# **Catchment Management Division**

Departmental Managers' Update for period ending 11 July 2008

# **Biosecurity (Wayne O'Donnell)**

# 1. Pest Animals: (Ray Clarey)

## 1.1 KNE Programme

Since the June Committee meeting it has been business as usual for the KNE programme.

In the Western Zone the focus has been to try and complete all servicing rounds in sites subject to shared funding with TA's or supported by Biodiversity Condition Funds. The projected income budget for the financial year was under achieved by 20 percent. This is directly related to programming issues early in the financial year with the changeover from using BioWorks, to providing services within an expanded Pest Animal Section.

In the Eastern Zone, routine servicing of KNE sites occurred during June at Taumata Oxbow, Pikes Lagoon, Waihora, Pounui, Morisons Bush, Tauherenikau Bush, Sulphur Wells and Rewanui Reserve.

A recent meeting between GW and DoC regarding the Mt Bruce/Pukaha buffer resulted in an agreement to share operational information in an attempt to predict trends and standardise best practise.

# 1.2 Rabbit Surveys - Western Zone

The annual rabbit proneness surveys have been concluded in the Western Zone. No areas of medium to high infestations were found. Proneness surveys are carried out by daytime inspection where rabbit presence and sign is scored against the Modified McLean Scale.

The survey to sample wild rabbits in the Western Zone for calicivirus immunity levels has been completed. Rabbits were sampled from eight properties with a rabbit prone history. The sites ranged geographically from Ataturk Park on Miramar Peninsula to coastal property at Peka Peka. Only 83 samples were obtained which reflects the low rabbit levels for this 'one off' exercise. The range of immunity varied from zero immunity in the samples from Berhampore Golf Course and Queen Elizabeth Park through to 100% immunity for Whitireia Park. The average Rabbit Calicivirus Disease immunity was 45.70% which is similar to this year's Wairarapa sample of 42.5%.

# 1.3 The Department of Conservation Wildlife Protection Review

In June GW staff submitted on the preliminary findings of the DoC review of the Wildlife Act. GW's submission was generally in support of the recommended changes. The Wildlife Protection Review was originally requested by various interest groups surrounding the Canada goose, a protected game bird and agricultural pest in the region. The review was expanded to include the protection status of a wide range of introduced and native wildlife species. The latest paper included the findings on all relevant species excluding the Canada goose, which will be released later this year in a separate document.

GW supports the proposed decisions for spur-winged plover, native shags, harrier hawk, black-backed gull, various game birds, native invertebrates and introduced frogs and reptiles. Comments were also made on technical aspects of the document surrounding the pet trade, Maori customary harvest of wildlife and the holding of protected native species. A change in status is required for a number of species to allow their inclusion in GW's Regional Pest Management Strategy, or to authorise their control for conservation purposes. GW has requested a change on the restriction of holding protected wildlife, to legalise the possession of native bird carcasses for autopsy by GW staff. The pending decision on Canada geese may also impact on Greater Wellington, particularly if their current game bird protection is removed.

## 1.4 Good Practice Guidelines for the Control and Monitoring of Feral Pigs

These guidelines were commissioned by the National Possum Control Agencies (NPCA) and are currently undergoing their second draft review. The practical aspects of feral pig control and monitoring (limited as they may be) are presented.

The primary audience is field staff and contractors responsible for undertaking feral pig control and monitoring. The document is also designed to provide practical guidance to community groups, land holders and land managers who have a need to manage the environmental and economic impacts of feral pigs. The document is not intended to direct specialised eradication or research objectives; nor is it intended to be a guide to policy makers.

In recent decades comparatively little effort has been expended on the management of feral pigs. However, feral pig management is once again becoming more of an issue, with both Regional Councils and the Department of Conservation giving increasing attention, particularly to the impacts feral pigs have on biodiversity values. With the commissioning of these guidelines, the reality is that little established practice is documented in New Zealand for the formal control of pigs, and practically nothing for their monitoring. Some methodologies that were available historically no longer are. For instance, no toxin is registered for use against pigs at present, and the larger leg hold traps suited to pigs are banned except with special permit. For monitoring, no method is generally in use in New Zealand which might inform good practice, nor is any index methodology established which has been formally calibrated against actual pig density, or confirmed to be strongly correlated with pig density.

Most control efforts today comprise encouragement of private hunters and their dogs, with limited pen trapping and professional hunting (air and ground). Formal monitoring of pig populations is practically non-existent.

The necessary pest management experience required to establish agreed "best practice" is lacking. Some elements of the guidelines, particularly for monitoring, present untried methods which are believed to offer a useful starting point. Fortunately overseas experience is available to assist.

#### 1.5 Rook Control

Planning for this years rook nest baiting aerial control is underway with a review of health and safety standards, helicopter hire contract, consultation with iwi and permissions from the Medical Officer of Health. However, the petrolatum and DRC1339 vertebrate toxin agent used for the baiting is currently awaiting a decision by the Agricultural Compounds Veterinary Medicines Group on an application for a variation to its mode of use. The ACVM Group has been advised that processing of the application by the beginning of September would be appreciated. Any delay will also adversely affect Horizons and Hawkes Bay Regional Councils operations.

## 1.6 Biodiversity 'Meet and Greet'

A 'Biodiversity Meet and Greet' forum was held in the Masterton Committee room in early July. This meeting was an opportunity for organisations and individuals involved in biodiversity in the region to get together and gain a greater understanding of each other's roles. A number of external organisations were invited to give a presentation on their roles and responsibilities, as were a number of internal staff from different departments. Each organisation or department highlighted their responsibilities, contribution to biodiversity and some requested or offered assistance to others. The meeting was a valuable way to better understand others, and put a face to the name on the other end of the phone.

