

**Flood Protection
Strategy and Assets
Manager : Brendan Paul**

Report for Period Ending 31 January 2002

1. Waikanae River Floodplain Management [Graeme Campbell]

1.1 Otaihanga Road Raising

Directly affected Otaihanga residents were asked to indicate their support, or conversely their reasons not to support, the proposed Stages 2 and 3 road raising. Responses to the mail survey have been analysed and there is strong support for Stage 3 (although the residents prefer land in the adjacent domain to be raised rather than the road). Support for Stage 2 is mixed so a meeting will be held with that affected group to clarify the position for them. If a majority do not support the Stage 2 road raising then it is possible the project could be shelved, and reconsidered at the Waikanae Floodplain Management Plan review in 2007/08.

1.2 Gravel Extraction Consent

The Resource Consent application was lodged on 4 December 2001 and notified on 15 December 2001. The period of notification closes on 8 February 2002 and to date Consents Management have received four submissions.

2. Otaki River Floodplain Management [Graeme Campbell]

2.1 Rangiora Outlet Structure Duplication

Construction commenced on 14 January 2002 with the work programmed to take three weeks to complete. Wet weather over December and January delayed the start of work but it will be completed this financial year as programmed. Higher than usual water table levels have caused some additional difficulties during the initial stages of the excavation, but these have now been resolved and work is progressing as planned.

2.2 Otaki River Mouth Lagoon Enhancement Works

Initial consultation meetings have been held with all parties who have an interest in this area, and a Project Scoping Document has been prepared. An outline plan is being developed for the area, based on the initial consultation. This outline plan will then be used for the next round of consultation, from which we hope to get the commitment from each of the key parties to help implement the plan. The Regional Council has budgeted \$10,000 this financial year to prepare a plan and a further \$29,000 for implementation next financial year. KCDC, DOC, Iwi, Friends, and Fish and Game have all indicated a willingness to be involved in the project.

2.3 Friends of the Otaki River

Input from the Friends is being incorporated into the Otaki River Mouth Lagoon Enhancement Work. The intention is to provide a substantial and appropriate project for them to be involved in. It is hoped that the project will help meld them into a more broadly focused organisation. Their previous year's work was monopolised by the Otaki water extraction consent application.

3. Hutt River Floodplain Management Plan (HRFMP) [Daya Atapattu]

3.1 Ava to Ewen Consent Process

The project is on track for lodging the consent applications for the proposed improvements in March 2002. Tracy Berghan, an ex staff member and now an independent consultant, was appointed on 10 January to manage the consent process through to its completion.

Hutt City Council, through their annual plan process, is considering budget provision for a pumping station at the Opahu Stream outlet. The Opahu Stream training bank, which partly blocks the Ava bridge waterway, could then be removed if a pumping station is constructed.

Tranz Rail has accepted, in principle, the stopbank strengthening works proposal at the Ava Rail Bridge; they will not consider building a replacement bridge for at least 20 years. Tranz Rail's main concern was the impact construction may have on their rail movements. Holmes Group has investigated a further option for strengthening the stopbank at the Ava Bridge; this assumes a pumping station will be constructed at Black Creek and the training bank can be removed. This latest design will be further discussed with Tranz Rail before the consent application is lodged.

The public consultation programme on the draft consent applications was continued with a public meeting held in "The Dowse" on 5 December 2001. A meeting will be held in February 2002 for Moera residents to explain the proposed stopbank strengthening works at the Ava Railway Bridge.

Ministry of Education (MOE) and Hutt Valley High School (HVHS) representatives have accepted that the proposed river alignment and stopbank arrangement is the most sensible option of all technically feasible options considered. However, HVHS would lose one rugby field and three cricket pitches as a result of the proposed works. MOE/HVHS have requested alternative access to the Hutt Recreation Ground to relocate games. We are hoping to resolve the Strand Park land issues before consents are applied for.

Ava to Ewen Detailed Design

Detailed design commenced in December 2001. Two consultants, a river engineering specialist and a hydraulic modelling engineer, were appointed and tenders were called for a physical model study. A principal consultant to co-ordinate and complete the detailed design and manage construction will be appointed in March 2002. Detailed design of the river realignment is on target to be complete by the end of June 2002.

A \$340,000 tender received for the physical model study was rejected as the expected benefits do not justify the costs. We believe that a slightly conservative design, using the previous Ewen physical model study and Hutt River computational model outputs (rather than spending large amounts on a new physical model study), will provide an acceptable and more economic outcome.

