Appendix 1: Regional Policy Statement and Regional Plan implementation summary

1. Wetland Action Plan

1.1 Background

Eight key actions were identified in the Wetland Action Plan, which was approved by the Council in March 2003. The 2005/2006 year was the third year of implementation. Day to day implementation of the Wetland Action Plan is undertaken by staff across a number of Greater Wellington departments.

1.2 Progress

- All available information for wetlands in the region was entered into the wetland database last year. All though the data is patchy in places it's valuable to have the geographic location of all known wetlands in the region in one place. This database is slowly updated as additional wetlands are found.

- Many wetlands in the region depend on groundwater. Work is underway to improve our understanding of Wairarapa aquifers and this should improve our understanding of how wetlands in the Wairarapa function. Greater Wellington is also supporting a Crown Research Institute research programme that is hoping to develop simple and low cost methods for monitoring wetland hydrology.

- Wetlands on land owned or managed by Greater Wellington include some of the most important in the region. There are four wetlands on land Greater Wellington holds that are used for flood protection purposes, and sixteen wetlands on land managed by the Parks and Forests Department. Public access to Greater Wellington wetlands have been improved by the construction a boardwalk across the wetland at the northern end of Lake Kohangapiripiri (East Harbour Regional Park) and a wheel chair accessible loop walk around the wetland at the McKays Crossing entrance of Queen Elizabeth Park. The public have also been involved in a number of corporate and community planting days at wetlands on Queen Elizabeth Park and Battle Hill Farm Forest Park. Weed control has been undertaken in several wetlands.

- The Wetland Action Plan states that we will work in partnership with other agencies and iwi to improve the Lake Wairarapa wetland. Greater Wellington owns some land around the Lake and is responsible for controlling water levels through the operation of the barrage gates. Discussions with the Department of Conservation over the governance structure for the proposed regional park are ongoing. There is funding this year (2006/2007) for some preliminary work towards setting up the park, including the development of a concept plan.

- Greater Wellington has funded ongoing pest management in Key Native Ecosystem (KNE) wetlands. The KNE wetlands include Te Harakeke (Waikanae), Nga Manu Reserve (Waikanae) O te Pua (Otaki), Lake Pounui (South Wairarapa), Waingawa Swamp (Masterton), Taumata Oxbow (east of Carterton) and Waimeha Lagoon (Waikanae), Lake Onoke (South Wairarapa) and Pikes Lagoon (Gladstone). A number of wetlands also benefited from pest control carried out as part of the TB programme, including the Pencarrow Lakes.

- The Wetland Incentives Programme was launched in November 2003 after being developed with input from wetland landowners. An additional 19 landowners have joined the programme this year, making a total of 82 landowners. Under the programme the fencing of seven wetlands was subsidised and weed control was undertaken on 13 properties.

2. Kaiwharawhara Stream Plan

2.1 Background

The Kaiwharawhara Stream and its main tributary, the Korimako Stream, have been the subject of various initiatives over the last few years. A report last year (05.293) updated the Committee about some of the initiatives taken by Greater Wellington in partnership with local community groups and Wellington City Council. In summary, these highlighted planting work at Otari (where nearly 30,000 native plants have been very successfully planted by hundreds of volunteers over the last 6 years), planting at the estuary and alongside School Road in the lower reaches (funded by Greater Wellington and Wellington City), and promotional work on managing streams and monitoring for water quality.

2.2 Progress

This year, there has been continuing participation by the local community and the two councils, with 4 meetings of all participants in Project Kaiwharawhara held regularly through the year. Additionally, a tour for councillors was organised for December 2005, timed to be able to show the restoration work that has been going on and provide an opportunity to see the newly erected interpretation boards located at three key parts of the catchment. A further 9 small signs with the same basic branding of Project Kaiwharawhara have subsequently been erected alongside tributaries to make the point that lots of little streams are all part of the bigger picture and as such need caring for too if the bigger streams are to be healthy.

The project has been hugely successful in achieving on the ground results, and Wellington City Council have given direction in their LTCCP to consider transferring the lessons and approach used to other streams. In recognition of the collaborative role between councils and the community, Wellington City Council has prepared an application, in partnership with Greater Wellington, for the New Zealand Post Management Excellence Awards. Whilst the results are not yet known, it is indicative of the good will generated by the project that City Council feels able to nominate the project for a nationally prestigious award.