External representatives were from QEII Trust, Masterton District Council, Department of Conservation, Carterton District Council, Federated Farmers of New Zealand, Forest and Bird and the Masterton YMCA. GW representatives were from Land Management, Environment Policy and Biosecurity (Pest Plants, Pest Animals and Monitoring and Investigations).

# 1.7 14<sup>th</sup> Australasian Vertebrate Pest Conference

Ray Clarey attended the 14<sup>th</sup> Australasian Vertebrate Pest Conference held in Darwin, Australia 10-13 June this year. The conference is held triennially with the last AVPC held in Wellington, NZ. The conference was hosted by the Northern Territory Government and organised in conjunction with the Invasive Animals Co-operative Research Centre and the Northern Territory Department of Natural Resources, Environment and the Arts.

It was a fast paced conference with some 140 presentations over the three days. Twenty papers had a NZ theme or presenter. Ray's presentation was titled 'Seeds of Doubt, Bother in the Bush' and related to the unusual sprouting of rodenticide baits within the Wainuiomata Mainland Island. The baits were manufactured in the USA and there was concern that the seeds and/or sprouts might be an invasive species or that the baits contained pathogens as the bait ingredients had obviously not been adequately devitalised. Baits manufactured in NZ, Australia and the USA are being used for pest animal control in many special ecological areas such as Macquarie Island, Seychelles, Madagascar, Galapagos Islands, South Georgia Island (Shetlands) and Ascension Island. The take home message was that care needs to be taken that a bigger problem is not created compared to the one trying to be resolved.

Whilst some of the papers covered economics and computer modelling there were many practical presentations on pest or problem animals. These included pest birds (starlings, Pacific Blue Ducks, Bell Miners), foxes, wild dogs, urban dingoes, mice, rats, rabbits, possums, stoats, cats, feral camels, goats, pigs, deer, monkeys, badgers, racoons, brown treesnake, fish (carp, gambusia, tilapia) and cane toads.

The current and future vertebrate pest problems faced by Australia are mirrored by those of New Zealand and Pacific neighbours. Professor Tony Peacock (Invasive Animals Cooperative Research Centre, University of Canberra) chaired the organising committee and summed up the future as he saw it by these statements:

"To 2050, Australian Society will continue to age; become more urbanised; and more animal welfare conscious. In the next decade, a large number of current research workers, teachers and practitioners will retire and not necessarily be replaced. The impacts on feral animal control are likely to be a restriction of freedom to operate, limited by availability of skilled workers and greater social barriers to conducting feral animal control.

It is likely that pest managers will need to provide projections of benefits and do more monitoring than has previously been the case. If you can't measure it, you can't manage it".

## 2. Pest Plants: (Richard Grimmett)

## 2.1 Regional Surveillance Species

Staff have continued property inspections with 191 inspections completed since the last Committee report. The inspections registered 11 new Total Control species (10 Banana passionfruit & 1 Madeira vine) and 4 Site Led – Boundary species (all Wild ginger). Over 50% of properties have new infestations identified. Trials studying initial control of two species have completed the first stage. New high risk species identified are listed below.

**Name of species found:** White Edged Nightshade (Unwanted organism status)

Number of sites: 1

**Comments:** Found a number of plants and many in areas not previously seen. The areas where plants were found were in areas which appeared to have been frequented by feral pigs.

**Name of species found:** Chocolate Vine (Unwanted organism status)

**Number of sites:** 2 new sites found.

**Comments:** Results from a field trial to test three chemicals have been collated for the first year. One chemical has outperformed the others. The trial will now continue for another season to assess maintenance control performance. The objective is to assess the best method of control plus establish total control cost estimates for future Cost Benefit Analysis.

**Name of species found:** Bomarea (Unwanted organism status)

**Number of sites:** Trial Site monitoring

**Comments:** A control trial has also been completed on this species to assess the most appropriate chemical control method. The trial will now continue for another season to assess maintenance control performance. The objective is to assess the best method of control plus establish total control cost estimates for future Cost Benefit Analysis.

Name of species found: Senegal Tea

Number of sites: 1

**Comments:** Found during delimiting surveillance of Total Control sites in a

pond. Purchased as "Temple plant", years ago by the occupiers.

Name of species found: Sagittaria

**Number of sites:** 1 with two plants

Comments: Samples collected from the Wellington Botanic Gardens,

Begonia House. Gardens staff instructed to remove the plants

from public display.

## 2.2 Import Health Standards

Preparation is underway for an upcoming meeting with MAF BNZ to discuss potential impacts on MAF partner organisations responding to new incursions due to failures of importers to comply with import standards, or the actual failure of standards to ensure products are safe to import. This meeting will discuss the failure of standards for Coco Peat sanitation which has resulted in a number of new to New Zealand plants arriving.

# 2.3 Total Control Species (11 species)

Delimiting surveys continued around sites located during previous surveys. For this period 180 properties were surveyed. Annual inspections were completed on 107 sites during June, with 4 new Surveillance species sites and 3 new Total Control species sites registered.

# 2.4 Key Native Ecosystems and Territorial Authority Reserves Programmes

All works across the KNE and TA Reserves have been completed for the current financial year.

Pest Plant staff completed planting of 580 trees with the local school at the Tauherenikau KNE. Sites pre-plant sprayed for various Care Groups have had final clearing work of dead material and touch-up spraying completed for handover to groups for planting. Closer monitoring of sites will be undertaken this year to ensure releasing of planted trees is initiated.

