taken place this year:

- The Key Native Ecosystem programme (KNE) is in the process of being reconfigured to act as the main vehicle for delivering Council services in relation to bush, wetlands, escarpments, and dunes. In the future this programme will deliver integrated pest management on a site basis (ie multi-pest) and will include ecosystems other than bush.
- The Regional Pest Management Strategy has been changed to provide for this new approach (Eco 10).
- We have looked at ways to achieve greater biodiversity outcomes for the funds available. The concept of a mainland island on WRC land was investigated and demonstrated that this should be a part of the Council's future approach, plus expenditure on areas of bush, wetlands, and other habitats that are representative of the Region's biodiversity.
- Leading edge methods have been employed to decide where to apply biodiversity funds to these representative ecosystems (Eco 10).
- Councillors considered the mainland island concept plus related issues in two workshops, and at the last Policy and Finance Committee meeting of the year, authorised the spending of Biosecurity Department funds on WRC land. This established the principle that funding for biodiversity should be directed to areas

where it will be most effective, rather than whether or not the Council owns the land.

- Sales of the Wellington Regional Native Plant Guide, which shows how to support neighbourhood ecosystems by planting "the right plant in the right place", reached 3000 copies for the year (Eco 14, 15);
- The private land protection programme (for the formal protection of remnant habitats) proved very successful. As well as the initial budget of $15,000, additional funds were provided at the six month review and these were fully utilised (Eco 15);
- The Wetland Recovery Programme commenced. This involves advise for landowners and a strategy for future wetland management. The strategy will be completed in December 2001 (FW 47, 48);
- On Council land, re-vegetation and restoration work commenced or continued at a number of sites identified for enhancement through the Long Term Financial Strategy. The Council supported a number of community groups working in these areas. Projects of note are the Te Marua Bush restoration, the efforts of the MIRO group at East Harbour, the Pakuratahi riparian planting (including Ladle Bend wetland), forest and wetland restorations at Queen Elizabeth Park, and design work for the wetland restoration at Battle Hill (see Report 01.493) (Eco 13);
- A restoration and development plan has been completed for the Cannons Creek Valley Bush (Maara Roa); and
- The Landcare Division continues to manage huge areas of significant habitat using an ecosystems approach (e.g., possum eradication of the Puketiro/Whakatikei block, vegetation monitoring).

Key Native Ecosystems and pest management

Ongoing KNE work is of critical importance to the Council achieving its RPS ecosystem objectives (Eco 7 [2], 12, 14, 15). Work in a number of areas has continued throughout the year and is regularly reported to the Rural Services and Wairarapa Committee. There are now 354 identified KNE sites in the Region, with 23 new sites identified and prioritised this year. Areas which have been treated this year include the Kelson area, Polehill Reserve, Tinakori Hill, Otari-Wilton's Bush, Kaiwharawhara, Ngauranga, Greytown Park Bush, Pounui, Big Hill Bush (Tuturumuri), Lake Nganonke (Pirinoa), Morrisons Bush, Carterton East (mustelid and feral cat control over 5,000 ha), Paekakariki escarpment, Te Rama, Waikanae Reserve, Raroa Reserve, Witako (Upper Hutt), and a major operation at East Harbour (2,375 ha). Some of these are new operations and some are maintenance works. With the refocusing of KNE operations described above, funds have been set aside to continue to maintain areas so that the good results achieved through this programme over the last five years are not lost.

In other areas the bovine Tb programme (which gives effect to Eco 7) also protects native bush. The year's achievements are reported in Report 01.532. Of the 290,000 hectares approved by the Animal Health Board for treatment, 287,000 hectares were treated.

River ecosystems

The first year of a three year programme for freshwater ecosystems has been completed. Surveys were completed of *whitewhait spawning habitats* in 21 streams in the western part of the Region (FW 40). The surveys established that 3 waterways, the Wainuiomata and Otaki Rivers, together with the Makara Stream, already have extensive areas of suitable vegetation for whitebait spawning. The spawning areas of another 7 waterways offered considerable potential for improvement through restoration. In 2001-02, a similar survey will be carried out in the Wairarapa. In the third year of the programme, we will commence the restoration of whitebait spawning habitat in selected rivers.

A technical discussion paper on *freshwater ecosystems management* has been prepared. It looks at freshwater ecosystems in the Region, their ecological processes, the values that people place on them, and how they can be improved through ecological approaches to management (FW 6). Further work is now needed on how some of the ideas and approaches put forward in the paper can be put into practice.

An *inventory of structures* in rivers in South Wairarapa has been completed. Some of these structures are barriers to fish passage (FW 36). In 2001-02, we will add to the inventory from other parts of the Region, and in 2002-03 we will look at opportunities for mitigating the effects of structures on fish passage.

A review of the information available on *freshwater fisheries* in the Region has begun (FW 40). It is due to be completed in mid-August 2001. The results of the review will include an assessment of the vulnerability of freshwater fisheries for catchments in the Region. It will recommend priorities for future freshwater fisheries survey work.

The freshwater ecosystems programme has also assisted with gathering information on *water races in the Wairarapa* by contributing to ecological surveys of these waterways (FW 10).

10. Heritage

Only a small amount of work has been carried out this year by the Council to manage Regionally important heritage resources. The Council's role is minimal in relation to heritage, being restricted to general policy matters and national issues where they arise. However, the role of the Council was discussed by the Environment Committee and a report prepared which shows the RPS's heritage methods are being implemented as originally intended (Report 01.304). One method that was held back, pending the outcome of the government's review of historic heritage, has been Method 9, which requires an investigation of the need for a Regional Plan for Regionally significant heritage matters. This provides the opportunity for a reassessment of the Council's heritage role. It is proposed to undertake this method in 2001-02, prior to the next Long Term Financial Strategy process.