Upcoming work includes planting at new sites up and down the streams from current planting sites, and the introduction of possibly 2 fish passes to assist fish movement throughout the catchment.

3. Riparian Management Strategy

3.1 Background

Greater Wellington's Riparian Management Strategy was adopted in June 2002. The Strategy outlines why the Council needs to act to promote the appropriate management of riparian areas on private land. The Strategy proposed that the Council should:

- Provide information and advice to landowners about the appropriate management of streams; and

- Provide funding to assist landowners to re-vegetate the riparian areas of high value streams with appropriate species.

3.2 Progress

Mind the stream, a booklet for landowners and care groups, was published in June 2004. It was distributed to care groups, territorial authorities and private landowners, as well as all Fonterra suppliers as part of Greater Wellington's implementation of the regional action plan for the dairying and clean streams accord. Over 1,000 copies of *Mind the stream* have been distributed and it is still in demand. It is also available on the Greater Wellington web site.

Riparian pilot projects have been running in three parts of the region. Three years of monitoring results were reported on in a booklet, *Riparian management, what difference does it make*? in October 2004. The monitoring has continued, and all the results will be analysed by staff in the Environmental Monitoring and Investigations department, and reported on this financial year. The results from this study, one of the most comprehensive of any riparian monitoring programme in the country, will be used to develop cost-effective indicators to monitor the success of stream restoration as part of a national project.

The funded part of the programme, *Streams Alive,* covers 12 catchments around the region. *Streams Alive* is delivered by the Land Management Department of the Catchment Management Division. In 2004-05, 1.3 kilometres of streams in eight catchments were fenced and planted with native plants through this programme. In 2005/2006 a further 4.8 kilometres of streams in seven catchments were fenced and planted.

4. The Council's Carbon Footprint programme

4.1 Background

A carbon footprint is a measure of an organisation's energy use. It is a figure that expresses all the different types of energy used in tonnes of carbon equivalent, highlighting the link between energy use and greenhouse gas emissions.

A full description of how the Council's footprint is calculated was provided in the 2003-4 report, but to recap, two things are needed. First, data on energy use, and second, a means of converting this data to a carbon footprint figure. The model we are using for this latter purpose is called EBEX 21, a product of Landcare Research.

For the EBEX 21 model to work, energy use data is required for two levels – direct and indirect use. Direct use covers our consumption of electricity, diesel, petrol, LPG and CNG, aviation fuel, light fuel oil and coal. Indirect use covers energy used in activities associated with the functioning of the organisation – international and domestic air travel, vehicle mileage for business trips, and staff commuting.

4.2 Progress

An initial estimate of Greater Wellington's carbon footprint was produced early in 2004 and the estimated footprint for 2002-03 was 4875 tonnes. Given the uncertainties associated with a number of the data sources in that first exercise, this figure was rounded up to 5000 tonnes to act as a benchmark for the LTCCP target (which sought a 10% reduction per year).

Following the first calculation, a more accurate set of data was collected for 2003-4, and a system set in place so that future year comparisons would be easier. The figure for 2003-4 was 4749 tonnes of carbon.

During this last year, a calculation was completed for the 2004-5 financial year and the figures are set out below. A figure for 2005-6 will not be available for some weeks, as the various pieces of data for the financial year have to be confirmed and brought together.

The results for 2004-05 are shown in Table 1 below. Electricity use is still the biggest component of our "footprint". The main user of electricity (about 90%) is the Utilities Division for bulk water supply but the figure was down some 2,000,000kWh from the previous year. Other categories (apart from Aviation fuel) showed some increase, but the overall footprint is smaller.