As part of the KNE review process, staff co-ordinating KNE operations are surveying stake holders (landowners, TA, GW staff) to determine the level of understanding of the KNE programme. Details will be collated to gain a better understanding of how the KNE/Reserves programmes can be improved.

### 2.5 Biological control

This is the dormant period of the year for monitoring biocontrol agents. The Department has reviewed our agreement with Landcare Research Ltd. and agreed to retain current services. There will be three new biocontrol agent releases this spring, including Broom Shoot Moth (multiple species), Green Thistle Beetle and Tradescantia Leaf Beetle. Landcare Research Ltd. support will involve further development of monitoring systems.

#### 2.6 Communications

Officers in the Wairarapa are helping to organise a weed swap in Masterton with DoC.

Staff members have completed meetings with individuals and groups nominated for Weedbusters awards

Staff attended the following events over the April / May period:

- A display of the Biosecurity Department was set up in the Greytown Library as part of the Greentown initiative.
- Officers attended a Weed Swap at Civic Square Wellington. A new Madeira site was registered as a result.

- Staff attended tree planting days with the local primary school at Tauherenikau over two days with 580 trees planted.
- Pest Plant Section staff organised a meet & greet meeting for all biodiversity practitioners within the Wairarapa.

## 3. Bovine Tb: (Graeme Butcher and Grant Crawford)

## 3.1 Vector Control Programme - 2007/08

The original AHB approved vector control programme for the 2007/08 year, with an approximate value of \$4.5M, included the following:

- 270,353 ha possum control
- 966 ha ferret control
- 26,817 ha of possum and ferret surveys
- 126,187 ha of pig surveys
- trend and performance monitoring.

The programme was reviewed in the first quarter of 2007 and again in December to determine if it remained suitable to achieve Bovine Tb targets. This review identified that a number of operations did not require control due to low monitoring results, and that some unplanned work needed to be implemented due to higher than expected trend monitoring results. Table 1 below outlines the control areas contracted following the two reviews.

Table 1

	Possum	Ferret	Ferret &	Pig	Total
	Control (ha)	Control	Possum	Survey (ha)	
		(ha)	Surveys (ha)		
GWRC	77,353	0	23,907	0	101,260
BioWorks					
J G McCaslin	24,294	0	860	0	25,154
Professional	97,138	2,116	0	0	99,254
Guiding					
T Oakly	0	0	0	152,806	152,806
Stratford Pest	9,131	0	0	0	9,131
Control					
Totals	207,916	2,116	24,767	152,806	387,605

**3.2** Table 2 details areas of the 2007/08 control programme which have been completed as at 30 June 2008.

Table 2

	Possum Control (ha)	Ferret Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GWRC	42,432	0	23,907	0	66,339
BioWorks					
J G McCaslin	17,967	0	860	0	18,827
Professional	91,897	2,116	0	0	94,013
Guiding					
T Oakly	0	0	0	152,806	152,806
Stratford Pest	3,312	0	0	0	3,312
Control					
Totals	155,608	2,116	24,767	152,806	335,297

Approximately seventy-five percent (155,608 ha) of the possum control programme has been completed and assessed by either performance monitor or audit. Contractors have estimated an additional 13,128 ha (6.3%) has been completed but the areas have not yet been monitored, indicating 81.2% of the programme is complete. Of the remaining programme, 20,479 ha or 9.8% of the BioWorks contracts had an agreed interim completion date within the 2008/09 year. The remainder of the area, 18,701 ha (9.0%) has been carried forward into the 2008/09 year.

# 3.3 Monitoring

During the 2007/08 year, 97 trend monitors and 67 performance monitors were required.

As at 7 July, all trend monitors were completed. Forty successful performance monitors have been completed. There were six failed monitors recorded. This failure rate compares favourably with the 2006/07 year when 15 failures were recorded. A summary of the failed monitors are provided in Table 3 below.

Table 3

Operation	Strata	Area (ha)	Contractor		RTC target	Failed RTC result	Passed RTC result
Waiorongomai	HMR 1	3,585	Professional Guiding		2.0%	2.1%	0.9%
South East Wairarapa Stg 1	HR 1	5,542	J McCaslin		1.0%	1.46%	0.62%
South East Wairarapa Stg 1	HMR 1	6,699	Professional Guiding		1.5%	1.7%	0.3%
South East Wairarapa Stg 3	HR 2	1,119	Stratford F Control	Pest	2.0%	2.78%	Re-work to commence
South East Wairarapa Stg 3	HR 3	553	Stratford F Control	Pest	2.0%	2.75%	1.33%
South East Wairarapa Stg 3	HR 6	2,997	BioWorks		2.0%	3.1%	Re-work to commence

# 3.3 2007/08 Carry Forward Contracts

The following BioWorks operations (20,479 ha) were not contractually due to be completed in the 2007/08 year. These operations are to be completed early in the 2008/09 year. BioWorks had advised through the tendering process that they did not have capacity to complete all projects by 30 June 2008.

•	Mangaroa Kaitoke HR 1	1,770 ha	BioWorks
•	Masterton Flats HR 1	1,482 ha	BioWorks
•	Mt Bruce Waipoua HR 3	1,799 ha	BioWorks
•	Taueru Maungaraki Ext HR 1 & MR 1	8,288 ha	BioWorks
•	Te Wharau HR 3, 6 & HMR 1, 4, 7	7,140 ha	<b>BioWorks</b>

The following projects should have been completed in the 2007/08 year but were not completed or monitored. There was approximately 18,701 ha (9.0%) of the 2007/08 programme to be completed which has been carried forward into the 2008/09 year.

