## **Catchment Management Division**

Departmental Managers' Update for period ending 15 April 2009

## Biosecurity (Ray Clarey, Acting Manager)

## 1. Pest Animals: (Ray Clarey)

#### 1.1 Eastern Zone Activities

#### Rabbits

One of the activities completed recently in the Eastern Zone (Wairarapa) is the annual rabbit proneness survey that is conducted in the Tauherenikau riverbed. The Waingawa riverbed has been removed from the survey due to the establishment of many lifestyle blocks and their rabbit predator pets.

Interestingly, the rabbit situation has remained quite static with low populations recorded there for many years now. The last GW rabbit control was carried out over the summer of 1993 when numbers of rabbits were high within the river system and on the adjacent farm land. The continued presence of RCD, combined with less favourable habitat (good pasture due to less grazing) on the neighbouring farm land has been successful in keeping rabbits down to low densities.

Level 5 on the Modified McLean Scale is the trigger for enforcement. The braided river system was assessed at Level 3, the same as last year, while adjacent properties ranged between 2 to 3 with one property recording Level 4.

Staff are currently undertaking the annual inspection of a subset of rabbit prone properties across the Wairarapa from beneath the Tararua Ranges out to the East Coast hill country. Properties inspected to date have provided no evidence of escalating populations. It is doubtful that any other problem areas will be disclosed this year apart from the known 'hot spot' in the Mount Bruce area.

#### **Native Bird Counts**

Biodiversity monitoring through five minute bird counts have been completed in the Wairarapa at selected Key Native Ecosystem Management Areas (KNEMAs). These counts were carried out at Waihora (near Martinborough), Tauherenikau Bush, Greytown Park Bush and Fensham Reserve (west of Carterton). While a general range of native birds mixed with exotic species was recorded, no new observations (such as the presence of whitehead) were disclosed at any of the areas surveyed. Some rat monitoring was also completed at Tauherenikau and Fensham Reserve using ink pads in tracking tunnels.

The observation of whitehead is on the increase over parts of the Wairarapa due to the long-term reduction of possums to low levels throughout the region. There have been increased sightings of this species particularly on the eastern coastal range where they have largely been absent for many years.

#### Rooks

Rook work has been minimal with some surveillance undertaken on a flock of approximately 70 birds in the Pirinoa area and another small flock of approximately 50 birds near Kopuaranga.

In both instances the rooks had been reported feeding on the residues of previously harvested grain or pea crops. Therefore, there were no issues of crop damage but some time was spent assessing the possibility of baiting these rooks. Unfortunately, the weather deteriorated to the point that these birds were able to return to a smorgasbord diet of invertebrates with the alternative baits being ignored.

### Agricultural and Pastoral Show

Biosecurity staff were in attendance at the Masterton A & P Show in combination with other representation from Greater Wellington to provide advice and education on pest animal related matters. The feeling is that public attendance at these shows is decreasing but staff consider that such events are still worth participating in as there is always interest from new owners of lifestyle blocks.

#### 1.2 Western Zone Activities

Servicing of bait stations and traps has continued as programmed with six sites being serviced by external contractors and 15 sites by pest animals team members.

Wax-tags are being used as monitoring tools at bait station sites to indicate whether it is possum or rat activity at the site. Possums, rats, and mice leave bite marks in the wax and staff are able to tell which species frequent that particular site. The baiting regime is then able to be modified to target a particular species.

New operations were completed at the WCC landfill, Korokoro Extension and the Pencarrow Lakes Block.

# 1.3 Combined Hutt Water Catchment, Akatarawa Saddle and Kaitoke Regional Park Operation

Planning for this aerial operation has commenced with adjoining landowners, iwi, tramping clubs, hunting permit holders and the media having been notified. Resource consents are already held to treat these areas and the Medical Officer Health application is underway.

The operation is due to start on 18<sup>th</sup> May 2009 and totals an area of 11,073ha. This operation involves GW staff from Biosecurity, Parks, Water Supply and Communications.