Non-structural Measures

A draft scoping report for implementing non-structural measures was prepared and sent to Hutt City Council and Upper Hutt City Council officers for comment in December 2001. The scope will be finalised in February 2002, once their comments have been worked through. A set of generic district plan provisions, to be considered by the city councils, will be developed by June 2002.

4. Mangaone Stream Flood Hazard Assessment [Phillip Purves]

The draft flood hazard maps were presented at a public meeting on 29 November 2001, at the Te Horo Community Hall. The nature of the flood risk was explained and landowners were advised of the need to understand the difference between stream flooding and surface flooding in some areas, in order to corroborate the theoretical risk with known flooding problems. The response to our offer to further discuss these matters with individual landowners, before finalising the flood hazard maps, was overwhelmingly positive; around 30 landowners taking up that option. This process is now being worked through.

5. Planning and Development Services [Phillip Purves]

The following summarises the formal, written requests for information or advice attended to during November and December 2001:

	<u>Nov/Dec</u>	<u>YTD</u>
Requests brought forward	5	5
Additional requests received	24	85
Responses provided	26	87
Outstanding requests	3	3

Revised flood hazard maps are being prepared for the Otaki and Waikanae floodplains (following a review of the hydraulic models for these rivers), to account for the reduced flood hazard associated with the significant upgrades of the respective flood protection systems. The main upgrades being Chrystall's Bend realignment on the Otaki River and Kauri-Puriri stopbank on the Waikanae River. A draft scope and programme was presented to senior KCDC officers on 20 December 2001, for the development of suitable non-structural measures for inclusion in the KCDC District Plan. The measures will accompany the revised flood hazard maps. Recognition of residual risk (in areas behind major stopbanks built to the scheme design standard) is an important matter to be addressed.

Flood Protection Operations Manager : Geoff Dick

Report for Period Ending 31 January 2002

1. Manager's Comments

Spring and early summer was unusually wet and unsettled. The wet weather did not cause any significant flood events in the major rivers, but it did cause some significant flood events in the minor watercourses, most notably 20 and 10 year return period events in the Waiwhetu and Porirua Streams respectively.

The wet weather has caused some delay to maintenance programmes. Although flood damage was generally light, work crews were kept busy clearing debris arrestors and pulling fallen trees from streams. Grass growth on river berms has been exceptional, stretching mowing resources. However we appear to have now move into more settled "summer" weather.

2. Hutt River

We have completed the annual cross-blading programme in the lower river. We are planning some further work in the upper river in the autumn when fewer swimmers and families are using the river.

The Avalon berms bank edge improvements are now complete following the placing of the last two rock heads on the fences in early December. The willows planted over the last two winters to re-establish the buffer zone are growing well.

The Mabey Road team have completed a maintenance run of the Hutt River access tracks. Access tracks still open to the public suffer a lot of wear and tear during wet weather. Otherwise river users caused few problems over the Christmas/New Year holiday period.

3. Kapiti Rivers

The wet spring weather caused a series of minor flood events in the Otaki and Waikanae Rivers, the most recent event occurring on 27 December with a close to annual return period in the Otaki River.

Recent freshes have caused some minor damage in the Otaki River, most notably bank edge erosion at Hughes in the upper river and downstream of the Gas-crossing in the lower river. Approximately \$45,000 of in-channel (cross-blading) work was completed in December to maintain the channel alignment.

On 13 December we successfully cut the Waikanae River mouth. The job went well with relatively few concerns raised by local residents. A recent inspection confirmed that the mouth has stabilised well in its new location.

4. **Watercourses**

The Waimeha Stream mouth was cut on 14 January following a number of calls from local residents concerned about erosion of the dunes to the north of the stream. We also completed the annual stream clearing run in December.

Garry Baker and I attended a regular meeting of the Waitohu Stream Care Group on 1 December 2001. The meeting was an opportunity to advise the group of the upcoming flood hazard study, to update the group on ongoing stream maintenance work and to answer questions. The group has asked for a walkover of the upper reaches to be arranged.

Aquatic weed in the Waiwhetu Stream continues to grow! Workers from the Waiwhetu Marae removed five tonnes of weed from the Te Whiti Park reach of the stream just before Christmas and there is now little evidence of their efforts. It is now evident that we will almost certainly need to spray some reaches of the stream with diquat in the autumn.

5. **Porirua Debris Arrestor**

On 22 November 2001 a flood event of around 10 year return period occurred in the Porirua Stream. The event caused bank erosion of a generally minor nature over the length of the stream, and destroyed the Middleton Road (end of the Porirua Stream) arrestor. This allowed the stream to bypass the arrestor.

