

 Report
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Committee Rural Services and Wairarapa Author 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 3 March 2003.

# 2. Divisional Matters

## 2.1 Farm Environment Awards

The presentations event for the second year of the Farm Environment Awards will have taken place by the time of this Committee meeting and the winners of the various categories known. Again, this event has been very successful in raising the awareness of sustainability amongst the rural community.

Like last year, the success of this event has been due to the efforts of a large number of organisations and people. However, mention must be made of three particular key individuals who make this event run as smoothly as it does. They are Dave Cameron from the Regional Council, Adie Long, Awards Co-ordinator, and Jamie Strang, Judging Co-ordinator.

# 2.2 Irrigation Study

The consultants working on Stage 2 of the Wairarapa Irrigation Study have reported back on their preliminary conclusions. Essentially the study is looking at four possible irrigation scheme areas supplied from both river off-takes and storage lakes.

Scheme areas have been modified a little from the earlier concepts and a promising new storage lake site has been identified.

I will give a brief presentation on the concepts at the Committee meeting.

# 2.3 Farm Forestry Conference

The Annual Farm Forestry Conference was held in Wellington recently. Cr Shields spoke at the opening dinner and the Council provided some assistance with arrangements. The Farm Forestry Association is one of the avenues through which our staff promotes sustainable land use within the Greater Wellington Region.

# 2.4 Recognition System

At the last Committee meeting in 2002, Cr Turver asked that the Committee take a leadership role in initiating a system to acknowledge the worthy contribution by members of the public to Council activities. Cr Turver gave the example of two Kapiti people who have eliminated many hundreds of magpies.

This subject has since been considered by managers and more recently by the executive management team. The consensus view was that there are already wider recognition systems in existence that are very suitable for recognising the efforts of individuals involved with Council related activities. Our experience is that there are often difficulties in finding sufficient nominations for these awards. An example is the DoC Green Ribbon Awards which are currently open for nominations.

In addition, various other forms of recognition are given to suit the occasion. For example, the Biosecurity Department give KNE branded polo shirts to volunteer group members who assist with specific projects. On other occasions, certificates are specifically prepared and given to individuals.

Accordingly, it is suggested that there is insufficient need for an additional recognition system.

# 2.5 Sustainability

The Council's goal of a sustainable region has resulted in some positive internal initiatives within the Division in the past year. I considered it appropriate to outline some of these -

- Some months ago we introduced a comprehensive recycling scheme in relation to our rubbish. This includes a paper recycling bin under each desk and no rubbish tin. Any non-recyclable rubbish has to be disposed of at centrally located rubbish bins. Our rubbish to the landfill has been reduced by 60% and our recycling contractor has commented that it is the best recycling scheme in Wairarapa commercial premises.
- The "carbon footprint" for the Wairarapa Division has been calculated at 350 tonnes per year of carbon gases. This is mostly from the use of fuel in our vehicles with a limited contribution from other uses such as electricity. Accordingly, we have been examining

how we can improve the fuel efficiency of our vehicles and of our drivers!

• Various initiatives have been taken to save paper, e.g. double siding, and electricity, e.g. energy efficient bulbs.

These moves have been useful in focusing staff attention on sustainability and getting them thinking about what this means. The various initiatives have also been useful in terms of saving money.

# 3. Operations Department: (lan Gunn)

# 3.1 Sustainable Farming Fund Field Days

Two projects funded by the MAF Sustainable Farming Fund held field days in recent weeks. Both projects involve the use of poplars and willows and have necessitated significant input from staff.

The first project utilises willows to remove nitrogen from soils following dairy effluent spray disposal. Early results indicate that willows will effectively reduce the minimum areas for effluent spray disposal from 4 hectares per 100 cows (for pasture) to 1.5 hectares per 100 cows.

The second project involves the use of poplars and willows as a drought supplement for breeding ewes. Significant increases in lambing percentages have resulted in the last two years. This year's trial looks at the minimum period of feeding to achieve production increases. A vital part of the trial is the establishment of fodder coppice blocks on commercial farms. A second block is currently being assessed at Jeff Ravenwood's property at Homewood.