## 1.4 Cat desexing campaigns

The first phase of the annual cat desexing campaign has been completed. A feline spaying and neutering programme was agreed with Vetcare Ltd of Masterton during March 2009 which resulted in 116 cats being treated. Advertising and promotional costs were shared. An agreement has been made with the Wairarapa SPCA to run a similar campaign in conjunction with some local veterinary practices during April this year.

A further Wellington focussed cat desexing campaign is being organised as a joint funded programme between Greater Wellington, Wellington City Council and the Wellington SPCA. The target areas are those that are considered to provide the most benefit to the campaigns objectives.

## 1.5 Marron – a pest freshwater crayfish

MAF Biosecurity NZ (MAFBNZ) is currently conducting a communication exercise to attempt to locate possible populations of an Australian freshwater crayfish known as marron. Marron is an unwanted organism and is notifiable under the Biosecurity Act 1993. It poses a threat to freshwater environments by competing with native species for food and habitat.

Marron were imported to farm in New Zealand in the 1980's. Once their environmental risk potential was better understood the farming operations were closed down and all known marron were eradicated. In 2005 a marron farming operation was disclosed at Massey in Auckland. MAFBNZ and the Auckland Regional Council worked together to close down this operation and destroy the marron. Suspicion remains however that this unwanted crayfish may still be present in unknown locations in New Zealand, especially in the North Island.

Marron have large smooth front claws. They can grow to around 380mm in length and have a colour range from jet black to brown. They prefer sandy areas in rivers and dams, particularly where organic matter accumulates. Our native freshwater crayfish (koura) appears similar but koura claws are hairy or spiny whereas marron claws are very smooth. Native koura are also smaller.

## 1.6 Compliance briefs for vertebrate toxic agents (VTAs)

ERMA New Zealand is seeking feedback from VTA industry groups on the content of draft compliance briefs. Biosecurity staff are coordinating a Greater Wellington response. The briefing cards contain practical information for users on the safe management of VTAs through their lifecycle and assist with compliance obligations under the HSNO and ACVM legislation. Typical prompts within the briefs are: licences and qualifications, purchasing, label instructions, permissions, communications required, restrictions, disposal, signage, storage, tracking (from purchase to use and disposal) and emergency response.

## 1.7 Registration of Alpha-Chloralose Powder

After many years of waiting, Animal Control Products, with the assistance of the Department of Conservation, have gained registration with the NZ Food Safety

Authority for Alpha-Chloralose powder, a technical grade material for applying to bread baits for the control of black-backed gulls (Larus dominicanus). Alpha Chloralose acts as a narcotic and may be used to target black-backed gulls when they become pests around refuse facilities or are creating bird strike hazards at airports. The use of this product will nearly always require the prior approval of the local Medical Officer of Health.

## 2. Pest Plants: (Richard Grimmett)

## 2.1 Biological control

Activity has been focused on the collection, distribution and monitoring of a range of existing species for release into new areas. Nodding thistle gall fly and receptacle weevil have been the main focus across the region.

The Nodding thistle population in the Wairarapa is down to such a low residual level that it is difficult to collect enough of the bio control agents for release into other areas. Horizons Regional Council staff from the lower Manawatu have helped by collecting two sizeable sample lots that were released in the South Wairarapa district. The releases made previously in the western areas (Transmission Gully) were inspected recently and are well established. Scotch thistle gall fly is also now well established in the same area.

Gorse pod moth sites were inspected in the western areas and found to be abundant and thriving.

Last year's releases (coastal Wellington and Porirua harbours) of Boneseed leaf roller caterpillar agents were inspected and have all established well and are vigorously active and spreading their range already. This is very pleasing and the resulting reduction in plant biomass is evident. This will aid the emergence of other species in the site to overtop and shade out these plants over time.

The life stages of the Boneseed Leaf Roller were determined and the monitoring protocols further refined. This information is invaluable for Landcare Research because Boneseed Leaf Roller is proving hard to establish in other regions but has spread rapidly in Wellington and is present over the entire Miramar peninsula and is already found in our control (non-release) sites. The impact on Boneseed will be evident once caterpillar density increases. Monitoring through the year will detect peak activity seasons.