The debris arrestor was constructed in the late 1970's following the 1976 flood event. It is designed to stop large stream debris from washing downstream into the Willowbank and central Tawa reaches of the stream and causing blockages at bridges, and other waterway constrictions.

Design of the necessary repairs is underway, including native planting to reduce the visibility of the arrestor and to stabilise the Middleton Road bank edge. The Glenside Streamcare Group will be consulted over the design before it is finalised.

The estimated cost of the repairs is \$25,000, and it is proposed that this be funded from flood contingency reserves.

6. **2,4-D Contamination, Waikanae River**

Clean up of the 2,4-D contamination adjacent to the Waikanae River is now essentially complete. Warning signs adjacent to the site have now been removed.

Remaining tasks include notifying appropriate authorities and arranging the disposal of the contaminated soil. The total cost of the clean up including the investigation report, laboratory analysis, and removal and disposal of contaminated soil will be about \$25,000.

7. **Gravel Extraction**

In December Winstone Aggregates have resumed extraction from the lower Otaki River after a spell extracting from their land-based resource. The current quota of 40,000 cubic metres from the river only supplies about half of Winstones requirements.

Similarly Horokiwi Quarries Ltd are about to resume extraction from a beach in the vicinity of the Ewen Bridge, Hutt River. This new extraction license is working well.

GEOFF DICK
Manager, Flood Protection (Operations)

Parks and Forests (Strategy & Marketing)

Manager : Susan Edwards

Report for Period Ending 31 January 2002

1. Manager's Comments

Here and Now Filming Video

The *Here and Now* video we produced to promote our parks and forests to film producers and location managers, is in hot demand from non-film related people as well as film companies. We are still providing the video free to film companies but are charging non-film related people for copies.

Wetlands Database Project

We have employed Stephen Imre on an eight week contract to prepare a database of wetlands in the Wellington Region. This Biodiversity project is one of several being jointly worked on by the Environment, Wairarapa (Biosecurity) and Landcare Divisions. Stephen will collate and update existing information on wetlands in the Region, interview people who may have further information and, if he has time, get out to check the accuracy of the information on the ground.

2. Policy Development and Planning (Anne Manley, Victoria Owen, Philippa Crisp)

Parks and Forests Management Plan Reviews

Since December, Victoria Owen and Anne Manley have made good progress on the reviews of the Parks and Forests Management Plans. They have:

- publicly notified the intention to review the management plans and called for submissions (statutory requirements). Submissions close 22 February.
- written an information sheet and letters which went out in December to all our stakeholders and interest groups.
- published the information sheet on the web-site and prepared press releases on the reviews to help publicise them and encourage submissions.
- contacted all relevant TA's, Government Departments and Landowners setting up meetings to occur during February and March.
- commenced meetings with iwi, which will continue through to March.
- scoped and tendered a telephone survey of users and non-users.

- engaged a consultant who has started work on the concept plans for each Park.

Biennial Visitor Satisfaction Survey

Every second year we undertake a self administered satisfaction survey at some entrances to our parks and forests. The survey enables us to get feedback directly from users on their satisfaction with the environment and facilities in the areas. We will carry out the survey at the end of February. The results will be analysed and compared against previous survey results, then reported to the Committee in May or June.

3. Environmental Protection (Philippa Crisp)

Goat Control in the Wainuiomata/Orongorongo Water Collection Area

Professional hunters commenced goat control in the Wainuiomata/Orongorongo Water Collection Area during January. At the time of writing five deer, five pigs and eighty-nine goats have been killed. The Judas Goats have proven reasonably successful in helping the hunters locate groups of goats. Unfortunately two Judas goats had died, however, the hunters retrieved the collars, which will be put on other goats.

4. Community Connections (Ross Jackson)

Queen Elizabeth Park Coastal Dunes Group

Councillors Shields and Turver, along with staff, attended a public meeting to discuss management of the coastal dunes in the Park. Over 40 people were present, many of whom put their names forward to be part of a dunes care group. On 26 January we started the first project in the dunes; installation of enclosure plots to determine which pests are inhibiting native vegetation regeneration on the dunes.

We also have four *Regional Outdoors* events relating to the dunes:

- Two Maori history walks run in conjunction with Te Ati Awa ki Whakarongotai.
- An ecologist talking about coastal processes and dune restoration.
- Botanists teaching people about coastal dune plants.

Friends of Belmont Regional Park

Ross Jackson and Chris Wootton have continued to work with the Friends of Belmont Regional Park. The Friends have identified a range of tasks they want to achieve during the year, (e.g., increasing membership, preparing newsletters, having a newspaper column about the Park, planting days, etc). We will continue to provide them with support and technical advice.

