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**Report 02.107**

4 March 2002

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 meeting held on 4 December 2001.

**2. Divisional Matters**

**2.1 Councillors Tour**

At the time of writing most arrangements for the Councillors tour in the Wairarapa on 7 and 8 March have now been finalised. The aim is to give an opportunity for Councillors and appointed members of the Committee to see a representative sample of some of the Council's activities in the Wairarapa.

Members may wish to briefly comment on the two day event.

**2.2 Proposed Annual Plan**

On 5 March the Council decided upon the Proposed Annual Plan and Long Term Financial Strategy Update. All recommendations of the Rural Services & Wairarapa Committee were adopted.

**2.3 Staffing**

Three permanent staff members have resigned their positions in the Biosecurity Department since December 2001. Six Fixed Term Employees have been appointed to fulfil control commitments.

Two Resource Advisors in the Planning & Resources Department have resigned to travel overseas. Peter Holden has departed after four years with the Division in the Resource Investigations, and Consents and Compliance Sections, and Phillip Percy after three years in the Policy and Planning Section.

Laura Watts has been appointed to fill the Consents vacancy and interviews are to be held for the other vacancy. Laura is a Victoria University graduate who is completing a masterate on urban runoff. She has previously been employed on a part time contract with the Resource Investigations Section.

Tyrone Te Tau has resigned to commence teacher training after 14 years in the rivers gang.

### **3. Biosecurity Department: (Wayne O'Donnell)**

#### **3.1 Bovine Tb Operational Progress**

Satisfactory progress has been made in undertaking this year's operations. To date over 50% of the area has been completed.

#### **3.2 Private Contractors**

Private contractors have completed 28,000 hectares and still have a further 85,000 hectares to complete before the year-end.

#### **3.3 Monitoring**

The new High Risk targets have caused concern for all operators, with a number of High Risk Stratas (partial operation) failing. Most failures have been due to individual lines exceeding the 7% RTC requirement. In most cases the mean RTC of 2% has been satisfied.

To date the Bovine Unit has had four High Risk failures over approximately 6,000 hectares.

Private contractors have had six High Risk failures over 25,000 hectares.

We have had feedback of High Risk failures in many Regions from throughout New Zealand. High Risk targets are extremely difficult to achieve. Operators working these areas generally aim towards the eradication of possums in the contract block.

**(1) Successful Monitoring Results**

<b>Operations Unit</b>		<b>%</b>
Bideford Aerial		0.6
Castlehill Aerial		0.9
Boggy & Matthews (Kahutara)		0.6
Kahutara (Medium Risk)		0.0
Martinborough		0.0
Mount Bruce-Waipoua (Medium Risk)		0.0
Otaki Buffer		1.4
Owahanga Aerial		0.9
Ruamahanga River		0.0
Te Awaiti Aerial		0.0
Te Wharau High Risk Stratas	1	0.8
	2	0.0
	3	0.8
	4	1.1
Tinui High Risk		1.9
Waingawa Medium Risk		0.7
Whangaehu High Risk		0.0
<b>Private Contractors</b>		<b>%</b>
Homewood-Riversdale		1.6
Woodside (Medium Risk)		0.0
Mataikona (1 Strata)		0.5

**3.4 Issues****(1) South East Wairarapa – Stage 1**

A number of occupiers within this operation have objected to the use of 1080 poison. Their preference has been to have a private contractor use alternative methods.

We have entered into agreements with landowners to treat their property by contractors over approximately 11,000 hectares and a further 6,000 hectares is still under negotiation.

All agreements require the occupiers to fund the additional management and monitoring costs incurred.

**(2) Mangaroa-Kaitoke-Whitemans Valley**

Planning for this operation has commenced. Within and adjacent to the operation is a group of individuals opposed to the use of 1080. These people have formed a committee and have held at least three meetings. Their intention is to stop the use of 1080 poison, and they are actively seeking publicity.

At the beginning of the financial year this operation was let for private contract. Tenders were received from the Bovine Unit and one private contractor.