Buddleia leaf beetle release sites on the Hutt River Highway were also recently inspected and the population has survived at both sites. Monitoring will continue to assess the population increases for harvest and redistribution in the coming years. This plant has the potential to establish in riverbeds and dominate over broom type woody weeds. Chemical control of buddleia is difficult.

## 2.2 Annual inspections and survey

Surveillance inspections continue to disclose mainly vine species in both urban areas and rural property gardens.

Biosecurity staff continue to collect samples of unknown plants that exhibit pest characteristics. Of interest is the recent identification of Prickly saltwort. This is an annual that has the potential to establish and dominate the lower front of dunes. This infestation is currently known in one isolated coastal farm on the north eastern regional boundary. Field horsetail, a species that has no known successful chemical control option, has now been noted on three more streams in the eastern Wairarapa for an estimated combined 60km infestation.

## 2.3 Biodiversity

Biodiversity Condition Fund grants have been announced with a substantial increase in support for regional restoration projects. This has already resulted in an increase of expectation of support from Biosecurity Officers to provide expertise in the near future for the successful projects.

Contract and Community groups has been focused on providing well prepared sites for planting programmes together with follow-up spraying in areas being encouraged to undergo natural restoration processes (e.g. self seeding).

## 2.4 Didymo

The Didymo awareness campaign was carried out for a period of 12 weeks over December 2008 to February 2009. The results of this campaign are enclosed as Attachment 3 to Report 09.195

## 3. Bovine Tb Vector Management: (Graeme Butcher & Grant Crawford)

## 3.1 2008/09 vector control programme

The Animal Health Board (AHB) approved vector control programme for the 2008/09 year includes:

- 191,965 ha possum control
- 12,145 ha possum control carried forward from 2007/08
- 40,293 ha of possum and ferret surveys
- 210,670 ha of pig surveys
- trend and performance monitoring

The table below summarises the contract areas for the 2008/09 year:

	Possum Control (ha)	Ferret Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GWRC BioWorks	87,952	0	26,161	0	114,113
J G McCaslin	23,262	0	0	0	23,262
Professional Guiding	78,172	0	14,132	0	92,304
M&M Contractors	7,823	0	0	0	7,823

T Oakly	0	0	0	210,670	210,670
Still to be let	4,049	0	0	0	4,049
Sub total	201,258				
Withdrawn	2,852				The state of the s
Totals	204,110	0	40,293	210,670	455,073

The following table details areas of the 2008/09 control programme which have been completed as at 3 April 2009.

	Possum Control (ha)	Ferret Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GWRC BioWorks	43,388	0	9,030	0	52,418
J G McCaslin	13,032	0	0	0	13,032
Professional Guiding	57,851	0	11,491	0	69,342
M&M	0	0	0	0	0
Contractors					
T Oakly	0	0	0	0	0
Totals	114,271	0	20,521	0	134,792

Approximately 114,271 ha or 56.8% of the possum control programme has been completed and assessed by either a performance monitor or audit.

An estimate of contractor possum control progress as at 6 March 2009 has been made following a review of contractor monthly reports. Contractors estimate they have completed approximately 134,398 ha or 66.8% of the possum control programme.

## 3.2 Monitoring

During the 2008/09 year, 110 trend monitors and 38 performance monitors are required.

All monitoring projects have been let and shared between the following contractors:

- Contract Monitoring Partnership
- Quality Control

To date, 40 trend monitors and 32 successful performance monitors have been completed.

## 3.3 Haurangi Crown

Consultations on this programme are now complete.

A change request was submitted to the AHB for additional funding to treat some areas with deer repellent. This additional cost of approximately \$42,000 has now been approved. Approximately 3,600ha will be treated without deer repellent.

The Wellington and Hutt Valley branches of the NZ Deerstalkers Association are satisfied that AHB and GW have been able to provide a compromise in an attempt to protect the best deer hunting areas within the treatment area.