Project	Strata	Progress	Ha completed	Total ha	Contractor
Te Wharau	HR 4	Not started	0	1,610	J McCaslin
Waiorongomai	HR 2	50% complete	2,358	4,717	J McCaslin
Bideford	HR 2	70% complete	710	1,014	Professional
					Guiding
Bideford	HR 3	70% complete	570	816	Professional
					Guiding
Taueru Maungaraki	MR 3	80% complete	2,729	3,411	Professional
					Guiding
Holdsworth Carterton	HR 4	90% complete	1,166	1,296	BioWorks
Holdsworth Carterton	HM 2	Monitor to start	536	536	BioWorks
Holdsworth Carterton	HMR 3	Not started	0	846	BioWorks
Kahutara Pirinoa	HR 1	50% complete	1,454	2,908	BioWorks
Kahutara Pirinoa	HR 3	50% complete	1,255	2,510	BioWorks
Kahutara Pirinoa	HR 4	Not started	0	3,369	BioWorks
Sth East Wai – stg 3	HR 6	Re-work required	0	2,977	BioWorks
Sth East Wai – stg 3	HR 2	Re-work required	0	1,119	Stratfords
Stronvar	HR 1	50% complete	2,350	4,700	Stratfords
Totals			13,128	31,829	

# 3.4 2008/09 Programme

The 2008/09 programme was submitted to the AHB for approval some months ago.

Proposed contractors have also been identified for the preferred supplier projects. Parcels of preferred supplier work have been released to two vector control contractors and one pig survey contractor. Their tenders are due to be submitted by 15 July.

The 2008/09 programme is proposed to include:

170,693 ha Possum Control

40,296 ha Possum & Ferret surveys

208,167 ha Pig surveys

38 Performance Monitors

110 Trend Monitors

## 3.5 Animal Health Board - National Pest Management Review

The AHB have released a discussion document regarding the future of Bovine TB control. The AHB's preferred option is an eradication strategy, expected to initially cost approximately \$100m per year with eradication achieved in 2035.

A national technical review group, comprising funding stakeholder representatives, has been considering the proposed AHB options. The main aim of the group is to identify a preferred stakeholder position on the objectives of the next NPMS.

The GW Vector Management team was recently requested to assist the AHB provide a VM perspective on vector control to the national review group. The objective was to explain vector management procedures and provide case studies so the review group had a greater understanding as they consider stakeholder responses to the AHB proposals.

These presentations were held on 3rd and 4th July in Masterton followed by a field trip to Mt Dick, west of Carterton.

# Flood Protection (Graeme Campbell)

### 1. Manager's comments

The Department has been focused on wrapping up the last of the works projects for the 2007/08 financial year and starting up the projects scheduled for the new 2008/09 financial year. Overall the Department had a good year with the completion of a number of capital works projects on time and budget.

Officers have spent considerable time looking at ways of bridging the gap between the Boulcott Alternative and the Green alignment costs including discussions with Hutt City Council, and officers of the two Golf Clubs. There has been a good willingness from all parties to try and find a solution that all parties are happy with. This matter will be reported to full Council once negotiations have been completed.

The extent of bulldozer work being undertaken in our Wairarapa river schemes has attracted the concern of Fish and Game New Zealand. Staff are working with them to clarify what works have been done under our various consents. Regardless of whether all of the works are within the consent conditions there will be an issue about the extent of this type of work and officers are now looking at ways of reducing it.

# 2. Western FMP's [Daya Atapattu]

### 2.1 Ava to Ewen project

The tendering process for the Strand Park stopbank reconstruction contract has started. Five experienced contractors are now pre-qualified for this contract following a Registration of Interest process completed in June 2008. Tender documents will be issued to these five contractors in mid July 2008.

The Strand Park stopbank project involves reconstructing the existing 900 metre long earthen stopbank to a flatter and wider profile with raised top levels. The contract includes about 50,000m<sup>3</sup> of earthworks, providing an access way to the proposed riverbank carpark below the Ewen Bridge, upsizing two stormwater pipes, and constructing a floodwall and lighting along the stopbank footpath. Car park access, stormwater upgrades and lighting are joint initiatives between Greater Wellington and Hutt City Council. This contract is scheduled for completion in 2008/09.

Stage 1 of the Opahu Stream planting is now complete following a community planting day held on 5 July 2008 as part of the Stage 1 works with 1300 plants put in around the waters edge. The next stage will be completed in September 2008.

# 2.2 Boulcott/Hutt stopbank project

On 30 June 2008, Council resolved to postpone the decision on the preferred alignment for the Boulcott stopbank. GW and HCC will further explore options for funding the additional costs of the Boulcott Alternative alignment and report directly back to the next Council meeting on 11 August 2008.

### 2.3 Whirinaki Crescent stopbank

Stage 2 stopbank works involving the reconstruction of about 700 metres of stopbank from the Home of Compassion end to the Wellington Golf course boundary are now complete. Resource consents to remove five trees from the Stage 1 filling area is taking more time than originally expected because of issues related to the proposed residential development on the site. A revised consent application was lodged on 27 June 2008, following a meeting with UHCC and Golf Club officers.

### 2.4 Maoribank investigations

Staff are currently developing concept designs and cost estimates for remedial works to be considered for the reach between Maoribank bend to the Norbert Street Bridge. Priority works will be included in the Hutt River capital programme for consideration through the next LTCCP.

