

# caring about you & your environment

**Report 01.832** 23 November 2001 File: Y/21/1

Report to the Rural Services and Wairarapa Committee from Colin Wright, Divisional Manager, Wairarapa

# **Divisional Manager's Report**

# 1. Purpose

To inform the Committee of current activities and provide information of interest since the previous meeting held on 4 September 2001.

## 2. Divisional Matters

#### 2.1 New Triennium

A welcome, on behalf of the Wairarapa Division staff, to both new and returning members of the Committee.

In my view, the Rural Services & Wairarapa Committee is a little different to the other standing committees of the Council in that it has responsibility for a broad range of activities and the committee membership includes several appointees to add another dimension to the discussion.

I trust that you will find this triennium to be interesting and satisfying.

My apologies for the volume of paper in this order paper. Because of the elections, there has not been a meeting for about 3 months.

Please ask the relevant manager or staff member if, at any time, you require further information or an explanation on any aspect of a report or our activities.

# 2.2 Combined Councils Meeting

For information, I note that the councillors from the three Wairarapa district councils and the two Wairarapa regional councillors are meeting on 13 December. These combined meetings take place at

approximately six monthly intervals and they are a very useful forum to receive briefings and to discuss items of mutual interest.

## 2.3 WairarapaNZ

WairarapaNZ is the interim name for the new organisation formed recently by the merger of the Masterton Business Enterprise, the South Wairarapa Enterprise Board, and Tourism Wairarapa. The combined organisation has been discussed for some time and it has now become a reality.

The Wairarapa Division has contact with this organisation on a regular basis, particularly at present in relation to the Wairarapa irrigation study and the regional partnerships economic development programme.

# 2.4 Wairarapa Irrigation Study

Stage 2 of this comprehensive investigation is now getting underway. The report from Stage 1 identified those areas in the Wairarapa Valley where water resources were such that irrigation is not a future option for farmers unless some form of community irrigation scheme is developed. The report put forward three possible water harvesting scheme concepts that could supply water to 34,500 hectares in total.

The first part of the Stage 2 investigation is to examine the likely future demand for water in the suggested areas so that the design and estimated costs of the scheme concepts can be developed and refined. The cost of the Stage 2 study is being largely met by central government, but the four councils in the Wairarapa have also been asked to make a contribution. The regional council has been asked to make a contribution of \$30,000 and this will be submitted to the Policy & Finance Committee at either the 6 months review or for next year's annual plan.

## 2.5 Staff

Two staff in the Wairarapa Division have recently taken part in significant undertakings outside of work. Brenda Clapp was a member of the New Zealand mountain biking team that competed in the World Championships and other international events in the USA. Since her return Brenda has broken her collarbone in a fall!

Kim Broad has been playing the part of Scrooge in the Royal New Zealand Ballet Company's production of 'A Christmas Carol' which is currently touring throughout the country. Kim is a retired ballet dancer who now kills possums and other animal pests as part of his work with the Council.

Two multi-sport teams from the Division competed in a recent corporate challenge in Wellington and again won the governmental section.

# 3. Operations Department: (Ian Gunn)

#### 3.1 Farm Environment Awards

Following representation by the Farm Environment Awards Trust from Waikato, a Farm Environment Award programme has been developed for the region. Based on the very successful Environment Waikato model, entries are now being sought from landowners. Awards will be made in five categories, and an overall winner will be announced from the category winners.

Entries will be open until 7 December 2001, judging will take place through January and February 2002, and an awards ceremony and field day will be held in April 2002.

Currently three Regional Councils are participating in the awards, and a further six Councils are to be on board next year. With this number of Councils participating a national award is planned for May 2003.

# 3.2 Akura Nursery Sales

After a slow start to the season, Akura has traded at very good levels that have it well placed to achieve budgeted surpluses. Open grown tree stocks, primarily made up of Pinus radiata, are up 8% on last year's sales. Native trees and shrubs are up 20% on last year's sales.

Pole numbers are down slightly, a result of previous dry seasons and the larger than normal replacement programme. Overall, the total number of trees sold was 577,000, up 4% on last year's totals.

The season over the last two months has been very favourable. Rainfall through October has been close to annual averages and good rain has fallen through the early part of November. The new irrigation system will be commissioned prior to Xmas. Soil moisture levels are being monitored on a weekly basis and presently they indicate that levels are more than adequate for maximum growth. A few warmer days would certainly boost the growth rates.