# 3.2 Biodiversity Funds for Private Landowners

The Ministry for the Environment, jointly with the Department of Conservation, has announced two funds to help landowners protect and restore native environments. Applications can be for a single project or a package of projects as part of a partnership arrangement. Local authorities are potential partners, along with non-government organisations, iwi, hapu, or industry groups.

Two funds have been established. The first is a Condition Fund which aims to improve and maintain the condition of vegetation, species or habitat through projects that include fencing or pest control.

The second fund is the Advice Fund that focuses on information and advice to land managers. Funds will be provided for projects which inspire landowners or groups to better protect indigenous species on their land, such as workshops, field days and publications. A total of \$2.3m is available this financial year. Staff will be working closely with Tim Porteous and the Land Management Protection Forum to identify relevant projects.

#### **3.3 Farm Environment National Trust**

The Trustees of the Farm Environment Award in Hamilton are proposing to set up a National Trust to administer the Awards and to ensure that there is national consistency across the regions.

Now that the Awards are established in 5 regions, and there are two more regions considering entering in 2004, the Trustees feel the time is right for a National Trust. A draft Trust deed is to be circulated in the next few weeks, its main focus will be to ensure regional representation. Further announcements are anticipated at the Wellington Awards function on Thursday, 10 April 2003.

## 3.4 Tauanui Access

The Lawyers have yet to secure the necessary signatures following approval from the parties.

This is largely due to the Rotorua solicitor advising on behalf of the Pirinoa Owners being involved in the Waitangi Tribunal Settlement for Kaingaroa Forest in favour of Ngati Awa and objected to by Tuhoe.

The access road construction, through agreement with all parties, has however been commenced. It is important to capitalise on this construction season so that logging is not delayed for another year. Progress has been excellent with the most difficult sections within a week of completion.

## 3.5 Stoney Creek Harvesting

Skyline Loggers using a forwarder and a feller buncher (a relatively new machine to the Wairarapa, first seen at Trimble Trust) have returned to continue with the harvesting of two of the old retirement areas within Stoney Creek. The duration of this operation will be controlled by the weather conditions as the forwarder cannot operate when ground conditions become greasy.

Currently the markets are saturated with timber as a result of the dry summer conditions and production levels exceeding demand. The higher quality sawlog is currently going to Juken Nissho who are actively seeking wood that is older than 30 years.

## 3.6 Rural Fire

A proposal for an amalgamated Rural Fire District for Wairarapa has been produced and presented to the CEOs of the three District Councils. The

proposal by the Wairarapa Rural Fire Co-ordinating Committee includes the Regional Council as a member and significant funder.

It is stressed that while there is a statutory basis and robust logic for our involvement, commitment from the Council has not yet been formally requested or considered. More specifically, the text stresses that the funding model is a hypothetical model. Once formed the Rural Fire District Committee members will determine the basis of apportioning costs and seek funding from member organisations on that basis.

The purpose of the proposal is to seek efficiencies by eliminating some of the duplications that occur while better meeting some of the obligations for Rural Fire Service delivery.

# 3.7 Technical Services

Involvement in the following activities:

- GIS and mapping work completed for Lower Valley reclassification project
- Stopbank investigation survey completed on Waiohine River at Fullers Bend on Williams property
- Aerial photographs taken for Sawfly damage at Tauherenikau
- First stage of Wairarapa Division plan scanning project completed
- Completion of stopbank survey, plan production and setting out of new Papatahi stopbank
- Computer draughting on soil conservation farm and sustainability plans
- Replacing cables on gate No.6 at Barrage Gates
- Work on Carkeek rain gauge site, installing new radio mast
- Large number of external customer enquires for maps and information
- Gravel Licence System processing of gravel returns and new licences

## 3.8 Lower Wairarapa Valley Development Scheme (LWVDS)

The new Papatahi stopbank (2.5 kilometres long and up to 1.6m high) has been completed.

The meeting for Tawaha/Moiki and East Pukio/Mahaki Wards has been held. Cr Tony Draper (South Wairarapa District Council) and Bob Smith were reelected to the LWVDS Scheme Advisory Committee. There was discussion and agreement that in future there should be an annual meeting open to all Scheme members which would elect specific Ward members each year.