# 2.5 Kapiti floodplain management

#### 2.5.1 Waikanae River

Graeme Campbell and Kees Nauta attended a public meeting with Otaihanga residents, DOC and KCDC on 7 June, to discuss flooding issues potentially affecting Otaihanga landowners. This meeting was in response to an earlier community visioning workshop for Otaihanga organised by KCDC. The major concern of Otaihanga residents was the build up of gravel within the lower reaches of the river, particularly in the estuary. GW staff are investigating this matter with a view to preparing consent to extract gravel within the estuary area and will prepare an estuary management agreement with DOC.

A letter has been sent to residents on the seaward side of Makora Road, seeking their views about the recommendation to delay further house raising for 1 year and bring forward the strengthening of the river bank edge adjacent to the Otaihanga Boating Club. Staff believe that in a major flood further erosion of the river bank will put the stopbank at risk, which in turn will put the properties on the seaward side of Makora Road at risk.

KCDC have advised that following public consultation and further discussions with Flood Protection engineers, they have decided to proceed with the final design and resource consent for a cable stay footbridge across the Waikanae River, located 300m upstream of the Jim Cooke Park entrance.

# 2.5.2 Friends of the Waikanae River (FWR)

At the executive meeting in June, FWR set a date for their ninth AGM. This is scheduled for 16 July 2008 in the Presbyterian Church Hall, Ngaio Road, Waikanae. The terms of reference require the meeting to elect approximately 12 people to the Working Group from nominations made at the meeting. Greater Wellington, Kapiti Coast District Council and Te Ati Awa ki Whakarongotai appoint another three members. Also organised at the Executive Meeting was a site walkover for the Waikanae Planting Plan in order to finalise any changes needed to the planting plan.

# 2.5.3 Friends of the Otaki River (FOR)

After the success of the Chrystalls Extended Stopbank and Walkway opening, FOR organised another planting day on 5 July. A further 1000 native trees were planted by the Friends and about 60 members of the public attended. This will build on the planting already established at Chrystalls Bend.

## 2.5.4 Chrystalls Extended Stopbank

Fencing of the stopbank has commenced which in due course will allow light grazing to maintain the grass cover. Following this, the easements will be surveyed and finalised. Land Information NZ has advised their intention to dispose of the land between the stopbank and the river that is surplus to railway requirements. Staff are investigating options for having this area either transferred to or vested in GW for river control purposes. A separate report will be submitted to Council for approval in due course.

#### 2.5.5 South Waitohu Stopbank

An estimate for the works undertaken as part of the feasibility design report indicated costs significantly higher than that allowed for in the budget. Staff are now investigating options for reducing the overall cost. In addition the latest modelling shows that a number of properties downstream of the proposed stopbank will experience increased flood levels as a result of the stopbank. Staff are checking to see what mitigation measures can be undertaken prior to proceeding with a resource consent.

#### 2.5.6 Isolated Works

Following the 8 January floods, staff provided advice to a variety of landowners whose properties were severely damaged by the flood. A number of these properties are outside present GW schemes on the Mangaone Stream in Te Horo and the Rangiora Stream in Reikorangi.

# 3. Western Operations [Jeff Evans]

#### 3.1 Hutt River

All the vehicle bollards have now been installed beside the access track at Taita and access roads have been graded along the full length of the river. Gravel extraction continues below the Kennedy Good Bridge, with good progress being made over the last few months. Willow planting is now in progress and willow rejuvenation and clearing work is also underway on a number of sites along the river.

# 3.2 Hutt River Ranging Services

Seasonal maintenance continues along the trail. Tagging of signs has continued and with the wet weather Stokes Valley and Taita berms were once again hit with vehicle damage. The new river works at Randwick also received some damage. It was a busy month for events with the annual Trentham Harriers Fun Run/Walk in the upper river, the Petone Aurora Harriers club event on the lower river, and the Te Omanga Hospice fund raising rubber duck race from the Melling Bridge to the Ewen Bridge.

#### 3.3 Otaki River

The last of the maintenance rock was delivered to Leithbridge and reach mowing work has been undertaken on the stopbanks below the State Highway Bridge. The Chrystalls bend planting, and open day was a great success with in excess of two hundred people turning up to participate.

#### 3.4 Waikanae River

Poplar and willow removal opposite Greenaway Road has continued and track maintenance has also been undertaken above Kebbles corner and behind Dricon. A number of sites have also been cleared in preparation for planting by the Waikanae friends groups.

#### 3.5 Watercourses

Wind blown trees have been removed from a number of streams over the last few weeks and an annual drain clearing run has also been undertaken for all the major rural drains under GW's responsibility in the Kapiti area.

# 3.6 Gravel extraction

Gravel extraction figures to the end of May 2008 are set out below.

			200	7/08	2006/07
River	Area	Contractor	Period	Year	Full Year
Hutt	Estuary	Winstones	3,675	39,249	46,100
пиш	River	Horokiwi	10,261	52,621	46,890
Otaki	River	Winstones	4,020	35,390	40,929
Waikanae	Above Greenaway Rd	Various	0	0	3,330
Walkanae	Below Greenaway Rd	Various	0	2,740	5,360
Waitohu	River	Mills Albert	0	2,502	2,500
		Totals	17,956	132,502	145,109

Gravel extraction figures to the end of June 2008 are set out below.