## 3.3 Catchment Scheme Asset Management Plans

The six Catchment Schemes administered by Council on behalf of the various ratepayer groups are to have Asset Management Plans prepared. The Schemes are scattered throughout the Wairarapa hill country and are focused on soil conservation and river management issues.

Each Scheme Manager is to prepare a list of current assets and a field assessment sheet will guide staff in their assessment of status, condition, life expectancy and replacement cost. Two of the very early Schemes covering the Whareama and Awhea catchments will pose a significant challenge as there have been a range of cost sharing policies since the Schemes were first prepared during the 1950's.

## 3.4 Silviculture

The pruning and thinning programme at Stoney Creek is up to date with 210 hectares of contract pruning completed (target for year is 500 hectares) and 130 hectares of thinning also completed.

## 3.5 Logging

The effects of lack of silviculture on an exposed site in the old crop at Hiwinui have been well illustrated in the October logging returns. 73% pulp reduced the Net Stumpage to \$3.75 per tonne for the month. This had the effect of reducing the average Net Stumpage to \$18.09 per tonne for the year to date.

This can be compared with 25% pulp to end of September with a Net Stumpage of \$21.15 per tonne.

Stands that have received timely pruning and thinning generate 10–12% pulp and a Net Stumpage of at least \$50 per tonne.

#### 3.6 Video

Final editing of the video showing the background to the Stoney Creek Soil Conservation Afforestation Project and progress achieved in the last 10 years will be completed this week.

## 3.7 Upper Ruamahanga Scheme Review

The review of the Upper Ruamahanga River Management Scheme and rating classification is progressing well. The review team has been working closely with two Steering Committees representing the Mount Bruce to Te Ore Ore, and the Te Ore Ore to Wardells sections of the Ruamahanga River. Ratepayer meetings to consider the adoption of new Schemes covering these sections will be held during December.

A new scheme to cover the remaining Wardells Bridge to Waiohine River section will be developed in consultation with a third Steering Committee over the period from January to March next year. This will ensure there is sufficient time to set up each of the new Scheme rating classifications for next financial year.

## 3.8 Te Whiti Stopbank Upgrade

The preliminary design and landowner consultation for the Te Whiti stopbank upgrade has been completed. Further work is needed before tenders are sought, including the preparation of a firm estimate, apportionment of benefit and cost, final landowner consultation, and the obtaining of Resource Consents.

Funding provision for this upgrade has been made during the 2004/05 and 2005/06 financial years. However the Te Whiti community is anxious for the work to be completed as soon as is practicable, and a

request for an earlier completion will be made after the investigation is finalised.

#### 3.9 River Scheme Asset Revaluation

Satisfactory progress is being made with the revaluation of river scheme assets in line with the Local Government Amendment Act's new Financial Reporting Standard (FRS-3). Scheme asset valuations must be updated, certified by an independent auditor, and incorporated into the Council's asset register before 31 March 2002.

#### 3.10 General River Scheme Maintenance

The river gangs have been busy over the past few months planting and lopping willows. Lopping reinvigorates older willows and provides additional bank protection. There is no evidence of willow sawfly in the river systems to date.

## 3.11 Pump Drainage Scheme Asset Management Plans

Ranjan Cyril, Manager of the Lower Wairarapa Valley Development Scheme, has convened one meeting to date with the ratepayers. The ratepayers of the Onoke pump drainage scheme have endorsed the Council's approach to the management of this pump drainage scheme. Further meetings are planned with the other four pumped drainage schemes.

#### 3.12 Technical Services Activities

Activities completed include:

- Upper Ruamahanga Classification Scheme work on the upper and middle sections.
- Gravel Licence System processing of gravel returns.
- 5 yearly resurvey of the Mangatarere Stream.
- Resurvey at Circle Stream, Stoney Creek.
- Completion of 6 monthly cross-section surveys at Tauherenikau, Waiohine, Upper Ruamahanga and Waipoua Rivers.
- Work on WELA maps.
- Work for external customer enquiries for maps and information.
- Bovine Tb mapping.
- Computer draughting work on Soil Conservation farm plans.
- Completion of the Wairarapa rivers swimming pamphlet.
- Donalds Creek sign completed and soon to be erected at Harrison Street, Featherston.