The work plan from both tenderers included the use of aerial 1080 poison.

### **3.5 KNE Pest Plant control**

Work involving pest plant control in KNE areas is now completed at the three following sites.

#### **(1) Otaki River**

Contractors have recently sprayed basal regrowths of Banana Passionfruit vines cut last winter. The infested areas were scattered along both banks of the river from the lower end of the Otaki Gorge to approximately 1.5 kilometres below the bridge on State Highway 1. Much of the operational area involved very steep, high banks above the river where infestations were well-established and difficult to access.

#### **(2) East Harbour Reserve**

Another pest plant control contract has been recently completed along the Eastbourne side of the East Harbour Reserve. This contract continues work commenced last year to create a 30-metre wide pest plant free buffer zone between private land and the inner Reserve. Completion of the latest contract now extends the buffer from Point Howard in the north to Days Bay in the south. A further contract is currently being arranged. This will complete the buffer to the southern end of the bush covered area of the Reserve.

#### **(3) Otari Reserve**

Pest plant regrowth areas on both banks of the Kaiwharawhara Stream through the southern section of the Otari Reserve have been recently sprayed. Established gorse, broom and blackberry through this area was cut and removed last winter with no herbicide applied to avoid contamination of the stream. The recent spraying, which was subject to a resource consent, was carried out on the short basal regrowth developing from the stumps of the previously cleared plants.

### **3.6 Old Mans Beard, River Contracts**

Three contracts for the control of Old Mans Beard on the banks of various rivers have been completed. These included work on the Waipoua River upstream from the railway bridge, the Ruamahanga River south of Martinborough and the lower Mangatarere and Waiohine above the Mangatarere junction. A contract was recently let for work on both banks of the Waingawa River from State Highway 2 to the river's junction with the Ruamahanga. Tenders are currently being sought for a further contract on the Lower Ruamahanga River above the Tuhitarata Bridge.

### **3.7 Publicity Material**

- (1) A revised “Facts” pamphlet is in the process of being printed. The revised version has been updated to cover changes in the list of plant species and control requirements under the new Regional Pest Management Strategy. Because of its quality photos and concise descriptions, the current Facts pamphlet has been in steady demand with several thousand distributed over recent years.
- (2) A number of field staff from various departments within the WRC advise Plants Officers of the location of key pest plants noted whilst working in the field. To assist with the identification of the more important species and to encourage a greater awareness, the Plants Section has produced a pocket-sized folder containing colour photos and descriptions of the main species. The folder is currently being distributed to appropriate WRC staff throughout the region. It is intended to also supply the folder to key field officers working for district and city councils.

### **3.8 Summer Growth**

Wet conditions have promoted exceptional growth in most pest plant species this summer. Particularly noticeable is the growth rate of the vine species including Old Mans Beard, Cathedral Bells and Banana Passionfruit. Ragwort is currently in full flower with infestation levels being the highest for several years. Sheep grazing has failed to control infestations in several areas. Biological control methods also appear to be unable to cope with the increased ragwort growth, particularly where cinnabar moth has been the predominant agent. The effectiveness of ragwort flea beetle this summer may also have declined. Populations may be unable to cope with the exceptional growth or may have been effected by very wet ground conditions. Adult insects generally appear in March when an assessment of their viability can be made.

### **3.9 Communications**

Plants officers have been involved in a variety of recent public education events. Of note was a Care Group Workshop at Waikanae and an interview on Breeze Am Radio covering aspects of pest plant control.

### **3.10 Rabbits**

The wetter than usual summer has resulted in prolonged spring-like conditions with lush pastures and late seed ripening. This has affected the normal pattern of vertebrate pest control programmes but overall has had favourable spin-offs, particularly for suppressing rabbit populations.