5. **Marketing (Graham Laws)**

The *Regional Outdoors Summer Events Programme* is well underway. We have run 16 of the 40 events in this year's programme, although six have been cancelled due to wet weather. So far over 440 people have attended the events, averaging around 28 people per event. We have received good feedback and positive comments from the visitor feedback forms distributed after each event.

Both Maori history walks at Queen Elizabeth Park were well attended (around 65 people per event). Eighty-seven people attended the Rimutaka Incline Rail Trail walk. The Wonderful Water Walks have attracted around 25 people per event. The East Harbour Lighthouse and Lakes event planned for 10 March is already fully booked so we are looking at taking a waiting list with a view to repeating the trip in early April.

6. **Capital Works Projects (Graham Laws)**

Paekakariki Toilets, Queen Elizabeth Park

The contractor started constructing the new toilets at the Paekakariki end of Queen Elizabeth Park in November and should be finished by early March.

Rimutaka Incline Walkway Bridges

The contractor commenced restoration of the Ladle Bend Bridge and five 3-metre bridges on the Rimutaka Incline Walkway in January. The projects are due for completion during April.

Stratton Street Woolshed Extension

The contractor has started constructing the extension to the Stratton Street Woolshed for use as a classroom for the environmental education trails. The building will be completed in time for the first of the trails on 18 February.

SUSAN EDWARDS
Manager, Parks and Forests (Strategy & Marketing)

Parks and Forests (Operations) Department

Manager: Bruce Andrell

Report for Period Ending 31 January 2002

1. Manager's Comments

Wet December and January

Wet and windy weather has affected both park visitation and maintenance programmes. Both the *Regional Outdoors* events and the parks have had lower patronage than expected.

The extended spring-like conditions have increased the work (especially lawn mowing) required to achieve the quality measures for the asset maintenance service levels.

Contaminated Dump Site

An old tip site containing heavy metals, arsenic and blue asbestos, has been found at the Rimutaka Incline Summit Yards. The site has been covered with earth, fenced off and sign posted to prevent any risk to the public or staff. We are working with the Resource Investigations section of the Environment Division on the long-term treatment of the site.

Culvert Failure - Tunnel Gully

The culvert under the Mount Climie access road at Tunnel Gully failed during heavy rains on 11 December 2001, causing the road formation to collapse creating a safety problem. The site has been secured and the failed culvert removed. A replacement culvert will cost \$83,000. It will be replaced as soon as possible to re-open the road for users. The road services telecommunication sites on the Mount Climie ridge and provides access to the upper Pakuratahi Forest. The financial implications are being reported as part of the Six Month Review.

2. Environmental Asset Management [Bruce Andrell]

Monitoring Programme

The annual monitoring programme is progressing well despite the wet weather. Phenology (recording fruiting and flowering), bird surveys, seed fall monitoring and native Mistletoe surveys have been completed.

Biosecurity completed a possum population monitor at Dry Creek, Belmont Regional Park. The result shows a very high possum population (29.6 percent residual trap catch). A control operation is programmed for next financial year.

Victoria University Research Projects

The School of Biological Sciences completed its entomology research programme at the upper Orongorongo montane wetland site. This ends a six week period of insect trapping and sampling in this unique area.

A Lepidoptera (moth) research/study project is still currently underway and will be completed in the near future. A full report on this and the entomology research programme will be passed on to the Regional Council in due course.

Akatarawa 1080 Possum Control Operation

The eastern side of the Akatarawa Forest was aerially treated with 1080 in December (the western side was treated in June). The post operation monitor showed we exceeded the target five percent residual trap catch (RTC) by reducing the population to 2.3 percent RTC. Biosecurity staff have been investigating dog deaths, due to possum carcasses being washed into the Hutt River in an annual flood event. Carcasses may also have been washed up on Eastbourne and Petone beaches. There were no pet dogs killed in the treated area due to the risk management measures in place for the operation.

3. Western Sector [Matt Ballantine]

3.1 Battle Hill Farm Forest Park

Approximately 500 people attended the Alpaca and Llama open day in November. The event was run by the Alpaca and Llama Breeders Association and as part of the *Regional Outdoors* programme. Attendees enjoyed viewing the animals up close and associated products they provide.

Representatives of the Lonely Planet Guide visited Battle Hill Farm Forest Park, intending to add it to the book. The Park is developing a reputation as a good camping site for travellers.

Despite the weather, Battle Hill had good numbers of both campers and day-trippers during the Christmas/New Year period. Many people said they had decided to stay closer to home this year and to try a local spot. At one stage, the Ranger had to open another paddock to provide more room for the campers.