# 4. Biosecurity Department: Wayne O'Donnell

## 4.1 Wellington City Programme

Staff are currently undertaking maintenance inspections on a random selection of properties where pest plants have previously been cleared under the Wellington City Programme. Of the 100 inspections completed to date, 85% were found to be re-infested. Most were of a minor nature involving juvenile plants. This would indicate a reasonable level of control by the occupiers with their efforts generally preventing plant development to the seeding stage. Eight Notices of Direction have been issued to property owners where mature plants were found.

Of the 121 initial inspections carried out in Wilton during October, 17 Snakefeather (Climbing Asparagus) sites were located. Although control of this species is not a legal requirement until the implementation of the Proposed Pest Management Strategy, staff are encouraging occupiers to clear sites. The level of co-operation has been very good to date.

# 4.2 Cape Tulip

The inspection and clearance programme of recorded sites of Cape Tulip has been completed. Staff completed this work under contract to AgriQuality NZ who are nationally responsible for the control of Class A Plants. Eighteen sites were inspected with 71 plants located and destroyed.

#### 4.3 Pest Plant Accord

Warrants under the National Pest Plant Accord have been issued by MAF to four staff. The Accord replaces the National Pest Plant Surveillance Programme, which operated from 1996 to June 2001. This programme attempted to nationally prohibit the propagation, sale and distribution of 103 plant species. Those regional councils and unitary authorities that included the national surveillance list in their pest strategies were responsible, using education and inspections, to ensure that nursery and plant retail outlets did not propagate or stock the listed species. Changes to the Biosecurity Act precluded the continuance of the National Surveillance Programme. Nationally it was agreed that a similar programme should be implemented. An initial list of 92 species has been declared Unwanted Organisms under the Biosecurity Act. MAF are responsible for such declarations, and have contracted the inspection and enforcement responsibilities to participating regional councils and unitary authorities.

## 4.4 Boneseed

Recent surveys of the South Wairarapa Coast indicated a higher level of Boneseed infestation than anticipated. Boneseed is listed as a Containment Plant in the Proposed Strategy, with Council staff being responsible for organising control in the Wairarapa. A start has been made to clear infestations at Ngawi, focusing on scattered plants on the hills behind the village and on a number of sections within the village.

#### 4.5 KNE

A contract has been let to control designated pest plants under the KNE programme in the East Harbour Reserve. The \$6,270 contract is the second involving pest plant control at East Harbour and extends the 30 metre buffer zone between private land and the Reserve from York Bay in the north to Days Bay.

Tenders are currently being called for maintenance control on two initial KNE projects completed last year. This work is at the Otari Reserve and on the banks of the Otaki River downstream from the Otaki Gorge.

# 4.6 Biological Pest Plant Control

Landcare Research Ltd. have supplied two species of biological control agents for release. One release of Broom Psyllid was made at a site in Wainuiomata. This brings the total number of releases of this agent to 13 since 1996. The other agent supplied was Mist Flower Gall Fly. This is the first release in the Region of this agent and was made in Lower Hutt City.

#### 4.7 Communications

Biosecurity staff arranged displays at the Home and Garden Show at the Westpac Trust Stadium and at the Carterton A and P Show. Other recent public education opportunities arranged by staff include:

- A 30 minute interview on Access Radio
- Address to over 100 members of the Kapiti Horticultural Society
- Two articles in the Evening Post on Snakefeather (Climbing Asparagus)
- Address to the Kapiti Cage Bird Society
- A range of unmanned displays at various venues
- Advice on pest plant control to eight Care Groups.

## 4.8 **Bovine Tb Vector Control Update**

# (1) Contracts

Sixteen contracts covering an area of 133,500 hectares have been tendered to date. Work has commenced in 12 of the contracts. Unfortunately, some contractors are struggling with the lower residual trap catch performance targets.

The number of tenders per contract is noticeably down on previous years. This declining interest has been occurring for the last three

years. The Council has received an average of 2.2 tenders per contract, down from 4.9 in 2000/01.

## (2) WRC Bovine Unit

The Bovine Unit has completed the following operations up to the end of October.