The annual rabbit proneness surveys of the Tauherenikau and Waingawa Riverbeds and adjacent farmland were completed in early January. These areas are used as a barometer to gauge change or impending change to rabbit densities and generally reflect probable trends for the region. Rabbit densities are low and on a par with last year. Whilst lush growth on the adjacent farmland and frequent floods have had an impact, it is considered that the Rabbit Haemorrhagic Disease (RHD) must still be cycling innocuously. There are no plans to undertake a RHD survey this year unless there is a specific request from occupiers.

Inspections of all significant rabbit prone areas throughout the region will be carried out in March/April, but the prediction is for densities to be generally low and on a par with the situation last year. Special attention will be accorded to the Kapiti Coast because of its light soils and dune associations. Medium to high infestation sites will be graded on the McLean Scale and a regional rabbit proneness map produced.

Pindone carrot sales (together with associated advice and education) have been steady through the spring and summer but have mainly been for rabbit nuisance in areas of gardens, horticulture and amenity plantings.

### **3.11 Key Native Ecosystem Management**

Key Native Ecosystem possum control has slowed considerably in the Wairarapa because of the expanding Bovine Tb programme and the resultant low possum densities. The Tauherenikau KNE management area is due for predator control this month. The focus will be on culling ferrets, stoats, weasels and feral cats.

The KNE programme in the Western Zone is extremely busy. One staff member from the Masterton office has been seconded to assist them maintain momentum. Most of the work is within the outer green belt and town belt of Wellington City. Initial works have almost been completed on Wright's Hill and at Karori Park with maintenance either underway or programmed for Denton Park/Polehill, Khandallah and Trellisick Parks. A service contract is being negotiated to ensure that all KNE sites in Wellington City are maintained on a three to four month basis. This entails the checking and replenishment of bait stations.

Work is also programmed for Emerald Hill (UHCC) and East Harbour (LHCC) KNE's.

Contact is to be made this month with the Te Horo Bush Paradise Care Group to establish the level of assistance they require to meet their aims.

KNE signs have now been placed at all of the managed sites in the Wairarapa. In some instances, permission needed to be sought in writing but was never refused.

A concerted effort has still to be made to get signs at all private and territorial authority sites in the Western Zone.

### **3.12 Possum Control – WRC Parks and Forests**

The aerial operation of the Akatarawa and Valley View Forests (7,825ha) was finally completed on 26<sup>th</sup> November after being delayed by continuing adverse weather conditions. There was a period of 54 days between the pre-feed and toxic applications. This is by far the longest period between any pre-feed and toxic applications undertaken by this Council. The post operational residual trap-catch was 2.3% against a performance target of less than 5%. There is no doubt that the long delay and the overnight temperature of 12 degrees Celsius for the first night of the toxic, negated a better result. Best results from aerial applications are achieved with less than 14 days between the pre-feed and toxic applications together with overnight temperatures of 9 degrees Celsius or less.

An unfortunate aspect of the job were the two major flood events four days apart in early December which washed 1080 poisoned possum carcasses from the control area 9.5 kilometres downstream into the Hutt River and thence into the Harbour. Two dogs are alleged to have been poisoned after ingesting parts of possum carcasses.

A contract will be tendered to treat the Dry Creek portion of Belmont Regional Park. The Pest Animals Section will conduct the operation in the event of a failure to attract a competent contractor with a competitive price.

Planning is underway to treat the Eastern and Western Hutt River Catchments. This has been scheduled for the period July to September 2002 and will require regular liaison between the Water Group, Parks & Forests and Biosecurity Departments of Council.

A meeting has been scheduled for mid March at which the Whitireia Park Board will be advised of the pending possum control operation for this reserve at Porirua. With correct planning, it should be possible to achieve and then maintain this reserve as possum free.

### **3.13 Goat Control**

An operation is being planned to undertake goat culling for the Wellington City Council near the wind turbine in the suburb of Kowhai Park. A Standard Operating Procedure has been completed recently by the Biosecurity Department. This will form the basis for the risk management required in these types of operations.

## **4. Operations Department: (Ian Gunn)**

### **4.1 Upper Ruamahanga Scheme Review**

The review of the Upper Ruamahanga River Management Scheme and rating classification is progressing well. Successful ratepayer meetings for the proposed new Hidden Lakes to Te Ore Ore, and Te Ore Ore to Wardells Schemes were held during December.