Channel alignment work has been completed in the vicinity of Shelton's property.

The Spartina grass (a potential pest plant) on the Onoke stopbank has been sprayed with successful results.

Large boulders have been recovered from the Onoke pump. Staff are bemused as to how they have entered the impeller chamber. It is proposed to increase security at the pump station.

## 3.9 Willow Clearing Projects

Willow regrowth has been sprayed on the Taueru River (lower section) and the Whangaehu River. Clearing of excess willow trees from the town reach on the Waipoua River has also been completed.

## 3.10 Ruamahanga River – Gladstone Section

Cattle damage has been significant in the Te Whiti area. The offending farmer, Hugh Ryan, was ordered to remove the stock from the riverbed. The cattle have damaged willow poles planted over a wide area during the last two years. A bulldozer is operating in this section of the river doing channel realignment and ripping the edge of high beaches.

# 4. Biosecurity Department: (Wayne O'Donnell)

#### **Bovine Tb:**

## 4.1 Operational Plan

All operational areas have been let for vector control within the region. The 2002/03 programme to be completed comprises:

	Hectares
Possum control	336,349
Ferret control	2 2,525
Feral surveys	16,664
	375,538

## 4.2 Delivery of Service

Below is a list of contractors and the total areas that have been let:

	Hectares	%
GWRC Bovine Unit	196,784	52.4
Professional Guiding Service	39,405	10.5
Trappersnz	58,165	15.5
J McCaslin	51,895	13.8
Target Pests	7,290	1.9
Horizons.mw Business Unit	11,042	3.0
Other (pig surveys)	<u>10,957</u>	<u>2.9</u>
	375,538	100.0

## 4.3 Areas Completed to Date

Areas completed or currently waiting for monitoring to be undertaken:

	Programme	Hectares Treated	%
GWRC Bovine Unit	196,784	94,801	48.2
Professional Guiding Service	39,405	19,726	50.0
Trappersnz	58,165	29,254	50.3
J McCaslin	51,895	24,286	46.8
Target Pests	7,290	0	0.0
Horizons.mw Business Unit	11,042	2,311	20.9
Other	<u>10,957</u>	<u>0</u>	<u>0.0</u>
	375,538	170,378	45.4

# 4.4 Monitoring

Approximately 50,000 hectares of vector control has been completed since the previous report. Some of this area has yet to be monitored. The following RTC monitoring results have been reported in this period:

Operation	Strata	Hectares	Result	Operator
Bideford	MR3	4,824	0.8	GWRC Bovine Unit
Castlehill	HR1	2,311	1.1	Horizons.mw
East Alfredton	MR1	2,481	0.7	J McCaslin
Homewood – Riversdale	HR3	6,183	0.8	<b>GWRC</b> Bovine Unit
Mangaroa – Kaitoke	Aerial	8,322	0.7	<b>GWRC</b> Bovine Unit
Mangaroa – Kaitoke	Cyanide	2,221	2.3	<b>GWRC</b> Bovine Unit
Mangaroa - Kaitoke	Brodifacoum	4,975	1.4	<b>GWRC</b> Bovine Unit
-	/Trap			
Mt Bruce Reserve	-	465	9.2	Trend monitor only
Mt Bruce – Waipoua	HR2	1,581	0.9	<b>GWRC</b> Bovine Unit
Mt Bruce – Waipoua	HR4	1,169	0.0	<b>GWRC</b> Bovine Unit
Ponatahi – Longbush	HR1	4,721	0.2	Professional Guiding
				Service
Ruamahanga River	HR1	1,734	0.5	<b>GWRC</b> Bovine Unit
South East Wairarapa Stage 1	MR5	7,213	2.0	Trappers.nz
Te Wharau	HR1	1,850	1.4	<b>GWRC</b> Bovine Unit
Te Wharau	HR2	3,216	1.3	<b>GWRC</b> Bovine Unit
Te Wharau	HR3	1,070	0.7	<b>GWRC</b> Bovine Unit
Tinui	HR1	3,140	0.7	<b>GWRC</b> Bovine Unit
Tinui	MR1	3,322	0.0	Professional Guiding
				Service
Tinui	MR3	7,031	1.2	Professional Guiding
				Service
Whangaehu	HR2	4,583	0.2	J McCaslin

High Risk (HR) strata normally have a 2% RTC target whilst Medium Risk (MR) have a 4% RTC target. Each stratum also has individual line targets meaning the contractors can achieve the mean RTC target but still fail the contract on line requirements.