Table 1

Level 1 Energy Source	*Quantity*	*Carbon Equivalent*
Electricity	19,860,000kWh	2897.7 tonnes
Diesel	205,000 litres	536.6 tonnes
Petrol	150,000 litres	344.7 tonnes
Avgas	300 litres	0.7 tonnes
Sub-total		**3779.6 tonnes**
Level 2 Energy Source		
International air travel	475,000 km	52.3 tonnes
Domestic air travel	400,000 km	72.0 tonnes
Staff commuting by car (< 2 litres)	1,000,000 km	260 tonnes
Staff commuting by car (> 2 litres)	1,000,000 km	370 tonnes
Sub-total		**754.3 tonnes**
	Total	**4,533.9 tonnes**

In the course of calculation, it became apparent that figures produced by the model were not consistent with previous years' figures. On enquiry, it appears that the model's assumptions are altered on a regular basis to reflect changing world energy prices. One consequence of this discovery is that it is not possible to make direct comparisons of year on year carbon footprint figures. It is easier, and cheaper, to simply compare energy use across the various model input categories because the ultimate objective is to reduce the quantity of energy used. If we are doing that, we are clearly reducing our footprint.

Subscription to Landcare for use of the EBEX21 model is renewed every two years. It is recommended that we do not renew the subscription next year.

5. Coastal and Marine Ecosystem Programme

5.1 Background

Two surveys of the sandy beaches and river estuaries in the region have been undertaken. The first survey covered the Wellington Harbour and South Coast and second covered the western Wellington coast from Kapiti beaches to Makara estuary. The results of the work were reported to this Committee in June 2004 (Report 04.320) and April 2006 (Report 06.83) respectively. The surveys are designed to fill a gap in our ecological understanding of coastal and marine biodiversity. The results of the surveys are being used for consents management, policy development, and care group functions.

5.2 Progress

The Cawthron Institute were contracted to map the substrate and vegetation of ten sandy beaches and ten river estuaries of the Kapiti Coast (a total distance of about 40km), Karehana Bay and Plimmerton Beach (4 km), Titahi Bay (1.3 km), and Makara Estuary (7.5 ha). The purpose of the survey was to provide an overview of the state of these intertidal habitats which provide significant amenity and environmental value. These sites are also under pressure from urban areas and vehicles on beaches.

The overall results of the survey are summarised below:

The intertidal sandy beaches and river estuaries of the western Wellington coastline are generally in a healthy condition and showed no signs of adverse nutrient enrichment or chemical contamination.

The beaches and estuaries are predominately (greater than 90%) sand, the only exception being Makara Estuary (77% sand and 21% mud). The general absence of silt and clay fractions from the river estuaries reflects their size – most being only very small streams discharging directly to the beach and having little in the way of an enclosed estuarine embayment where finer material accumulates.

There are no obvious signs of adverse enrichment at any of the sites. For example, no extensive growths of algae or anoxic (without oxygen) sediment were observed. Using sediment heavy metal concentrations as an indicator of potentially toxic contaminants, fine scale sample sites all had levels well below the Australia and New Zealand Environment and Conservation Council's (ANZECC), Interim Sediment Quality Guidelines (ISQG) for Fresh and Marine Water Quality (ANZECC and ARMCANZ, 2000).

The animals living within the estuary and beach sediments were typical of other New Zealand estuaries and beaches in good condition. Sandy beach samples generally contained relatively few animals, particularly in the upper tidal ranges, reflecting both the type of habitat present and also the limited sampling undertaken. Small stream estuary sites had very few animals present, reflecting the small area that was estuarine and the sandy substrate. Waikanae and Makara estuaries had more estuarine character with a range of sediment dwelling fauna (amphipods, polychaetes and gastropods) present, including scavengers and deposit feeders typically present in muddy estuarine environments.

Many of the environmental pressures identified (erosion protection, beach grooming, introduced weeds, stormwater, vehicles and residential development) were not considered to be adversely affecting the sites investigated beyond localised areas. The low impact reflects the low percentage of each area affected and, to a lesser extent, the intermittent nature of the pressure, the assimilative capacity of the environment, and/or likely recovery rates. The most significant impacts are associated with residential development along the coast and the subsequent loss of marginal habitat and increase in erosion protection works.

It is intended to complete the survey of the entire Wellington coastline this coming summer with a full survey of the sandy beaches and river estuaries of the Wairarapa coast. This will place Greater Wellington in an enviable situation of having a full survey of all its beaches and river estuaries along the coastline.