The Wairarapa branch of the NZDA is still actively pursuing measures to stop this operation as they remain strongly opposed to the use of aerial application of 1080.

Consent applications are to be completed during April and submitted to the Medical Officer of Health, the Department of Conservation and the GW Resource Consent Department.

## 3.4 Pig survey progress

The following table details pig survey progress to date for the 2008/09 year.

Project	Area (ha)	Required Samples	Samples received to date	Tb positive
Akatarawa	20,538	30	31	
Bideford	39,023	40	12	
Castle Hill	4,529	30	28	
East Alfredton	4,900	20	8	
Homewood	25,789	120	35	
Riversdale				
Kapiti	30,966	50	12	
Mataikona	6,779	40	57	1
Moonshine	6,035	20	27	2
Otaki Crown	3,551	15	7	
Pakowai	6,909	60	78	
Stronvar	25,976	85	25	
Tinui	35,675	120	137	
Totals	210,670	630	457	

#### 3.5 2009/10 programme

The AHB have commenced the tender process for the 2009/10 year.

The tender round one timetable is as follows:

5 February Released tenders20 March Tenders closed

- 15 April Complete tender evaluations

- 1 May Release contracts

Approximately \$3.4M of control and survey work has been evaluated for the lower North Island.

One staff member from Greater Wellington assisted with the evaluation process.

The following projects from the Wellington region have been included in tender round one.

Ponatahi-Longbush
 Taueru-Maungaraki
 Martinborough
 Moonshine
 (MR 1, MR 2)
 (HR 1, HR 2)
 (HR 1)
 (HR 2)

#### 3.6 Infected herds

		I Herds @ June 2008	I Herds @ end of December (1 clear test in brackets)	Target I Herds @ June 2009
	Cattle	0	0	
VFA	Deer	0	0	9
VRA	Cattle	0	6 (2)	

## 4. Monitoring and Investigations (Sara Moylan)

The report on the KNE (Key Native Ecosystem) survey completed in October 2008 is now drafted and will be released once signed off by the review team. Surveying stakeholders on their perceptions of the KNE programme was worthwhile. Stakeholders see the programme as extremely valuable, are committed to it, and consider it one of the most important biodiversity programmes the Council participates in. Problems identified were well defined, specific and easily mitigated.

The next step in the KNE programme review process will be for the review team to develop an action plan based on the reports recommendations.

Databases have featured this month with several staff from the Biosecurity Department attending a workshop on biodiversity metadata management and a second workshop on the LUCAS (Land Use Carbon Accounting System) database. The workshops introduced staff to several databases used by other Councils and Government agencies for both monitoring data and site management (including prioritisation models and operational outcome data capture), that can be accessed and used by officers.

## Flood Protection (Graeme Campbell)

## 1. Manager's comments

The following report shows that good progress is being made on both the routine maintenance work and on the capital works programme. We are currently forecasting that all work programmed for the 2008/2009 financial year will be completed and within budget, apart from the South Waitohu stopbank which is covered in a separate report (Report 09.214) seeking deferral of construction.

The major issue to arise during the period has been the need to retender the Waiwhetu cleanup and flood improvement works on the basis of a revised works specification. Initial tenders were significantly over budget and it was decided the fairest way to seek prices for a revised specification was to ask all three tenderers to resubmit a tender. We are confident that the changes to the specification and scope of work will produce a good result within budget.

Also of note is the government's desire to fast track a number of roading projects in the region and particularly those on SH2 affecting the Hutt river corridor. Improvements at Melling and Silverstream are both likely to impinge on the floodway capacity and we are working on setting up an agreement with the NZ Transport Agency on how such issues will be dealt with in the design phase.

## 2. Western Floodplain Management Plans [Daya Atapattu]

### 2.1 Ava to Ewen project

The Strand Park stopbank reconstruction works are now about 90% complete and on track for completion by May 2009. The contractor is currently progressing with access arrangements at Market Grove and Whites Line West, concrete steps at St Albans, stopbank walkway and surface reinstatement.