A new scheme to cover the remaining Wardells Bridge to Waiohine River section is currently being developed in consultation with the Steering Committee. The ratepayer meeting for this third Scheme will be held in early April, which will ensure there is sufficient time to set up three new Scheme rating classifications for next financial year.

### **4.2 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.

The Te Whiti community is anxious for the work to be completed as soon as is practicable, and sufficient funds have been provided for construction during next financial year.

### **4.3 River Scheme Asset Revaluation**

Good progress is being made with the revaluation of river scheme assets in line with the Local Government Amendment Act's new Financial Reporting Standard. The asset valuation methodology has been updated, and is in the process of being reviewed and certified by an independent auditor. The certified valuations will then be incorporated into the Council's asset register before 31 March 2002.

### **4.4 Farm Environment Awards**

The first round of judging of the fifteen entries has been completed. A debrief of judges has been held and the finalists selected. A further round of judging will take place in mid-March to determine category winners and the supreme winner. The standard of entries has been particularly high and there has been very positive feedback from both judges and landowners.

The Awards ceremony will take place in Masterton on 12 April 2002. Judges have made recommendations for a number of merit awards where a specific management practice is having a positive effect on the environment. A field day will be held in late April/early May on the winning property.



#### **4.5 Akura Irrigation**

The first test run of the irrigation system at Akura has been completed. The system meets the required specifications in all respects. Soil moisture conditions throughout the summer have generally been adequate, however despite the higher than normal rainfall there have been one or two occasions when additional water would have optimised plant growth.

#### **4.6 Bideford Hill Management Plan Review**

The original Management Plan for this section of road was prepared in 1997. A range of hill stabilisation works have been completed since that time including poplar and Acacia plantings, subsurface drainage, and the removal of over mature radiata. The lack of any significant rainfall events has greatly assisted the stabilisation programme.

The review sets out a programme of work for the next five years. Its focus is primarily on the use of vegetation as a long term control measure for the hill area. Measures will include the establishment of a road protection zone where vegetation is regularly trimmed to maintain an efficient rootmass for effective stabilisation. Other measures will incorporate additional poplar planting on open pastureland and the ongoing removal of inappropriately sited Pinus radiata and silver poplars.

The District Council will fund the majority of works through Transfund, with some cost sharing occurring with the poplars planted on pastureland.

#### **4.7 Juken Nissho Ltd - Flood Damage**

On Saturday, 19 January, a localised rainfall event occurred in the headwaters of the Kaiwhata River. The closest recording station at Ngaumu headquarters recorded 30mm over a two hour period. Farmers in the area recorded 60-70mm over a 4 hour period. Indications are that a specific catchment within the JNL forest bore the brunt of the storm and may well have received rainfall of greater intensity, i.e 30mm per hour.

The catchment in question covers 600 hectares and has been clearfelled over the past eighteen months. The Regional Soil Plan requires slash and debris greater than 100mm to be removed from watercourses following completion of the harvest operations. JNL's own Environmental Management System ensures that this practice is met. Removal of slash and debris was carried out in this catchment.

The scale of the event was such that large quantities of slash and debris found its way back into the watercourses and was transported downstream, eventually coming to rest against a very large culvert. The culvert blocked and the roadway was scoured out as a result.

JNL are reviewing their systems in light of the incident and are liaising with Council on possible solutions to the management of slash and debris in watercourses.

#### **4.8 Harvesting Operations**

Poor quality untended timber on the high ridges of Hiwinui have impacted significantly on recent logging returns. Pulp logs made up the majority of the production for October. Negative returns for this wood resulted in a net return of only \$3.75 per tonne compared with \$18.09 for the year to date.

The wood value improved during December (to a net \$12.80 per tonne) as the harvesting arc moved further down the hill and to \$16.84 per tonne for the January production which came from the tidy up of a remnant lower down the slope. This area contained a more normal percentage of sawlog.