Highlighting the importance of estuaries and what we can do about them will be part of the Coastal and Marine Action Plan. We are currently preparing this plan as part of the biodiversity programme (others include the wetland and lowland forests action plans). This information will assist in our day to day management of the coast and Regional Policy Statement and regional plan development.

6. The Freshwater Ecosystems Programme

6.1 Introduction

Greater Wellington's Freshwater Ecosystem Programme has been running for several years now and is regularly reported to the Environment Committee. The programme has the following goals.

- To identify ways that the Council can improve the health and functioning of freshwater ecosystems.
- To increase community interest and awareness of freshwater.
- To enhance freshwater ecosystems through restoration.

6.2 Progress

This year we have worked with community groups on enhancing fish passage at locations in streams where culverts or weirs are limiting the upstream migration of native fish. By providing better fish passage, more habitat can be made available to a greater number of native fish species. A number of community groups working on stream restoration projects have approached us for assistance.

We have prepared concept plans for fish passes at nine locations on four streams. These are the Kaiwharawhara Stream, Owhiro Stream, Waiwhetu Stream and Hulls Creek. The concept plans have been developed into full engineering drawing at two locations on the Kaiwharawhara Stream. Resource consents have been obtained for the constructions of fish passes at these sites with support from community groups. Construction of the fish passes is now planned, and Wellington City Council and Capacity will assist with construction costs.

Once the fish passes in the Kaiwharawhara Stream are built, we will be developing full plans and obtaining resource consents for fish passages at sites in the Owhiro Stream and Hulls Creek.

Point, Click, Fish

A web version of the computer based tool called Point, Click, Fish has been developed. Point Click Fish was designed to help manage the habitats of freshwater fish in rivers. It has two parts:

1. Computer modelling tells us the species that should be found in the reaches of every river and stream in the Region. The model relies on fish presence data from field surveys and on environmental information taken from the nation-wide River Environment Classification (REC).

2. The results of modelling can be viewed on a customised Geographic Information System (GIS). This allows users to look at the distribution of any fish species at levels of resolution that range from a single stream reach to the entire Region. In addition, the model can be linked to other relevant information about fish and rivers at the click of a mouse. The links we have included are photographs of fish; information about structures in rivers and their locations; critical habitat requirements, migration times, climbing ability, breeding habitat, when fish passage should be considered, and ways to avoid, remedy, or mitigate the adverse effects of specific activities in rivers.

Some examples of our use of this tool are: deciding on fish passage requirements when resource consents applications are made for structures in rivers; prioritising rivers for riparian management or other restoration projects; and reporting on the state of the environment. Point, click, fish could also be used in education and public awareness programmes.

Freshwater fish diversity index

Last year, the Council adopted an internationally used diversity index for freshwater fish and applied it to the Wellington region. Freshwater fish are a good indicator of river health. Our main use of the index will be as a monitoring tool for rivers, particularly over the longer term, and it will assist us to report on the state of our river environments. Fish surveys this year have targeted the locations where the fish passes are being investigated.

7. QEII Private Land Protection programme

7.1 Background

Private landowners wishing to legally protect and better manage areas of biodiversity value on their land can enter into covenant agreements with the QEII National Trust (QEII). Such covenants bind existing and subsequent owners to manage the area in question (normally a block of indigenous forest or wetland) to protect and enhance the natural values.

The costs involved in establishing a covenant typically relate to the need to fence the area to exclude stock and define the area by survey to enable registration on the title. These costs are normally shared by the landowner and QEII. In 2000, Greater Wellington established a fund to enable the costs of establishing covenants in the region to be shared. The effect of this funding is two-fold. First the cost to the landowner of covenanting is reduced (but not eliminated) making it more attractive to landowners and, secondly, the per covenant cost to QEII is reduced, enabling the Trust to undertake more work in our region.

From 1 July 2003, Council agreed that a portion of the QEII fund could also be applied to a one-off "knockdown" of any significant pest animals or plants. Any Greater Wellington expenditure is matched by QEII. The opportunity is taken to provide the landowner with information and skills to enable them to manage the issue in the future. However, the need to use our funding for this purpose has diminished with the establishment by central government of the Biodiversity Condition and Advice Fund.