## 2.2 Boulcott/Hutt stopbank project

Topographical surveys and geotechnical investigations required for the detailed design are progressing. The two golf clubs have been provided draft land entry agreements and we expect feedback on those by the end of April 2009. Consultation with the stakeholders has commenced and is progressing. We expect to lodge the designation/consent applications by June/July 2009.

## 2.3 Whirinaki Crescent stopbank

The hearing on the resource consent to remove two trees to enable site filling is now fixed for 22 April 09. Construction of the remaining 50 metre stopbank has now needed to be scheduled for summer 2009/10.

## 2.4 Kapiti floodplain management

#### 2.4.1 Waikanae River

The construction of rip rap edge protection on the left bank of the Waikanae River near the Otaihanga Boating Club has been substantially completed.

## 2.4.2 Friends of the Waikanae River (FWR)

FWR have started purchasing plants and supplies for the Honda Treefund planting on 28 June 2009. FWR have received \$40,000 of funding for the Oxbow restoration in the Waikanae River from DoC's Community Conservation Fund.

## 2.4.3 Friends of the Otaki River (FOR)

FOR have been successful in obtaining \$90,000 of funding over three years from the Ministry of the Environment's Sustainable Management Fund (SMF). A site visit has been organised with GW staff and the Friends group for early April to identify potential planting sites to include in the development of a planting plan. This will form the basis of a work programme for a person (made available by the SMF) to help with restoration work with FOR on the river. An ecological strategy is being prepared for the Otaki River corridor by GW which will help guide the FOR's work. FOR have also received DoC Community Conservation funding of \$15,000 over two years for restoration work at the Otaki Estuary.

## 3. Western Operations – Jeff Evans

## 3.1 Hutt River

Rock line extensions have been carried out at Avalon and maintenance has been completed on the Nash Street groynes and Belmont rock line. A new rock groyne is being constructed at Whakatiki. The Upper Hutt drainage channels have been mechanically cleared and new hand rails have been fitted to the headwall around the Black Creek flood gates.

#### 3.2 Hutt River Ranging Services

The river trail maintenance programme continued over the last period with vegetation clearing in a number of areas. Rotary funded a new section of trail alongside the Hutt River carpark in Hutt City. This section of trail has been a long term goal for Rotary, but it is expected to be an area requiring high maintenance due to the low lying nature of this section. During construction, 100 metres of newly laid surfacing was washed away in a relatively minor fresh.

### 3.3 Otaki River

Beach re-contouring has been carried out opposite Mansell's in the upper river and channel alignment work has been undertaken opposite Lutz's to protect the cliffs. Rock delivery has started for the right bank groynes above the State Highway Bridge.

#### 3.4 Waikanae River

Overgrown scrub has been removed from the river berm above the rail bridge and below Greenaway Road to maintain floodway capacity. A number of old and dangerous trees have been removed from beside the trail on the left bank.

#### 3.5 Western Watercourses

The Waimeha Stream mouth was cut after it migrated north and threatened adjacent properties. Walkers drain was cleared after blocking with weed, and stream clearing runs were undertaken in the Porirua and Kenepuru Streams.

## 4. Wairarapa Operations [Mike Longworth]

## 4.1 Wairarapa River Schemes

#### General

The work programmes in the Wairarapa Rivers for 2008/09 are progressing well with a number of contractors and our work gangs working hard to complete the main construction work before the winter period. This work involves installing rock and boulder bank protection work, channel alignment and beach ripping.

The flood damage repairs resulting from the upper valley flood on 7<sup>th</sup> October 2008 are now being completed following the granting of resource consents.

The Lower Wairarapa Valley Development Scheme development work is progressing well with the expectation that this year's programme will be completed under budget.

The 10 river schemes advisory committees are holding their annual meetings over the period 7 April to 12 May 2009. The dates for these meetings are noted in the Councillors Bulletin.