			200	7/08	2006/07
River	Area	Contractor	Period	Year	Full Year
Hutt	Estuary	Winstones	3,479	42,728	46,100
Пиш	River	Horokiwi	13,581	66,201	46,890
Otaki	River	Winstones	2,616	38,006	40,929
Waikanae	Above Greenaway Rd	Various	0	0	3,330
Walkallae	Below Greenaway Rd	Various	0	2,740	5,360
Waitohu	River	Mills Albert	0	2,502	2,500
		Totals	19,676	152,177	145,109

# 4. Wairarapa Operations [Mike Longworth]

# 4.1 Wairarapa River Schemes

#### 4.1.1 General

The work programmes in the Wairarapa rivers for this financial year 2008/09 are about to get under way with pole planting. Staff are working on the various documentation and reports associated with the management of the river schemes for the 2007/08 year.

## 4.2 Lower Wairarapa Valley Development Scheme

The detailed planning for the development work budgeted at \$752,000 for this year is being developed. Construction work will not start until the summer. The proposed work this year includes:

- Wavelap protection at Maclands and Sutherlands
- Rock berm at Butchers
- Boulder groynes in Pukio area
- Stopbank upgrading in the lower Tauherenikau

# 4.3 Investigations and Technical Advice

## 4.3.1 Private Stopbanks around Lake Wairarapa Study

The study to investigate the state of private stopbanks and other private structures associated with preventing flooding around Lake Wairarapa can now progress following receipt of a long awaited consultants report. Options for Council's involvement, if any, are being developed for reporting to Council.

### 4.3.2 LIDAR Survey in the Wairarapa

New Zealand Aerial Mapping have been commissioned to carry out a LIDAR survey of a number of areas in the Wairarapa associated with Regional Council projects such as the Waiohine stopbank upgrade and Waingawa scheme review. The survey is also picking up some areas of interest to the three District Councils who are also contributing to the cost of the work which totals \$156,066. LIDAR (light detection and ranging) is a remote sensing system used to collect topographic data. The data is collected with aircraft – mounted lasers capable of recording elevation measurements at a rate of 2,000 to 5,000 pulses per second and have a vertical precision of 15 centimetres.

#### 4.3.3 Technical Advice

Staff have responded to four significant requests for advice over this reporting period. These include information requests from the public, local authorities and also flood protection comment on resource consent applications to Greater Wellington.

### 4.3.4 Drainage Schemes

The drainage schemes have been closely managed by staff over this last year to ensure budgets were met following several years of weather related extraordinary cost. Most schemes finish very close to budget despite a number of unforeseen costs such as electrical failures.

## 4.4 Staff Changes

Graham Reidy was promoted to the role of Engineer and will manage the Waiohine, Waingawa and Waipoua river schemes as well as the drainage schemes.

Rob Graham was promoted from Senior River Hand to the new role of Supervisor for the central area of the valley covering the Waiohine, Ruamahanga from Waihenga to the Waiohine, the Tauherenikau and the Huangarua. This new role frees the Southern Supervisor to manage the Lower Wairarapa Development Scheme development work. Peter Hing was also promoted to Senior River Hand in the northern rivers gang.

It has been good to be able to promote from within the organisation for this role as it shows support from Council of succession planning.

# 5. Investigations and Assets [John Eyles]

A full report on the outcomes of the \$500,000 trial, to test the clean up methodology, was presented at the Waiwhetu Stream Advisory Subcommittee meeting on 24 June. The lessons learned from the trial will be applied to the detailed design and consenting of the main clean up. One of the main issues to resolve is the high water content of the contaminated sediments. Dewatering or other treatment will be required to ensure that it is acceptable to the Silverstream landfill. The estimate to complete the clean up of contaminated sediments is \$5.9M and the associated floodworks (primarily widening and deepening the Waiwhetu channel) is \$4M. Both estimates will be reviewed during detailed design and any changes reported back to the Waiwhetu Stream Advisory Subcommittee in October.

The confirmed minutes of the WSAS meeting are included in Report 08.519 in this order paper.

Consultants URS, in partnership with AC Consulting Group, have been engaged to provide the professional services for the detailed design, consenting and implementation of the clean up and widening and deepening. Work has been underway since the start of June, with construction programmed to commence in March 2009.

# 5.1 Asset Management

Annual asset management inspections have been undertaken on the Otaki, Waikanae and Wainuiomata rivers. Further inspections of the remaining watercourses will be undertaken over the next few weeks and the results reported back to the Committee in September.

Seven staff from Horizons Regional Council were hosted on June 19 and 20, to peer review flood protection asset management procedures on the Western and Wairarapa rivers. A short report will be prepared by HRC to complete the independent peer review requirement of our asset management plan. Staff enjoyed meeting our cousins from the north and hearing how they managed the disastrous 2004 floods in their region. Productive relationships were formed which will have a long term benefit for both councils.

A reciprocal visit, to review HRC flood protection assets, is planned for June 2009.

# 6. Strategy & Technical Support [Sharyn Westlake]

The following table summarises the number of formal, written requests for advice responded to over the period from 24 May - 4 July 2008. These include information requests from the public, local authorities and also Flood Protection comment on resource consent applications to Greater Wellington.

	24 May – 4 July 2008	YTD
Requests brought forward	0	3
Additional requests received	24	226
Responses provided	21	227
Outstanding requests	2	2

As a continuation of our internal policy development, staff are progressing a review of the Department's visions, goals and objectives to feed through into the LTCCP. Development of other internal policy documents such as a guideline to floodplain management planning is progressing and staff are working on a number of smaller applications and requests for written approvals and information.

# **Land Management (Dave Cameron)**

## 1. Manager's comments

#### 1.1 Akura Conservation Centre

The Centre opened for trading on 3<sup>rd</sup> June and because soil conditions are ideal for planting, trading has been very brisk. The trading season will last until the end of September. Saturday morning trading is again proving very popular with turnover averaging \$2,000.