7.2 Progress

A report on this programme was presented to the last meeting of the Environment Committee (report 06.290). In summary, since QEII's inception in 1977, up to 2000 (23 years), a total of 108 covenants were established in the Wellington region, an average of 5 per year. Since Greater Wellington's funding assistance has been available, the number of covenants established per year has risen to 15 or a total of 88. These 88 protect 1,245 hectares in perpetuity.

The following table shows what was achieved last year, with a budget of $70,000:

QEII Trust Covents established 2005/06

Type	**No.**	**Area (hectares)**
Lowland forest remnants	7	112.1
Coastal or semi-coastal forest	3	79.4
Wetlands	3	14
Total	**17**	**205.5**

Highlights this year include securing the high profile 2.5 hectare lowland forest remnant at the Masterton Agricultural and Pastoral Showgrounds and 29.4 hectares of high value and rare beech/totara/broadleaf forest in South Wairarapa. This area had been identified as a "recommended area for protection" under the Department of Conservation's Protected Natural Areas programme.

8. Waiwhetu Stream Action Plan

8.1 Background

A programme to implement the Waiwhetu Stream Action Plan has been running since 2000. It is jointly funded by Greater Wellington and Hutt City Council, and is guided by the community-based Waiwhetu Stream Working Group.

The programme has a whole-of-catchment focus, from the headwaters in the Eastern Hutt hills at Taita, to the mouth at the confluence with the Hutt River at Seaview. While community and school planting events to improve the riparian environment have taken place annually, inevitably the greatest attention has been given to the issue of the contaminated sediments in the lower reaches of the Waiwhetu Stream. Greater Wellington and Hutt City Council, with the assistance of the Ministry for the Environment's Contaminated Sites Remediation Fund (CSRF), have commissioned a series of reports characterising the sediments and examining remediation options.

As a result of the flooding from the Waiwhetu and Awamutu Streams in February 2004, a joint Hutt City Council/Greater Wellington Waiwhetu Stream Floodplain Management Study was commissioned in 2005. The "Waiwhetu Project", as it is known, has now brought together the environmental rehabilitation and flood mitigation projects. This recognises that neither the issue of contaminated sediments nor the flooding problem can be dealt with in isolation of the other. The Waiwhetu Project is overseen by the Waiwhetu Stream Advisory Committee which contains representatives from Greater Wellington, Hutt City Council, Iwi and the Waiwhetu Stream Working Group and is chaired by Stuart McCaskill. The Advisory Committee reports to this Council through the Landcare Committee.

The Waiwhetu Project has been able to draw upon the body of work on the contaminated sediments completed prior to 2005 to inform its considerations

8.2 Progress

A report on progress with this project was presented to the last meeting of the Environment Committee (Report 06.289). In summary, to better understand the nature of the region's urban stormwater discharges, Greater Wellington sampled 11 sites in 2003 from a range of catchments in the region. Two of the sampling sites were of stormwater systems draining the Gracefield area and discharging into the Waiwhetu Stream. These investigations showed that there were elevated levels of contaminants discharging from these systems.

In the light of the work that was being undertaken to find ways to remediate the contaminated sediments in the lower reach, it was determined that further investigations were needed. It would not make sense to deal with the contaminated sediments in the stream if high levels of contaminants were continuing to enter the stream. Two professional services contracts were let to CRL Ltd in May 2005 jointly funded by Hutt City, Greater Wellington and the CSRF.

The first project sampled the two major stormwater systems at the point of discharge into the stream during normal low flow conditions and during "first flush" situations following a significant rainfall event. Testing of the samples was undertaken for a range of heavy metals and the results were compared to the commonly used ANZECC guidelines for Fresh and Marine Water Quality.

The results show that during periods of normal flow the guidelines are exceeded for chromium, copper, lead and zinc. During "first-flush" flows there are excedances for cadmium, chromium, copper, lead and zinc. These are particularly high for copper, lead and zinc.