## 4.2 Investigations and Technical Advice

#### Waingawa River Scheme Review

The next step in the review is the completion of the hydraulic modelling and the analysis of gravel transport. This work is currently underway. A report outlining the outcomes of the review is expected to be drafted by 30 June 2009.

#### Waiohine Floodplain Management Plan

Work has commenced on a floodplain management plan for the Waiohine River. The technical work involved in setting up and hydraulic modelling of the river flows to determine the potential stopbanks height and flood extent is almost complete and will be presented to the first meeting of the Waiohine Floodplain Management Plan Advisory Committee currently programmed for mid May 2009.

#### **Technical Advice**

Staff are preparing evidence to present in the Environment Court opposing a subdivision which is entirely within the 50 year flood hazard zone of the Waiohine River. The subdivision straddles the stopbank which is likely to require upgrading as a result of the Waiohine flood plain management planning process. The subdivision is a non complying activity in the proposed Wairarapa Combined Districts Plan.

### 4.3 Drainage Schemes

The wet weather caused higher than normal power usage. A series of unplanned electrical and maintenance problems at three of the pump stations has meant that the overall expenditure for the drainage schemes is currently over budget. Only essential expenditure will be carried out for the reminder of the year to limit expenditure over run. Rate increases will be necessary for those schemes that are over expended and that do not have adequate reserves. The drainage schemes are entirely self funded.

## 5. Investigations and Assets [John Eyles]

## 5.1 Waiwhetu cleanup project

Three tenders were received by the Council at the time of tender closing on February 13. The evaluation of these tenders was completed in early March and showed that the tendered prices significantly exceeded the project budget. Options to proceed included negotiating with a single preferred tenderer or re-tendering with all three contractors. Professional advice was sought which, for reasons of equity, recommended that Council re-tender the contract to give all three contractors the opportunity to revisit their bids based on a revised set of contract documents. Tenders will now close on 22 April.

Improvements have been made to the contract documents, such as critically looking at the extent of the erosion protection works, the quality of designed improvements and the risk profile to reduce project costs. We have also looked closely at other opportunities to reduce project costs such as beneficially reusing clean fill (instead of paying disposal costs) and contract supervision costs, a proportion of which will now run in-house.

I am confident that the re-tender process, together with the other measures, will provide a high quality project at the right cost and on programme.

The re-tender process will delay the start of construction, but any delay will primarily affect the flood works part of the project and not the clean up (and consequent funding from the Ministry for Environment).

The Waiwhetu Stream Advisory Subcommittee meeting scheduled for 5 March was deferred and a new date will be set once the tenders are received.

## 5.2 Pinehaven flood hazard assessment

A joint project with Upper Hutt City Council is underway to complete the first stage of a flood hazard assessment for the Pinehaven stream. This will entail undertaking a LIDAR and topographical survey in the Pinehaven catchment and then developing a dimensional hydraulic model of the waterway and floodplain. The main outputs from the study will be a set of flood hazard maps which will identify those areas at risk of flooding. The next stage of developing options for managing any identified flood hazard will be undertaken in 2010/11.

## 5.3 Asset management

Asset inspections and a peer review of asset management are being programmed for completion by the end of the financial year.

Staff are also continuing their involvement in the implementation of SAP asset management software. A test bed is now available for testing and is showing promise. Data migration issues have been worked through, and a go live date for the system is programmed for August 2009.

## 6. Strategy and Technical Support [Sharyn Westlake]

The following table summarises the number of formal, written requests for advice responded to over the period from 7 March - 9 April 2009. These include information requests from the public, local authorities and also Flood Protection comment on resource consent applications to GWRC.