## 4.5 **Operational Failures**

During the 2001/02 year higher standards of vector control were introduced. This was brought about in the following ways:

- Increased operation stratification
- More intensive RTC targets

Due to these measures 26 operational failures occurred during the year. By comparison, only four failures have occurred during the 2002/03 year to date:

- GWRC Bovine Unit 1 failure at Homewood Riversdale
- Trappersnz 3 failures at Mangaroa Kaitoke

## 4.6 Aerial 1080 Pellet Control

The Haurangi Crown aerial 1080 pellet operation was completed in February 2003. Post operation monitoring is not fully complete, however results to date indicate an RTC below 1.0%.

The Holdsworth to Woodside Crown (9,300 ha) and Featherston to Waiorongomai Crown (5,700 ha) operations are currently in the planning stage.

Control is expected to occur during May-June 2003. Control will be undertaken by the GWRC Bovine Unit.

## 4.7 Surveys

The 2002/03 programme has increased due to two surveys requested by the Disease Manager, Agri-Quality NZ.

A ferret and possum survey has been approved over 1,560 hectares within problem areas (associated with the Waipoua River) of the Mt Bruce-Waipoua operation.

A ferret and possum survey has been approved in the Whangaehu operation over 2,840 hectares. This survey will be spread over the 2002/03 and 2003/04 years.

## 4.8 Current Infected Herd Status

As at 30 June 2002 there were 62 infected cattle herds within the region. At the end of March 2003 the infected number of herds has reduced to 51.

There are 42 infected herds within operational areas and 9 infected herds in non-operational areas.

There are 2 infected deer herds as opposed to 1 infected herd as at 30 June 2002.

## **Pest Plants:**

#### 4.9 Exemption from Regional Pest Management Strategy Rule

The Council has recently received two letters from Waikanae-based companies seeking to apply for an exemption under s80D of the Biosecurity Act 1993. Both companies are seeking exemption to the rule concerning the use of Eel Grass (Vallisneria spp.). The Strategy objective for Eel Grass is regional eradication by 2011.

As a pest, Eel Grass falls under s52 and 53 of the Act which states no person shall release, propagate, or sell of offer for sale, or otherwise spread Eel Grass (except twisted leaf varieties). Both companies operate aquarium businesses where Eel Grass is a key component.

Exemptions can be given by the Council as long as the Strategy objectives are not 'significantly prejudiced'. Staff are currently investigating the risks associated with the current companies activities. A full report will be presented to the Committee when this investigation is complete.

#### **4.10 Eradication Plants**

Under the RPMS 2002/2022, control of Eradication Species is the responsibility of GWRC. Work may be undertaken by either contractors or staff. Over the last two months control work has been completed on the following species:

**Eel Grass**. Infested ponds adjacent to the Waikanae River have been backfilled eliminating the problem. Staff have cleared an infestation situated in a stream east of Masterton.

**Bathurst Bur.** Staff carried out two spray operations at the Gladstone sites SE of Masterton. This area has had a high level of infestation over the last two years.

African Feather Grass. A contractor has sprayed two sites at Western Lake with all other Wairarapa infestations controlled by the occupiers. Plants staff have sprayed scattered infestations through the Wellington City suburb of Miramar. Wellington City Council has sprayed the extensive infestations in the Karori Cemetery.

**Sweet Pea Shrub.** All scattered sites in Wellington City, Porirua and Kapiti have been cleared.

**Manchurian Wild Rice.** A contract to complete all initial and maintenance spraying of infestations throughout the Te Harakiki Wetland has been arranged. This work, which includes infestations on Kapiti Coast District Council reserve, should be completed by mid April.