We are awaiting the arrival of a Forwarder to harvest some of the old retirement areas in Stoney Creek. By selecting the material extracted we anticipate generating a net return per tonne of \$20.00.

On the wider scene, the Agri - Fax Log Price Index has risen over \$3 per tonne over the past two months to \$80 delivered, its highest point since late 1997. A significant factor has been in the export market where shipping costs have come back \$10 per tonne.

#### **4.9 Technical Services Section - Highlights Last Quarter**

Activities completed include -

- Upper Ruamahanga Classification Scheme work on upper and mid sections
- Completion of coastal surveys at Castlepoint and Riversdale
- Completed erosion zone coverage on flood hazard maps for Engineering Section and Masterton District Council
- Completion of 1 yearly RBM surveys at Waihenga, Gladstone and Kokotau Bridges
- Completion of RBM programmed 5 year resurvey of Tauherenikau River
- Completed 6 monthly x-section surveys at Tauherenikau, Waiohine, Upper Ruamahanga and Waipoua Rivers
- Bovine Tb mapping
- Computer draughting work on Soil Conservation farm and Sustainability Plans
- Fensham Reserve contour survey undertaken for Environment Division
- Donalds Creek sign erected at Harrison Street, Featherston
- Survey work in Huangarua River for river modelling investigation
- Aerial photography completed for Waingawa and Waiohine Rivers
- Set out upgrade to Turanganui stopbank

#### 4.10 Gravel Royalties

Three gravel extractors have requested a meeting to discuss the increase in gravel royalty fees to \$1.00 per cubic metre.

A meeting will be convened with the Gravel Users Group to discuss the issue.

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

#### 5.1 Environmental Incidents

Date	Incident	Details
12/12/2001	Dust again blowing onto residence from two adjacent timber yards under gusty north-westerly conditions, Masterton	Companies written to, requiring compliance with the Air Plan.
17/12/2001	Dead cow in river at popular swimming spot, South Wairarapa	Removed by WRC and buried. Owner could not be traced.
17/12/2001	Dead fish dumped in Lake Wairarapa.	Small quantity of fish, not considered significant environmental impact. No further action taken.
18/12/2001	Contractor dumping "dark evil looking stuff" beside creek, Masterton.	Found to be bitumen. Contractor required to remove.
18/12/2001	Landowner near Carterton concerned about the spraying of effluent by a neighbour during heavy rain.	Effluent was determined to be dairy shed effluent which was being sprayed in compliance with consent conditions. No action taken.
19/12/2001	Car and rubbish dumped in riverbed, Carterton	Person responsible for the rubbish was traced. They removed it immediately. Car removed by WRC. Unable to be traced.
23/12/2001	Fire Service advised of a chemical spill at timber treatment plant outside of Masterton.	Under investigation.
24/12/2001	Masterton resident complained about smoke nuisance from a neighbour's property	Smoke not considered objectionable or offensive. Reminder given on appropriate burning items. N further action taken.
3/01/2002	Abandoned car in bed of Ruamahanga River, end of Oliver Road, Te Ore Ore.	Car removed by WRC.
8/01/2002	Landowner near Carterton reported problems with groundwater well supply suspected to be due to recent drainage activities by a neighbour	Under investigation.

8/01/2002	Abandoned car in river bed, adjacent to Waihenga Bridge, South Wairarapa	Vehicle removed and taken to Martinborough landfill.
12/01/2002	Abandoned car in Waipoua River, Masterton	Removed by WRC.
18/01/2002	Local stream running white	Contacted complainant. Stream had cleared. Stream inspected upstream and downstream. Could find no trace of white discharge.
19/01/2002	Dead sheep in the Waipoua River	Dead sheep located and removed from the active river channel. Owner still being pursued.
24/01/2002	Odour from neighbouring industrial site, Masterton	Company has committed to pollution control equipment by June 2002.
28/01/2002	Dead sheep in Waipoua River, immediately above swimming hole, Masterton	Removed by WRC staff.
15/02/2002	Effluent overflow at dairy farm from sump.	Effluent overflow from effluent sump had been contained in overflow channel and had been discharged to pasture.
21/02/2002	White froth on Booths Creek which passes through the complainant's property, Carterton.	Source not able to be determined.
26/02/2002	Farm dump on boundary of property in South Wairarapa causing nuisance.	Under investigation