Table 1: Laboratory results for dry weather sampling event 7 July 2005 (ANZECC guideline excedances in bold)

	Hutt Road Culvert	Parkside Culvert	ANZECC Level of Protection (% species), freshwater
	Average g/m^3	Average g/m^3	95%
Total Arsenic	0.0011	0.0013	0.024
Total Cadmium	<0.00005	<0.00005	0.0002
Total Chromium	**0.00168**	<0.0005	0.001
Total Copper	**0.00336**	**0.00494**	0.0014
Total Nickel	0.00072	0.00105	0.011
Total Lead	**0.00853**	**0.02078**	0.0034
Total Antimony	0.00142	0.00084	not determined
Total Zinc	**0.0394**	**0.0703**	0.008

Table 2: Laboratory results for wet weather sampling event 15 September 2005 (ANZECC guideline excedances in bold)

	Hutt Road Culvert	Parkside Culvert	ANZECC Level of Protection (% species), freshwater
	Average g/m^3	Average g/m^3	95%
Total Arsenic	0.0068	0.0053	0.024
Total Cadmium	**0.000796**	**0.000601**	0.0002
Total Chromium	**0.01314**	**0.01223**	0.001
Total Copper	**0.077**	**0.06**	0.0014
Total Nickel	0.00704	0.00857	0.011
Total Lead	**0.5185**	**0.5747**	0.0034
Total Antimony	0.01203	0.00512	not determined
Total Zinc	**0.9155**	**1.313**	0.008

With the recent receipt of the final results from this project, discussions are now underway with Hutt City to identify the responses necessary to address this problem.

The objective of the second project is to establish the significance of contaminated groundwater infiltration as a source of contaminants into the stormwater system. Approximately 30% of the 93 industrial/commercial sites in the Gracefield Industrial area are listed in the Regional Selected Land Use Register as having a history of storing, using or manufacturing hazardous substances. The high groundwater level and shallow stormwater drains in this area introduce the risk of contaminated groundwater entering the Waiwhetu Stream via infiltration into stormwater pipes.

This project involves the installation of 4 groundwater monitoring wells in the Gracefield area and sampling groundwater levels and quality during wet and dry weather over a twelve month period (12 samples per site). The data will be interpreted to establish groundwater level, flow direction, flow velocity and contaminant concentration, and estimate likely scale of contribution to the stormwater system. Two sampling runs have been completed to date and show "little or no presence of contaminants". This project will be completed by March 2007.

9. Waitohu Stream Improvement programme

9.1 Background

The Waitohu Stream has some ongoing and longstanding issues, including:

- Degraded water quality, in particular in the Mangapouri Stream, but also in the lower reaches of the Waitohu;
- Lack of aquatic species diversity in the lower reaches of the stream;
- Stream bank erosion, leading to loss of land and to siltation of the streambed;
- Livestock in the stream channel;
- Overgrown willows in the stream channel;
- Flood risk, with occasional flooding of properties in Convent Road and Bennett Road;
- The movement of the stream mouth at Otaki beach and a longstanding debate about how best to manage the mouth position;
- Spread of pest plant species like climbing asparagus, hornwort, banana passionfruit and tradescantia;
- Intensification of land use in the Kapiti and Horowhenua as land use changes from dairying to semi-rural lifestyle blocks;
- Extreme low flows in the stream in dry summers, requiring water shortage directions to be issued, prohibiting people from taking water;
- Gravel build up in parts of the stream.

In 2003, staff from the Landcare and Environment divisions began work on the Waitohu Stream Study. The aim of the study was to investigate the flood hazard posed by the stream, to assess the stream's water quality and ecosystem health, and to consult with the community to determine their views about how it should be managed (see report 04.25). This approach extended an earlier approach that was to focus only on flood hazard assessment and management (see report 02.708).

The Waitohu Stream and its tributaries are in the *Streams Alive* riparian programme, which means that all streamside plants are paid for by Greater Wellington as long as the stream is fenced from stock.

9.2 Progress

During 2004, 2005 and 2006 staff prepared seven reports: *Ecological assessment of the Waitohu catchment and stream*, *Summaries of environmental investigations and data, A history of the management of the Waitohu Stream*, *River characteristics and sedimentation, Hydraulic modelling, Potential flood damages,* and a *Consultation summary.* These reports were presented to the Landcare and Environment committees in August 2004 and March 2006 (see reports 04.436 and 06.87).