## 4.11 Old Mans Beard

Several large areas of Old Mans Beard were recently sprayed in the Masterton District by helicopter. This machine applies herbicide through a pressurised beer keg hung below the aircraft. The system allows spray application to be undertaken in very difficult areas where conventional aerial and ground applications are not possible.

## 4.12 Playcentre Inspections

At the request of the Playcentre Association, all child playcentres and kindergartens in the Wairarapa and the Hutt Valley are being inspected to determine if poisonous plants are present in outdoor play areas. Where species are found, childcare personnel are informed and advised on control methods. A copy of a poisonous plants book is also supplied for their future reference. It is intended to eventually inspect all early childcare centres throughout the Region.

## 4.13 Wellington City Programme

The reviewed Wellington City plants policy has now been operational for three months and is operating with few problems. Those occupiers who have expressed concern with the new approach have, following detailed explanation, generally understood that the previous programme was unsustainable.

## 4.14 KNE Contracts

**East Harbour Reserve.** Work on the southern end of the East Harbour Reserve buffer zone at Eastbourne has been completed. This contract now completes initial work along a 30 metre wide strip adjacent to private land from Point Howard to Muritai Road.

**Raroa Reserve.** Maintenance control through the bush area of the Raroa Reserve at Pukerua Bay has been completed. Work on clearing scattered Boneseed on the coastal escarpment south of the Pukerua Bay coastal settlement is continuing with most of the outlying infestations cleared.

**O-Te-Pau Wetland.** Old Mans Beard control has been completed at the O-Te-Pau wetland north of Otaki. This is the first stage of a development programme of this significant wetland.

Further pest plant control is to be completed during April in the Trelissick Park and the Otari Reserve KNE in preparation for restoration planting during the winter.

## 4.15 Biological Control

Seasonal releases of the biological control agent Ragwort Flea Beetle are currently underway. These continue to be made in areas where this agent appears to have not yet established. Most releases are at the request of occupiers. The widespread distribution of this insect is becoming more apparent, particularly in the Wairarapa, with activity often noted in areas some distance from earlier releases.

## **Pest Animals:**

## 4.16 Mount Bruce-Pukaha Restoration Programme

Control of predators has been ongoing for six months now in the GWRC buffer area. Tallies of possums and mustelids have started to reduce. The longer-term aim of the programme is to not catch anything. However, the mustelid species are very mobile, with large home ranges and will probably keep invading the buffer area.

A guided walk of about three hours duration for neighbours and friends of the project is to take place on Sunday, 13<sup>th</sup> April to see some of the more interesting sights in the Mount Bruce/Pukaha forest. Those interested are asked to meet at the Wildlife Centre at 9.30am. The wearing of tramping boots/good walking shoes and warm clothing is recommended.

A meeting of the Mount Bruce Neighbours Group is scheduled for 7.00pm Tuesday, 6<sup>th</sup> May at the Mount Bruce National Wildlife Centre. This will take the form of a workshop with the following topics proposed:

- ➤ Neighbours Doing your own pest control? How are you finding it?
- ➢ GWRC The difference between weasels, stoats and ferrets.
  - Different rat species and how to control them.
- DoC Update on the proposed kokako and kiwi releases. What can you do to assist and protect?

The proposed release of 20 kiwi and 10 kokako into the wild at Mount Bruce was announced recently by the Mayor of Masterton at a promotional event. A further promotion hosted by the Mayor and Go Wairarapa will be held at the Masterton Town Hall on  $1^{st}$  May 2003. The proposed release date for the kokako is  $15^{th}$  June 2003.

## 4.17 Miramar Peninsula Possum Eradication Programme

This operation is now well underway. It has had excellent support from the community and very few complaints have been received. It is understandable that some people will be apprehensive about possum control measures occurring in their neighbourhood. The media coverage has also been positive. The initial phase of the operation will be completed by the end of June but replenishment of bait stations and minor works will continue through to December. Due to the nature of the operation a close liaison is being maintained between GWRC, Wellington City Council, the Police and the Department of Public Health.