## 5.2 Enforcement

### *Abatement and Infringement Notices*

- An upgrade timetable has been provided by the company involved in a diesel spill into a water race last year. The abatement notice is still in force and a further meeting is planned.
- The hearing of a defence lodged against an infringement notice, issued in relation to unconsented wild flood irrigation, is yet to be held. The matter has been transferred to the Wellington District Court with an Environment Court Judge to be allocated for a hearing.

The case was called on 27 February and a not guilty plea entered and a nominal hearing date was expected to be given.

### *Prosecutions*

Sentences were issued in the Environment Court for two prosecutions for deliberate pumping of dairy effluent into water courses. Guilty pleas were made in both cases. Fines imposed were:

Nichols:       \$4000 fine,   \$1797 costs  
Warren:        \$5000 fine,   \$334 costs plus Court costs.

Council receives 90% of these fines.

The sentences achieved widespread publicity, perhaps because one plaintiff referred to his recent dairy farmer of the year award when addressing the Judge on sentencing.

Media articles drew attention to the low level of fines in relation to the deliberateness of the actions and the maximums allowable under the Act.

### *Waingawa Chemical Spill*

This spill of copper based timber treatment chemical into a water race occurred on 23 December at the time of Christmas close downs. Staff did a good job working with emergency services and Carterton District Council staff to determine the nature of the chemical and make appropriate responses.

Staff participated in a debrief with emergency service staff and issues of common interest have been formally raised with Carterton District Council.

The company has co-operated and acted responsibly to ensure that future incidents will not occur and an appraisal of site activities and consent requirements has been made covering the full timber processing activity.

A decision will be made shortly as to whether a prosecution should be taken.

### **5.3 Notified Consents**

Carterton – Kaipatangata - water take	Application received – under process.
Featherston Sewage – discharge	On hold awaiting full assessment of effects and consultation. Agreed lower priority than Martinborough.
Martinborough sewage – discharge	Hearing set for 26 March 2002.
Masterton Sewage – discharge	Interim consent application to be made before June 2002.
Owahanga Station – coastal	Meeting held with owner’s representative to clarify scope and requirements. No further progress.
J Barton – heavy vehicle assess on stopbank – land use	Notified.
Renalls Ltd – air discharge	Notified.
QE Park Lake Masterton - 4 consents	Notified with no submissions received. Final issues being resolved with applicant.
S McLachlan – Rathkeale – underground takes	Appeal formally withdrawn. Consent operative.

Water Races - 6 - Masterton, Carterton and South Wairarapa District Councils	Applications received for all races. <ul style="list-style-type: none"> <li>◦ AEEs assessed for Masterton races with further information requested.</li> <li>◦ Carterton full AEE yet to be received.</li> <li>◦ South Wairarapa AEE's assessed, some additional information being provided.</li> </ul>
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#### 5.4 Riddiford Counterclaim

This matter was to be heard at the Masterton District Court in December. With the late involvement of the Trustees of Ruamahanga Farm, a negotiated agreement was eventually reached to dispose of this \$200,000 claim and the issues it raised.

A formal agreement was given by the Trustees that the issues will not be raised again and a payment of \$3000 was made towards the Council's costs in responding to this vexatious claim.

#### 5.5 Coastal Strategy

Some 70 people attended three key stakeholders meetings held to explain the draft vision and process. Feedback has been received from a number of individuals and will be considered at a meeting of the Group in March.

Tender proposals have been requested for preparation of Landscape and Ecology Technical Reports. Funding provision for these two reports was approved at the Council's half yearly review.