Ways of preserving the historic character of boat sheds in the coastal marine area were also considered during the year (Heritage Policy 5) (Report 00.659).

An initiative taken to protect heritage resources on Council land was the restoration of the Pakuratahi Bridge (L&H 14) .

11. Natural Hazards

A significant step in giving effect to the RPS's hazard programme is the completion of a Regional-Scale Study on Tsunami Hazards. This identifies likely areas at risk and steps that can be taken to manage those risks (NH 5). Another study to determine the risk from natural hazards to the storage and transport of (non-petroleum) hazardous substances has also been completed (NH 10).

Method 7 (making information available) is mainly given effect to through the activities of the Emergency Management Department and the Wairarapa Emergency Management Officer. Given the dry summer, rural fire was a big risk, and considerable effort was put into publicity and information for rural landowners. In addition, members of the public and territorial authorities have continued to seek information from us on the Region's hazards (e.g. early childhood and primary teachers seeking help with hazard planning). A strategy for communicating and marketing our hazard and emergency information has been developed to better implement Method 7.

Other activities mentioned above (such flood plain management plans, and submissions on resource consents for new buildings relating to earthquake and flood risk) help meet *Measuring Up's* concerns about natural hazards in this Region. These are earthquakes, flooding, drought, tsunami, coastal erosion, and the need to identify risks before new developments go ahead.

12. Energy

Measuring Up's main concern about energy use is our continued reliance on fossil fuels and the only modest gains in energy efficiency that have been made. The Council's energy related activities this year have been:

- A submission of the Council's view on the national energy efficiency strategy (En 3[1]);
- The continued development of Environmental Management Systems by departments, most of which include energy efficiency and audits (En 1);
- The inclusion of energy efficiency as a factor in the Regional Land Transport Strategy (RLTS) (En 2);
- The promotion through the RLTS of:
  - existing modes of sustainable transport and their infrastructure (trains, buses etc);
  - more efficient use of fossil fuels;
  - cycling, walking and other modes of transport fuelled by renewable energy sources (En 4); and
- Work with developers and Council s on the energy use implications of resource consent applications for major buildings (e.g., Lambton Towers, a Lower Hutt Supermarket) and urban expansion (Grenada North subdivision) (BE 4[3]).

13. Waste Management and Hazardous Substances

According to *Measuring Up*, the quantity of waste produced in the Region is not being minimised, but recycling, the consenting of waste disposal facilities, and the gradual clean-up of high risk contaminated sites are helping to manage the by-products of the way we live.

The Council seeks to control waste discharges in many ways; through consents under its' Regional Discharges to Land Plan and Freshwater Plan (Waste 9), through education and advocacy, and through contributions to national debates and policy making. During 2000-01:

- The Pollution Response Services continued to police waste discharges of all kinds. At year end, the Wellington based arm of this service had responded to around 1400 call-outs, and the Wairarapa arm, 150;
- The Council communicated its views on waste to policy makers as part of the development of a national waste minimisation strategy;
- In the Wairarapa, the Council continued its involvement in the development of a Waste Plan for the area, specifically seeking to influence those aspects to do with hazardous waste and the burning of solid wastes. This involvement is likely to continue for a number of years (Waste 13[2]);
- A Strategy for implementing the collection of unwanted agri-chemicals and hazardous household wastes has been completed and is reported separately in this Order Paper (Waste 23).
- Funding was provided for Enviromart, the regional waste exchange for the recycling of commercial waste (Waste 8);
- A follow-up study of leachate from the Pukerua Bay landfill showed that the environmental impact on the Taupo Swamp from this source is small (Waste 10).
- Investigations of 10 potentially contaminated sites used by the Council revealed few significant problems (Waste 21). This investigation also resulted from decisions taken through the Long Term Financial Strategy.

Measuring Up's conclusion that our pollution response service is mainly reactive has been addressed this year with the development of the *Take Charge* programme, within the Environmental Education Initiative (Waste 8, 13 [1]). This involves working with businesses and industries that use resources to reduce the amount of waste they produce and avoid the adverse effects of pollution from their activities. As mentioned in the Environmental Education Annual Report in the Committee's June Order Paper, *Take Charge* has been developed and tested, and resources produced to support its use by business. It is due to commence in September 2001.

14. Built Environment and Transportation

The SER describes the Wellington Region as being "on the up", a place to come to, with a lifestyle to be envied. It says we have a public transport network that is the best in New Zealand. Nevertheless, it also says that the way we live, particularly how we move around, use resources, and generate waste, is causing environmental pressures.

The Council's role in achieving its RPS objectives in this area is centred around its regional transport functions and, in particular, the promotion of a sustainable transport system that encourages the efficient use of infrastructure (BE 3).

The Council has not taken a strong advocacy role on the development of the Region's urban areas, opting to leave decisions about these areas to the territorial authorities. However, the Council did request an investigation into a possible urban growth strategy late in the year which officers are progressing (BE 5[1]). Submissions have continued to be made on proposed developments within the cities where Council policies have been relevant or Council services affected (BE 5 [2]).

15. Challenges for 2001-2002

Whilst the implementation of the RPS will continue to occur across the Council, the following major initiatives could be thought of as the major RPS related challenges for the Environment, Landcare and the Wairarapa Divisions in 2001/2002:

- The progressive implementation of the projects designed to assist ecosystems and biodiversity;
- The operation of the Environmental Education Programmes;
- Ensuring the relationship with iwi continues to grow;
- Further work on groundwater issues;
- A review of the Council's historic heritage role; and
- Further contributions to government processes to do with energy, climate change, waste and biodiversity.