Operation	Risk Strata	Performance RTC	
Tinui	High	1.9%	
Tinui	High	1.5%	
Mt Bruce-Waipoua	Medium	0.0%	
Mt Bruce-Waipoua	High	0.0%	
Whangaehu	High	0.0%	
Otaki buffer	High	1.4%	
Te Wharau	High (4 strata)	0.6%	
Waingawa	Medium	0.7%	
Waingawa	High	1.7%	
Bideford aerial	High	0.6%	

High risk strata have a 2% performance RTC target whilst the medium risk strata target is 5%. Individual line targets also apply.

# (i) Aerial Control Completed

Aerial control using 1080 pellets has been undertaken in the following areas:

Owahanga	1,200 hectares	1.5kg feed/toxic (trial)
Bideford	700 hectares	2.0kg feed/toxic
Castlehill	1,300 hectares	2.0kg feed/toxic

# (ii) Aerial Research

Further aerial control has been programmed for the Tararua Ranges (5,300 hectares) and the Rimutaka Ranges (11,700 hectares) prior to Christmas.

In each operation a trial area will be set aside to undertake further low sowing rate research at 1kg feed and toxic per hectare.

## (iii) South East Wairarapa – Stage 1

A number of occupiers have expressed opposition to the use of 1080 poison on their properties. Investigations have occurred to identify any cost variations by using private contractors. If additional costs arise through tendering then agreements with landowners will be required to ensure these costs are paid.

Operational progress in Stage 1 has been disappointing due to the very dry autumn and winter. Stock feed supplies have been very low and landowners have had difficulty making land available.

# (3) Animal Health Board Technical Review – Preliminary Outcomes

The Animal Health Board have verbally advised that not all aspects of the proposed 2002/03 work programme, submitted at the September Technical Review, will be accepted. The budget proposed by Council staff was greater than that submitted in the original 12-year plan. The Board indicated that the combined budgets submitted by vector managers nationwide was \$9M greater than the plan. The Council has been advised to reduce the 2002/03 Technical Review budget by \$1.2M. Details are -

- (1) South East Wairarapa Stage 2 will not be approved until the 20003/04 year. There are 7 infected cattle and deer herds within this operation as at 30 June 2001. The Council had programmed this operation for the 2002/03 year when the Board's original 10 year plan was proposed. Deferment of this operation will cause some anxiety amongst South Wairarapa landowners who have been waiting many years for vector control to commence. The incidence of Bovine Tb in this area has been increasing steadily in recent years.
- (2) Control within Moores Valley (Wainuiomata) has also been postponed for the 2002/03 year. No indication has been given for its re-introduction. At a pre-technical review meeting, the AHB had requested that this operation be scheduled into the 2002/03 year.

However, the reductions above will not impact on the LTFS budgets as both the operations described were brought forward for the Technical Review proposal in an effort to further reduce reactor numbers.

#### 4.9 Key Native Ecosystem Management

(1) The first phase of the large East Harbour (2,375 hectare) possum control operation was completed on 13<sup>th</sup> October 2001. This consisted entirely of a trapping operation by an external contractor and resulted in the capture of 8,987 possums, 20 mustelids, 1,114 rats and 15 feral cats. The performance target was a residual trap catch (RTC) index of 5% but resulted in a credible 1.9% RTC or an indication that approximately 93% of the possum population has been removed. The equivalent of 3.8 possums per hectare were culled.

The next priority is to address the possum re-invasion issue and to instigate control measures in the areas close to urban housing where the contractors were not permitted to undertake control. The Eastbourne based MIRO volunteers have already

recommenced their programme to protect the important native ratas in the area.

The Biosecurity Department will work with Hutt City Council Leisure Services Department to activate possum buster community groups to assist with possum maintenance within and near to urban areas. The Wainuiomata boundary is the most critical.

There has been a substantial amount of positive publicity associated with this project befitting a programme that aims to protect endangered and regionally significant flora and fauna from pest plants and animals.

(2) Within Wellington City, the KNE focus has been on preparing bait lines within the new areas of Wrights Hill and Karori Park. The treatment of these two areas will complete the possum control zone in the City Green Belt that stretches around the western hills from Johnsonville to the Town Belt near Mitchelltown. Maintenance of other city KNE sites (Johnston Hill, Otari-Wiltons Bush, Huntleigh Park, Khandallah Park and Johnsonville Park) are being undertaken by service contract.