## 4.18 Waimeha Lagoon Predator Control Operation

A predator control programme has commenced at the Waimeha Lagoon situated within the urban area of Waikanae. This is the first operation of this type conducted by GWRC and is a joint venture with the Waimeha Restoration Group and Kapiti Coast District Council. Special purpose wooden tunnels have been installed to contain both traps and bait. The tunnels are designed so that they are not easily tampered with and are fastened to prevent access by people, dogs and cats. Whilst Biosecurity staff established the operation, most of the maintenance will be undertaken by the restoration group. This operation will provide the basis for analysing the most proficient techniques for further predator control in wetlands, with particular focus on protecting desirable species.

# 4.19 Rabbits

A rabbit control operation is being planned for Riversdale Beach Resort in early May 2003. This time slot follows the school holidays and will allow adequate time to complete the operation before the expected visitor influx at Queens Birthday weekend. A comprehensive risk management programme will be undertaken. It will be necessary to have the support of most Riversdale occupiers for the operation to be a success. The rabbits have been scratching up lawns and the golf course, digging burrows under buildings, eating garden vegetables, gnawing on newly planted shrubs and trees, and destroying the highly palatable pingao plants, and other species, which are an integral part of sand dune stabilisation. The rabbits are plentiful in spite of some localised control measures by a few occupiers. A similar large-scale operation was conducted at Riversdale in August 2000.

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

# 5.1 Environmental Incidents

Changes to the incident database have prevented a summary report from being presented. This will be included in the next order paper.

# 5.2 Enforcement

## Abatement Notices

These have been issued requiring:

- Compliance with the requirement to install water meters four properties.
- Cessation of unconsented irrigation.
- Supply information required for consent to be processed and granted.

# Carterton District Council

The Council has failed to comply with the consent condition requiring no discharge of treated effluent to the Mangatarere Stream during the three-month period of 1 January to 31 March 2003. Legal advice has been obtained and a meeting held with District Council representatives.

# **Unconsented** Irrigation

A search warrant was exercised and evidence gathered in relation to unconsented irrigation in the Hughes Line/Parkvale area. The area has been subject to both surface and underground water this summer. The landowner has appealed the abatement notice to the Environment Court.

## 5.3 Notified Consents

Carterton - Kaipatangata water take	Granted without appeal.	
Featherston Sewage – discharge	Draft AEE completed. Consultation proceeding with initial site meeting held.	
Opaki and Te Ore Ore Water Races –	Submissions closed 12/2/03. Applicant meeting	
Masterton District	with objectors. Hearing planned for late May.	
Carterton sewage discharge.	Submissions closed on 19/12/02. Application on	
Application for variation.	hold at applicants request.	
Water Races -Carterton, and South	Notification that was scheduled for November is	
Wairarapa District Councils (4) being held up through delays by the consultant		
Discharge to air from sewage ponds	Hearings held, decisions awaited.	
– Carterton and Greytown.	-	
Water take – Waingawa River –	Submissions closed on 14/2/03. Pre-hearing	
Taratahi Agricultural Training Centre	meeting held.	

## 5.4 Appeals

Appellant	Nature of Appeal	Action	Current Status
J Barton	Additional charges on	Mediation	Hearing awaited
	withdrawn stopbank	declined	
	access application		
J Barton	Requirement for 'up		Strikeout being
	front' payment of		considered.
	estimated consent		
	processing costs.		
I Alexander	Appeal of abatement	Interest	Enforcement order and
	notice requiring	registered with	other action being
	irrigation to cease	Court.	pursued.

# 5.5 Resource Management Annual Charges

Annual charges were mailed on 27 March and accompanied by a Consents newsletter.

## 5.6 Water Shortages

Irrigation bans proved necessary for all takes within the Ruamahanga River system. These were applied during the first quarter over two separate sixweek periods. 170 mm of rain was recorded at Angle Knob on 31 March allowing all restrictions to be lifted, hopefully for the last time this summer.

This has been a very busy time for staff from both the Consents and Resource Investigations Sections, monitoring flows, issuing restrictions and dealing with compliance and enforcement.