#### 5.6 Hazards Research

- Consultants proposals have been received for identifying current responses to tsunami hazard and how these might be applied within the Region.
- IGNS have commenced a study of the Mokonui fault west of Masterton, accurately mapping and determining fault movement and identifying possible trenching sites for later detailed study.
- Proposals have been requested from detailed mapping of the Masterton fault within the town. This is a joint Masterton District and Regional Council project.

#### 5.7 Hydrology

##### *Rainfall*

Rainfall figures for January varied percentage wise for the Wairarapa. In the Tararua Ranges the rainfall was below average (85%) with few rain-bearing north-westerly fronts coming through. However rainfall was above average for the Wairarapa Valley and eastern hills with more easterly rain.

The table below is for 3 representative rainfall sites.

Site	Location	Jan 2002 (mm)	Jan (mm)	% of average
Angle Knob	Tararua Ranges	387	457	85
Alloa	Middle Valley	70	65	108
Tanawa Hut	Eastern Hills	66	62	106

### *Rivers*

December flows from both the western Tararuas and the eastern hill country were between 150-200% of their average monthly flows. During January these levels fell back somewhat. Flows from the eastern hill country for January were still above average by about 10% but flows from the Tararuas were 10% below average.

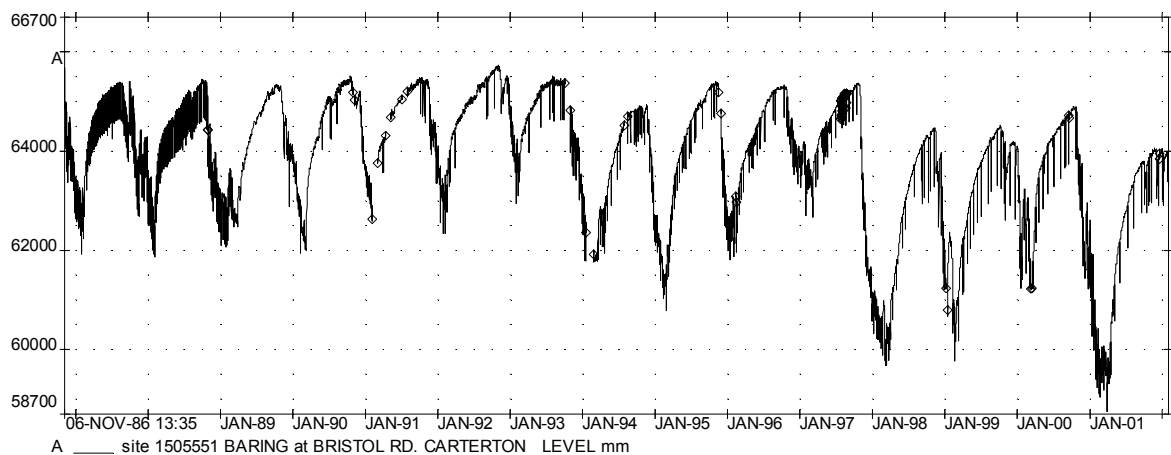
The table below contains January flow statistics for 2 representative sites.

Site	January 2002 Flow (m <sup>3</sup> /s)	Average January Flow (m <sup>3</sup> /s)	% of Average
Waihenga	50.0	45.9	109
Waiohine	15.7	17.3	91

### *Floodwarning*

	January	Financial Year to Date	Previous Year to Date
No. of Events	0	4	15
No. of Lists Issued	0	16	129

### *Underground Water*



The plot above identifies the trend in groundwater from the telemetered site at Baring's (east of Carterton – Parkvale No. 3). The data depicted is partial processed but can be used to identify the current trend.

Although the Parkvale aquifer identified above was 1m below average winter recharge prior to this irrigation season, it is at present 0.5 metre higher than the January mean. This is a reflection on the above average rainfall over the December/ January period in the Wairarapa Plains and consequently less demand on the groundwater resource for pasture irrigation.

## **6. Recommendation**

*That the report be received and its contents noted.*

Colin Wright  
Divisional Manager, Wairarapa