Thistles have been a real problem this year with the extra long growing season, creating extra work for staff to control them. The same weather conditions have meant that staff have been able to carry on planting in the revegetation plots into the New Year.

3.2 Belmont Regional Park

The Korokoro Fun Run was held on 9 December attracting over 370 entries, despite wet weather on the day. The Hutt Valley IHC runs the event, which utilises the Cornish Street and Belmont Trig tracks.

We have been assisting the Friends of Maaroa Roa promote possum control on land neighbouring the Park. We provide the group with Timms traps (on loan).

Maintenance focused on re-opening the areas affected by the 22-23 November 2001 floods. The tracks in the Korokoro Valley were the hardest hit with several footbridges and parts of the track being washed away. Roads were also damaged in Dry Creek and Hill Road. All areas re-opened by Christmas, however, significant repairs are still required on tracks in the Korokoro Valley to reinstate them. This is reported in the Six Month Review.

A series of small boardwalks were constructed adjacent to the Woolshed to form a short loop track through bush for the environmental education programmes.

3.3 **Queen Elizabeth Park**

To date we have had three *Regional Outdoors Summer Events* in Queen Elizabeth Park. The Wetlands Walk was held before Christmas in poor weather with twelve people attending it. The Maori history walk was held on a wonderful sunny Kapiti day. Sixty-five people took part in the walk around Whareroa Pa site to gain insight into life for Maori living in the area prior to 1900. The family sunset walk was cancelled due to bad weather.

The Urupa fence surrounding the cemetery at the Paekakariki end of the Park was replaced in consultation with the Urupa Trust.

We have undertaken the yearly maintenance work on the play equipment at the Paekakariki end of the Park.

The pohutakawas that line the sides of the picnic areas and roads at Paekakariki have been pruned to improve access for camper vans and allow picnickers to park in the shade.

Three new seats have been installed in the northern section of the Park.

3.4 **Whitireia Park**

Stock has been walking around the end of the new fence protecting the Onepoto Stream at low tide. We have obtained resource consent and will extend the fence into the Porirua Inlet.

4. **Eastern Sector [Fraser Oliver]**

4.1 **Akatarawa Forest**

Dean Hearfield assisted Kapiti Coast District Council at the emergency operations centre during New Zealand Golf Open. Dean is trained and experienced in incident management. His skills are valued by other agencies in the Region.

Windthrown trees were removed in the Hukinga and Valley View Forests. Prisoners continue cutting vegetation along Cannon Point Walkway. Flood Protection completed the ford to provide reliable access to the baches and adjoining forest from Bulls Run Road. Security gates have been upgraded at Clearys and Perhams Roads, McGhies Bridge and 257 Road.

4.2 **Pakuratahi Forest**

Scheduled work has included:

- upgrading security gates at Maymorn and Station Drive;
- metalling sections of Tunnel Gully and Rimutaka Incline Walkway;
- sowing and fertilising grass in the Rimutaka Summit Yards;
- hydro-mowing Station Drive, Rimutaka Incline Walkway (to Ladle Bend) and Maymorn;
- grading Rimutaka Incline Walkway;
- removing windthrow trees, Summit Yards;
- Rimutaka prison labourers assisting with pot hole filling, releasing douglas fir and clearing debris from the Summit Yards on the Rimutaka Incline Walkway; and
- removing vegetation from two historic bridges to prevent damage to historic stone abutments and upgrading the handrails on both of these structures.

4.3 **Kaitoke Regional Park**

Since the release of the Lord of the Rings film the *Rivendell* site has become a popular spot. An interpretation panel has been placed at the site.

Three events have been held as part of the *Regional Outdoors* Programme. A nature treasure hunt was held for around 35 children in conjunction with the *H²O Xtreme* programme, run by the Upper Hutt City Council.

There have been several incidents of reckless driving in the Park. Offending drivers were evicted. In two cases, police have prosecuted and others have been served trespass notices.

Maintenance focused on getting the Park prepared for the busy summer season and repairing vandalism (which has been continually occurring). Electrical fittings and plumbing infrastructure have been inspected and repaired where necessary. Plantings in the campground have been pruned and mulched. Water tables on all tracks and roads have been checked and maintained where necessary.

4.4 **Wainuiomata**

General ranging duties have continued throughout the catchment and unauthorised public access has been minimal.

Two catchment tours were held over November and December, both of which went well. Again, the public comments were excellent.

BRUCE ANDRELL
Manager, Parks and Forests (Operations)