The large Miramar Peninsular possum operation has been deferred until the 2002/03 financial year. Biosecurity staff are currently working with Wellington City personnel to develop a 10-year pest animal control programme.

(3) Maintenance possum control is also being undertaken at KNE sites throughout the Kapiti Coast, Porirua, and Hutt Valley areas. The Upper Hutt Branch of Forest & Bird volunteers are currently working in the Keith George Memorial and Silverstream Reserves. Many people have commented about the apparent improvement in the health of these two reserves since the possum numbers have been maintained to low levels.

#### **4.10** Wasps

- (1) Each year since 1990, a report has been prepared entitled "Wasps in the Wellington Region". The report summarises information about wasp nest types, location, time of year and frequency of occurrence from registers supplied by Territorial Authorities, Department of Conservation and the Regional Council service centres. Monitoring regional wasp trends on an annual basis provides some understanding of wasp population dynamics and may assist with future biological control programmes. Of note, for the 2000/01 financial year is that:
  - The wasp densities on the Kapiti Coast were the lightest recorded.
  - No German wasp nests were discovered in Hutt City.
  - Common wasps were the most prevalent on the Kapiti Coast.

- The number of calls to the Regional Council for assistance with wasps from Wellington City residents almost doubled from the previous year.
- Overall, the wasp season for 2000/01 was of a low nuisance value.
- (2) A new wasp bait is being trialled by Landcare Research NZ Ltd at the Nelson Lakes Rotiti Nature Recovery Project area. The bait product is called X-stinguish and is showing great promise. X-stinguish contains a protein base and the toxin fipronil. The bait has also been sent to a number of countries around the world for testing. Once results come in from overseas and a final bait formulation has been selected and registered, the new bait will be available for use by anyone with wasp problems.

Most current control of wasps is reliant upon discovering and destroying wasp nests. A wasp baiting strategy relies on the toxin being carried back to nest sites and is more proficient at reducing or eradicating wasp colonies over a wide area regardless of terrain or cover type.

# 5. Planning & Resources Department: (Steve Blakemore)

## **5.1** Environmental Incidents

Date	Incident	Details
12/09/01	Spray drift from neighbouring apple orchard, South Wairarapa	Orchardist undertook to comply with Air Plan for future applications.
12/09/01	Dairy effluent being discharged to creek, Carterton.	Abatement notice and infringement notice issued
13/09/01	Odour from neighbouring furniture manufacturer.	Furniture manufacturer has agreed to relocate varnishing process.
24/09/01	Spray drift from neighbouring orchard, South Wairarapa.	Orchardist spoken to undertook to comply with the notification requirements of the Air Plan in future.
25/09/01	Dairy effluent dirtying creek, Carterton.	Found to be overflow from field drain. Farmer required to make changes to effluent management.
30/09/01	Dust from neighbouring industrial site	On-going problem site. Company are commissioning a water cart for dust suppression.
1/10/01	Dust nuisance from neighbouring industrial site, Masterton.	Under investigation
1/10/01	Dead horse in drain as result of accident	Removed by owner
1/10/01	Dust from neighbouring industrial site causing nuisance, South Wairarapa.	Caused by storm conditions. No further action taken.

	· · · · · · · · · · · · · · · · · · ·	T
3/10/01	Landowner concerned about either	Under investigation
	diversion or taking of water from stream	
	near Masterton	
8/10/01	Resident in Masterton rang in concerned	Found to be diesel from bus yard, company
	about the pollution of the Makoura	are required to make changes
	Stream	
8/10/01	Resident in Greytown expressed concern	Irrigation take expired last month. Consent
	about lowering groundwater levels due to	holder has been advised to apply for resource
	an irrigation take down the road	consent including pump test by end of
		October. Resident satisfied with WRC
		approach to take and general monitoring
		undertaken in the area.
12/10/01	Car abandoned in Waiohine River,	Removed by Wellington Regional Council.
	Carterton	
20/10/01	Suspected diesel spill in water race,	No signs of diesel detected during inspection,
	Carterton	water samples of two areas of scum sampled.
23/10/01	Stream running through residential area	Suspected someone washing paintbrushes.
	flowing black when usually clear.	Could not locate source. Stream running clear
		the next day.
24/10/01	Dairy effluent discharging to creek,	Abatement notice issued
	Carterton	
5/11/01	Dead horse in creek, Carterton	Not possible to be removed. No further action
		taken.
7/11/01	Abandoned cars on stopbanks	Referred to Masterton District Council
9/11/01	Car dumped in riverbed, Gladstone	Removed by Wellington Regional Council
12/11/01	Dumped car in riverbed	Under investigation
14/11/01	Chemical pollution in Kuripuni Stream,	Stream clear when investigated, unable to
	Masterton	take further action.
15/11/01	Stream discoloured	Stream discoloured from upstream sediment
		inflow, under investigation
15/11/01	Resident in Masterton complained about	Under investigation.
	odour and nuisance from a domestic fire	
	in the neighbour's property.	
L	I.	