## 5.7 Barriers to Fish Passage

Identifying structures that are a barrier to fish is an important part of the Council's freshwater ecosystem programme. Dave Sim of the Operations Department in 2001 identified structures within the lower Ruamahanga catchment, falling within the South Wairarapa District.

Tim Baker is now undertaking this work within Carterton and Masterton districts. Tim is completing his Victoria thesis and has been employed over the summer in the Resource Investigations Section.

## 5.8 Contaminated Sites

James Cowan has completed verification of the location of contaminated sites in the Wairarapa. James is a recent graduate employed on a short-term contract.

# 5.9 Hydrology

# Rainfall

Rainfall figures in the Wairarapa were well below average for March, and lower than February.

Angle Knob's monthly total was 326mm, at 74% of the March long term average (443mm), Tanawa Hut's total was 67mm, at 67% of long term average (101mm), and Alloa's total at only 21mm was only 27% of long term average (78mm).

Most of the rain we had last month tended to be from the north-easterly direction, with more tending to fall at the 'top end' of the region and to a lesser degree lower down the valley. This is reflected in the rain totals

The figure below shows the monthly rainfall totals at Tanawa Hut since July 2000 against the long-term average for each month. It can be seen that for most of the last year the monthly totals have been below average.

#### Tanawa Hut Rainfall



The following table provides rainfall for March and also February for three representative sites:

Site	Location	March		February		March	February
		Rain mm	Average	Rain mm	Average	% of	average
Angle Knob	Tararua Ranges	326	443	289	351	74	82
Alloa	Middle Valley	21	78	32	64	27	50
Tanawa Hut	Eastern Hills	67	101	76	75	66	102

#### Rivers

March river flows for both the Tararua and Lower Valley (Waiohine at Gorge & Ruamahanga at Waihenga) remained low. The Waiohine continued to be well down, averaging only  $6.6m^3/s$  (37% of March long term average of  $18m^3/s$ ) Waihenga was similar, averaging  $18m^3/s$  (37% of March long term average  $49m^3/s$ ). Last months average was only  $12.6m^3/s$ .

It was stated last month that the minimum low flow for Waihenga was only  $5.9m^3$ /s equating to a 20yr return period. However subsequent gaugings have shown this flow figure was too low, the lowest flow this year was in fact closer to  $6.6-6.7m^3$ /s on March 28<sup>th</sup>, which lies within a 5-10yr return period.

The following table gives both March and February's flow statistics for two representative sites. The figure is a map of the Wairarapa with the catchments for the two sites shaded to show their percentage of monthly flows for March.



# Floodwarning

	March	Financial Year to	Previous Year to
		date	Date
No. of events	0	8	5
No of Lists Issued	0	33	23

## 5.10 Groundwater

## **Bore Permits**

	March*	Financial Year to date	Previous Year to Date
Applications Received	12	61	58
Consents Issued	10	55	66
Consents on Hold	1		

The following graph shows the groundwater levels for Baring's (east of Carterton – Parkvale #3). The most recent data is raw unedited data and may require editing.

The plot shows the daily maximum, minimum and means of the mean over the whole of the record verses the actual water level for the period March 2002 - 2003.

The envelope plot shows that the current groundwater level in Parkvale #3 aquifer is now at the level of the Long Term Minimum.



#### Activities

Water quality field sampling has been completed for all bores in the Parkvale aquifer. In all, 30 bores were sampled over 11 days. Interesting a 21m deep bore in the region of Tiffin Hill was dry. This may be sampled at a later date when water level recovery has taken place.

A number of public enquiries have been received to do with so called "dry bores" with several of these coming from the Kahutara G/W zone and the bottom end of the Battersea G/W zone. Subsequent investigations have shown that the bores are not dry, but water levels appear to be at their lowest recorded levels. Generally speaking, aquifers that have no direct river influence have been some one to two metres below their lowest levels. The following long term Baring plot in the Parkvale aquifer is a good example of this. In contrast, aquifers with a river influence are typically at their summer low levels.



# 6. Recommendation

That the report be received and its contents noted.

**Colin Wright** Divisional Manager, Wairarapa