With the likelihood of the Wairarapa Regional Erosion Control Initiative project gaining Council funding in 2009, it is appropriate to now review Council's landbank of nurseries with a view to increasing the supply of poplars and willows over the next three or four years. For this to occur, new planting is required to take place in the spring of 2009. A number of options have been tentatively explored over the last six months. A proposal will be put before the Akura Board before the end of this year.

# 1.2 Poplar and Willow Research Collective

The Poplar and Willow Research Collective is a small group of Regional Councils and HortResearch personnel who have maintained an interest in promoting the use of poplars and willows for erosion control and river management purposes. It is a group that is severely limited by funding, surviving on contributions from various Councils (\$60,000) and some inkind support from HortResearch. A key element of future proofing the use of poplars and willows i.e. the selection and breeding of new clones, has been curtailed since 1996.

The Collective has applied to the MAF Hill Country Erosion fund to assist in putting together an annual \$600,000 programme to restart the selection and breeding programme. Existing and new Council members will be asked to substantially increase their annual contribution (GW is likely to increase from \$7,500 to \$25,000).

This opportunity is probably the last one for this aspect of sustainable land management research. Many avenues have been tried over the last ten years, however with hill country erosion now firmly on the radar the opportunity is there to provide a secure source of funding to support this very vital aspect of research.

#### 1.3 Hill Country Erosion Fund

The Hill Country Erosion Fund Stage II application was considered by MAF's panel on 5<sup>th</sup> June. Following changes requested by the panel Council have supported the project in principle and will make a decision on funding as part of the LTCCP process. MAF have agreed to ring-fence their four year contribution of \$525,000 on the proviso that it is matched by Council's contribution.

# 1.4 Winter Planting

The winter planting programme began in mid-June. Soil moistures are currently at good levels for planting and the programme is in full swing. Two helicopter flights have been completed, dropping poles into hill country sites. A large number of poles have also been delivered to clients undertaking their own planting.

The demand for poplar and willow poles has been very strong, despite the recent drought and the drop in farm incomes. The pole supply from the two Council nurseries is being topped up with poles from the Aokautere nursery in Palmerston North.

Seedling planting has also started. To date planting gangs have been focusing on small blocks where replanting is occurring following harvesting. In the coming weeks the focus will shift to a 100 hectare block at Blairlogie.

### 1.5 Whitireia Park – Titahi Bay

Staff are assisting the Park Ranger at Whitireia Park to assess aspects of the grazing lease. Grazing on 110 hectares of the Park has been ongoing for many years, however local members of the Park Board are concerned that the lessee may be overstocking the area and animal welfare issues have been raised.

The grazed land will be mapped according to its land capability units. This will provide information on annual dry matter production and correlation with the numbers of stock permitted by the lease conditions.

#### 1.6 Whareroa Farm – Paekakariki

Staff are assisting the Friends of Whareroa to assess the grazing and protection options within the property. An inventory of natural resources for the property has been compiled by AgResearch. These documents will form the decision support information to determine which land is grazed as part of a 'working farm', and which land is set aside for riparian, biodiversity and recreation opportunities.

The 'working farm' integrated with environmental, cultural and social outcomes is an example of total catchment management. Whareroa Farm offers very good opportunity to engage with the community to provide a local education facility, one that links in well with QE Park.

#### 1.7 Issues for the next period

- Completion of annual programmes for individual landowners
- Completion of the winter planting programme
- Promotion of the Afforestation Grant Scheme to landowners
- Completion and adoption of the Streams Alive review

# 2. Farm Plans (Don Bell)

# 2.1 Delegated approvals - New Plans, Reviews and Annual programmes

Approvals	New Plans, Reviews	Annual Plan Target	Total 10 Year Expenditure	
New Sustainability Plans	0	3	\$0	
New Conservation Plans	3	2	\$102,212	
Ten Year Reviews	14	20	\$458,354	
_				
Programme delivery	Annual Programmes Undertaken	Annual Plan Target	Expenditure to date	Annual Plan Budget
	Programmes	Plan	_	

# 2.2 Planning Comment

Forty hill-country erosion control annual programmes, totalling \$155,000 were approved during the 30 May - 11 July period.

The first helicopter flight to spread poplar and willow poles took place on June 19<sup>th</sup>, almost six weeks earlier than last year. The key factor in this timely start was the development of an auger planting technique which overcomes the need for soil to be adequately softened by autumn rains.

Many farm deliveries of poplar and willow poles have also been undertaken where clients will plant the poles rather than the GW organised contract gangs.

Land Management and Environment Education staff combined with the Papawai Stream Restoration Group to run a public planting day to celebrate World Environment Week. Some fifty pupils from Greytown Primary School and Kuranui College helped locals and GW staff plant 320 native plants in a section of stream below the Papawai Marae.

Invitations to the Honda Tree Fund planting day at Fensham reserve (D Shields property) have been posted. The event will now take place on Tuesday 12 August (fall-back day Tuesday 26<sup>th</sup>). In addition to Honda and GW, key participants will be the Fensham Group, Enaki Stream Care Group, Forest and Bird and Trees for Wairarapa.

A very successful inaugural planting to kick-off the Makoura Stream Restoration project took place on 4<sup>th</sup> June. Up to 130 participants, including residents, pre-school, primary and college pupils, planted over 500 native shrubs on the Makakaweka stream bordering Webstar Print. Land Management and Upper Hutt Parks staff joined forces with Sustainable Wairarapa Incorporated to facilitate the event, and serve up hot drinks and sausages on a biting-cold day.