# 5.2 Enforcement

# Abatement and Infringement Notices

- Preventative measures still to be actioned by owner to prevent future diesel spills from industrial premises contaminating a water race. The company has been asked to provide a firm timetable for upgrading. The Infringement Fee of \$1000 has been paid.
- The hearing of a defence lodged against an infringement notice, issued in relation to unconsented wild flood irrigation, continues to languish in the courts. At a previous callover, a District Court Judge determined that the matter had to be heard before a District Court Judge who was also a Judge of the Environment Court. Current indications are that the matter may be heard in February, a year since the "instant fine" was issued.
- ° Two abatement notices have been issued to cease discharge of dairy effluent to streams and Infringement Fees applied. A notice was issued to

clean up rubbish dumped on a riverbank and an infringement fee applied. A notice has also been issued requiring compliance with the requirement to record and provide irrigation records to Council.

#### **Prosecutions**

- Hearing of a prosecution against a dairy farmer for the alleged discharge of dairy shed effluent by direct pumping into a stream has been transferred to the Environment Court, Wellington. A hearing date has yet to be set.
- o Informations have been laid against another dairy farmer for alleged discharge of dairy shed and feed pad effluent to a stream by direct pumping.

#### **5.3** Notified Consents

JNL –air discharge variation	Previous application for variation withdrawn. Awaiting		
	revised application. No recent action by the applicant.		
Martinborough sewage – discharge	Pre hearing meeting held. Applicant has requested it to		
	be placed on hold to allow for updating of AEE.		
	Hearing likely in February.		
Featherston Sewage – discharge	On hold awaiting full assessment of effects and		
	consultation. Agreed lower priority than		
	Martinborough.		
Masterton Sewage – discharge	On hold. Progress with rapid infiltration trials held up		
	by landowner negotiations. No recent action by the		
	applicant.		
Owahanga Station – coastal	Meeting held with owner's representative to clarify		
	scope and requirements. No further progress.		
M&C Moran - take from Lake	Lake Approval sought at this meeting.		
Wairarapa			
Genesis Power – 7 consents – Kourarau	Approval sought at this meeting.		
QE Park Lake Masterton - 4 consents	Notified with no submissions received. Under process.		
S McLachlan – Rathkeale –underground	Hearing held and consent granted. "Wildcard" appeal		
takes	received by non-submitter outside of timeframe.		
Water Races - 6 - Masterton, Carterton	on Applications received for all races.		
and South Wairarapa District Councils	° AEEs assessed for Masterton races with further		
	information requested.		
	° Carterton full AEE yet to be received.		
	° South Wairarapa AEES are currently being assessed.		

# 5.4 Resource Management Charges

Annual resource management charges have been forwarded to consent holders together with a newsletter.

#### 5.5 Riddiford Counterclaim

In response to legal action taken in April to recover \$787.48 outstanding resource management charges for Mr Riddiford lodged a counterclaim with the courts. His claims relate to existing stopbanks on Ruamahanga Farm and the Waihenga river recording site. Although Mr Riddiford has paid the annual charges in full he has not withdrawn his counterclaim.

In the District Court on 21 November, Mr Riddiford was ordered to pay the Council costs of \$350 for late filing of documents and ordered to comply with mutual discovery of documents at Masterton Court before 12 December. The matter is before the Courts again on 19 December.

# **5.6** Coastal Strategy

Three meetings have been arranged with key stakeholders (including all major coastal landowners) on 27, 28 November, and 3 December, to explain the intentions of the strategy. Feedback has been requested on the proposed process and the draft vision. A discussion paper leading to wide public consultation will then follow.