Consultation with iwi, landowners, and relevant organisations began in February 2004 and continued until February 2005. Most people thought water quality was important, and were concerned about the frequent small flood events which cause significant disruption. They wanted increased stream maintenance, particularly for overgrown willows, better flood warning, and more streamside areas fenced off and planted with native plants.

A summary of these reports, *Waitohu Stream Study Summary*, was distributed to the community in the Waitohu catchment area, and other interested parties such as the Department of Conservation, in April 2006, to inform them of the results of the investigations and confirm that their views were accurately portrayed. The programme will be finalised and presented to the Landcare and Environment committees in September 2006.

10. Pauatahanui Inlet Action Plan

10.1 Background

The Pauatahanui Inlet Action Plan sets out a vision for the Pauatahanui Inlet and its catchment, and describes a range of actions to address the environmental issues relating to this important area. The Pauatahanui Inlet Community Trust (PICT) was formed in 2002 to represent the local community in the implementation of the Action Plan. The Trust, Greater Wellington, and the Porirua City Council work together to make the plan a reality, along with a number of other agencies with responsibilities in the catchment. Projects undertaken since that time have included:

- Commissioning of ecological restoration plans for the non-rural parts of the catchment;

- Convening of a two-day "Science workshop" to bring together experts in estuarine and catchment management from around New Zealand;

- Commissioning an investigation into sedimentation in the Inlet, along with a related project looking at land use history and change in the catchment over the last 150 years (see report 05.235);

- Assisting PICT with its "Planting with a Purpose" project aimed at landowners in the catchment.

10.2 Progress

A report on progress with this project was presented to the last meeting of the Environment Committee (06.288). In summary, the last twelve months have focussed on:

- The installation of interpretative signs describing the natural and human history at four locations around the Inlet. These signs also contain the relevant boating and fishing regulations. These signs are the first part of a project that will see interpretative signs around the Inlet. The second series of signs will be completed as part of the Motukaraka Point to Pauatahanui Village walkway currently under construction.

- Part funding, and providing input into, the "Vegetation Frameworks" project (see below).

- Ensuring integration with Porirua City Council's proposed Porirua Harbour project.

Vegetation Frameworks Project

A sedimendation study completed in 2005 highlighted that one of the most significant influences on the health of the Inlet is the condition of the catchment. Vegetation in key areas of the catchment is very important for the water quality of the streams flowing into the Inlet. It can protect soils that are vulnerable to erosion, shelter and bind the soil, stabilise stream banks, filter overland flow of water, keep in-stream water cool and help reduce peak flood flows. With the exception of Battle Hill Farm Forest Park and a small number of public reserves, the majority of the catchment is in private ownership and landowners are the key to improving the quality of the water entering the Inlet.

As part of developing an overall restoration plan for the rural part of the Pauatahanui Inlet catchment, Greater Wellington and Porirua City Council are jointly funding a one year project, along with the Ministry for the Environment's Sustainable Land Management Fund. The project has involved developing a vision and support for planting and vegetation management in the Waikanae and Pauatahanui Inlet catchments. It aims to provide ongoing benefits to individual landowners and the whole community.

Peter Handford and Associates are contracted to deliver the project, which will be completed in August 2006. By then, the following will have been completed in relation to both catchments:

- A review of existing information about the catchments including current vegetation, soil and water values, and management issues;

- Contact with a sample of landowners with significant landholdings to obtain their views on soil and water issues and to begin the identification of opportunities for enhancing vegetation management;

- Wider contact with all landowners, including a mail out of information, the holding of "drop-in" meetings and follow up mail outs;

- Completion of a broad-scale vegetation framework presented in graphical form based on issues and opportunities put forward by landowners. The framework also indicates where the community has identified the need for more vegetation;

- Scoping of what is needed to implement the framework, including the provision of a network of advice and support, sources of information and advice, co-ordinated pest control, access to plants and funding;

- Completion of three property plans (including one sub-catchment group as a means of co-ordinating the needs of lifestyle block owners) to serve as a demonstration of what can be achieved;

- Production of a series of information sheets to address issues not covered by other agency publications;

- Establishment of a website through which landowners can access information specific to their needs.