## 3. Akura Conservation Centre (Stan Braaksma)

## 3.1 Nursery Operations

- The cutting of 3 metre poles for Land Management is about 75% completed. There are still the Rivers orders to fill with 2 metre poles and stakes. Mangapakeha Nursery soil conditions have been particularly wet making extraction of the product difficult.
- This year's contract cutting crew have maintained excellent outputs, and are generally ahead of the demand. There are still some issues around pole grading, especially in oversize poles.
- Hill country soil moistures are saturated leading to an early start this winter. For 2007, pole planting started into dry soil conditions on June 23<sup>rd</sup> and required post hole borer planting to achieve planting depths required. This year we are back to the traditional bar planting technique.
- Pole production counts have been supplied to Flood Protection and enabled a broader range of product available to be ordered. In the mix this year are considerable numbers of Osier willow for stream edge planting.
- Most pole orders are from hill country farmers with a 20% reduction from last year. Land Management has revisited their allocations to maximise harvest of our own Nursery production. Similarly we have adjusted our demand from Aokautere from 7,100 three metre poles to 3,400. There have been major grading issues with Aokautere with 20% rejected from the first shipment. A recent visit to Palmerston North has corrected these problems.
- There will be no new cuttings planted this year as the two areas at Mangapakeha have yet to be fully cleared of stumps. Blanking of cuttings will occur at Akura on two blocks with poor survivals from 2007. This material has been harvested and held in moist sawdust until required.

• The improved yard layout has separated the retail from the commercial and the processing operation has been much tidier.

### 3.2 Trading

- This year with the wet June soil conditions, trading has been very brisk.
- There has been a good uptake of the catalogue and this is now on the GW web site under Akura Conservation Centre.
- The Centre has been able to access tree species as requested and the existing forward orders for species have the bulk of the requests covered. Numbers sold to date reflect healthy sales for this time of the year.
- The eco-sourced seed collected for 2009 has been sent to Morgans Road Nursery, Blenheim, with many of the species already sown. Some reporting back has found weevil problems and unripe seed. The Nursery is to report back in the next two weeks and a visit to Blenheim is planned for the end of July where our staff and Wairarapa Stars Trust will do a debrief on seed supplies and germination rates. The seed collection to date has cost Akura \$10,000.
- Both Wairarapa Stars Trust and Norfolk Road nurseries are trialling the growth of native species in root trainers as potential suppliers to Akura. A recent inspection of product has found some pricking out and root distortion problems.

## 3.3 Staffing

- Paul Henderson and Raewyn Hullena are coping well with the current workload. With good soil conditions for planting customers have arrived early, compared to last year when dry soil conditions slowed the early winter trading.
- Land Management supervisors and Waru Contracting have assisted in pole collection from Managapakeha to Akura.

### 3.4 Budget

The Akura Business Unit operating surplus has dropped significantly since the last report. A surplus of \$15,700 has been achieved. One-off costs account for a large portion of the loss, namely, eco-sourcing \$10,000, Workplace Safety \$6,000 and reduced margins on Aokautere poles \$12,000.

Activity	Budget 2007/08 – Operating Surplus	June Operating Surplus 2007/08
Nurseries	21,100	(5,500)
Trading	(58,200)	(10,200)
Total	(37,100)	(15,700)

# 4. Biodiversity (Jacki Byrd and Michelle Bird)

Planting has been completed in the Otaki River and Ration Creek catchments. A total of 3,000 plants have been planted. In the next few weeks new sites at Mangaroa and Upper Ruamahanga will be planted.

The review of the Streams Alive programme is nearing completion. Recommendations are due to be forwarded by the end of June.

### 5. Operations (Kevin Burdan)

Silviculture in the reserve forests has totalled 125 hectares of pruning and 45.4 hectares of thinning.

The new Rough Hill boundary fence is fully posted. Wires are still to be attached along 1500 metres of the 2500 metre length.

Three silviculture crews are currently operating on Farm Plan properties. To date this year 61 hectares have been pruned and 128.6 hectares thinned on 16 properties. Cash flow constraints associated with the drought and poor stock prices have impacted significantly on this activity.

### 5.1 Contract Pole Planting

- Properties involved with contract pole planting this winter have numbered eleven and 2,105 poles have been planted to date. Properties involved in contract seedling planting and release spraying this winter have numbered five and a total of 16 hectares has been planted.
- For the 2007/08 year contract pole planting was undertaken on 63 properties and contract seedling planting on 22 properties.

# **Integrated Catchment Management (Ian Gunn)**

## 1. TCM Concept

A report on the concept of TCM was endorsed at the June meeting of the Catchment Management Committee. The Committee endorsed the draft principles and implementation framework. They also requested a workshop be planned to educate all Councillors on the TCM concept.

Since the May meeting terms of reference have been developed for cross divisional executive and establishment committees. Possible providers of ecosystems training have also been contacted.

## 2. Lower Wairarapa Valley Development Scheme - Rating Classification

The new classification was adopted by the full Council in June. A newsletter outlining the decisions of the Hearings Committee and the Council decision has been forwarded to all ratepayers. To date there have been no ongoing issues with the new classification which is an excellent result.

## 3. Lake Wairarapa

Discussions have been held with Murray Waititi on how to proceed with this ambitious project. There is agreement that in the short term the focus will be on establishing a practical governance model while initiating some improvements at Lake Domain and control programmes for some of the widespread plant pests.

# 4. Emergency Management

I have attended two controllers' courses to assist with training for my role as an alternate controller. There is a need to develop some protocols and teamwork within the GW emergency management team to ensure "on the day" that roles and responsibilities are well understood.