#### 5.7 Maori Activities

A very useful meeting was held with Wellington Historic Places Trust staff. This established some very useful contacts in relation to waahi tapu sites, archaeological requirements and heritage. A representative of Rangitaane o Wairarapa also attended.

Non-notified consent and capacity building contracts are now in place with both iwi.

A water monitoring workshop was held in Otaki with participation by Resource Investigations staff.

#### 5.8 Tsunami Hazard

Work commissioned by the Council and the presentation by the study team that investigated the recent Chile tsunami, has focused attention on this hazard in relation to the Wairarapa coast. Tsunami response is being publicised by Civil Defence Officers, with emphasis on the need for quick movement to high ground when a strong earthquake is felt.

Consultants are currently being sought by Council to identify the provisions currently applied elsewhere for tsunami hazard. This should document the planning, physical, technical and other options that can be used to provide for this hazard in the built environment.

## 5.9 Hydrology

## Rainfall

In contrast to an extremely dry September, October and November have been wetter and cooler months. October figures were:

Site	Location	Oct 2001 (mm)	Average Oct	% of
			(mm)	average
Angle Knob	Tararua Ranges	665	724	92
Alloa	Middle Valley	120	96	125
Tanawa Hut	Eastern Hills	113	94	120

The above average figures for the valley and eastern hill country, compared to the Tararuas reflect the more southerlies and easterlies experienced, and the lack of north-westerly conditions.

Looking at the longer term trends, for the eastern hill country the annual cumulative total for the year is between 60 - 70% and for the Tararuas 75% of normal.

Over the last 10 months (Jan/October) Alloa has had 556 mm, ranked lowest over this period since records began in 1963. For the same period Tanawa hut had 755mm, ranked 3<sup>rd</sup> lowest since 1956. (697mm 1998, 742mm 1994) Angle knob is ranked 5<sup>th</sup> lowest (4254mm) and has not been this dry since 1987 (4095mm).

#### Rivers

The rivers in the Wairarapa for October came back somewhat from the very low flows experienced in September. Mean flows were up, but still below their average for this time of year as shown for two representative sites:

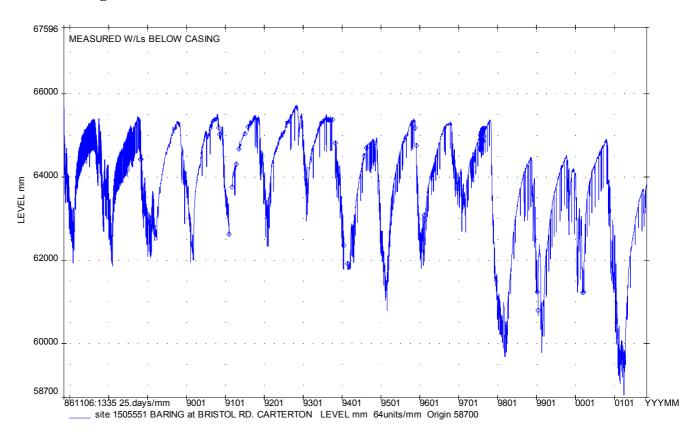
Site	October 2001 Flow (m³/s)	Average October Flow (m <sup>3</sup> /s)	% of Average
Waihenga	72.6	108.0	67
Waiohine	23.5	33.9	69

#### **Floodwarning**

	October	Financial Year to Date	Previous Year to Date
No. of events	0	2	9
No of Lists Issued Warnings	1	13	69

No floodwarnings were issued during October, though warnings were issued to farmers when water was back flowed from Lake Onoke into Lake Wairarapa as a consequence of a blocked Onoke Outlet. To date during November, some warnings have been issued on two occasions, in response to moderate freshes in the Ruamahanga and Waiohine Rivers.

# **Underground Water**



The above plot identifies trends in groundwater levels from the telemetered site at Baring's (east of Carterton – Parkvale #3). The data depicted can be used to identify current trends.

The Parkvale aquifer at this site is currently 1m below average to date, and also at its lowest recovery level since monitoring began in November 1986.

# 6. Recommendation

That the report be received and its contents noted.

Colin Wright Divisional Manager, Wairarapa