A destroyed section development and the contract of the contra	7 March — 9 April 2009	YTD
Requests brought forward	0	2
Additional requests received	40	253
Responses provided	40	255
Outstanding requests	0	0

Over this reporting period the Strategy and Technical Support team has provided further information to Upper Hutt City Council for the Maymorn Structure Plan development. Staff have also participated in discussions and workshops on Hutt City Council's CBD Vision 2030 and have contributed to the GW submission on the Hutt City Central Area District Plan Review (Plan Change 12). A submission has been made on Wellington City Council's alteration to designation (number 134 "proposed new road") Westchester Drive to Middleton Road, and input has been provided to the GW submission on draft plan changes for the Residential Area and Suburban Centre zones of Wellington City's District Plan. Comments on the RMA 2009 Amendment Bill relating in particular to proposed changes to the process for designations have been provided for inclusion in the GW submission.

## Land Management (Dave Cameron)

## 1. Manager's comments

### 1.1 Afforestation Grant Scheme

The Afforestation Grant Scheme Regional Council pool has recently completed its first application process for 2008/09 and 2009/10. The National Allocation Panel met in March and approved the following expenditure:

	Regional Council Pool Allocation	Grant Allocated	Grant to be allocated	Number of projects	Area Planted
2008/09	\$1.2M	\$851,040	\$348,960	5	354.6 ha
GW totals 2008/09		\$199,200 (23%)		1	83 ha
2009/10	\$3.5M	\$2,244,320	\$1,255,680	22	960.8 ha
GW totals 2009/10		\$759,360 (34%)		13	340.9 ha

A further round of applications is being sought by 20 April 2009 to allocate the remaining grant money. Outcomes will be known by the end of April so as to allow planting this coming winter. Greater Wellington has a further five projects totalling 100 hectares in this next round.

Of the 423.9 hectares approved for the Wellington region, 341.4 hectares (80%) are from the Wairarapa and 82.5 hectares from the Otaki and Paekakariki areas.

#### 1.2 Eco-sourcing native plants

A broadening sales base for native species, encouraged by the requirement to Eco source for all native plants for Greater Wellington projects, has created better opportunities for local nurseries. A new market for planter bag trees has been established with Masterton based Norfolk Road Natives to cater for the emerging school and care group plantings.

#### Main suppliers are:

Morgans Road Nursery	Root trainer (ES)	26,000
Morgans Road Nursery	Root trainer (non ES)	14,000
Wairarapa Stars Trust	Root trainer (ES)	5,000
Norfolk Road Natives	PB2/3 (ES)	5,000

The seed collection being completed by Wairarapa Stars Trust is about 80% completed. This year the green uncleaned seed is being sent direct to Morgans Road Nursery in Blenheim to enable earlier germination of some species, and feed back on seed quality.

A tentative native species order is being prepared for the 2010 season where Norfolk Road Nursery will trial production of 25% of our root trainer requirements.

#### 1.3 Streams Alive

There are 21 new planting sites for this winter, as well as blanking at 22 previously planted sites. Another 18 sites are still being maintained under the two year maintenance period. This brings the total number of active sites to 61 in eight of the twelve Streams Alive catchments.

Around 14,000 plants will be planted this winter. There is stronger focus being put on removing all environmental weeds from the Streams Alive sites before they are handed back to the landowners to ensure the sites can become self-sustaining in the long term. All Streams Alive participants are being offered a days training to get GrowSafe and Approved Handlers certificates. This will increase landowner confidence tackling weeds and improve the ongoing maintenance of riparian margins by landowners.

A new Streams Alive newsletter is going out to all current and past participants to keep them informed of issues that may affect their sites and to raise awareness of the catchments they are part of.

## 1.4 Papawai Project

The first stage of the main willow clearing operation in Papawai Stream was completed in mid-March. Approximately 450 metres of stream margin was cleared using a 20-tonne digger (as used in the Kopuaranga River).

The contract was let by the Papawai Marae Committee in conjunction with the Papawai Mangarara Care Group for two areas involving the lower stream above JR's Orchard culvert and immediately behind the marae. They were funded through the MfE Sustainable Management Fund and Greater Wellington's Iwi Project Fund respectively.

Prior to the works commencing, Mike Grace organised a seminar at Papawai Marae, headed by Caleb Royal, Freshwater Scientist, Te Runanga o Raukawa, Otaki which allowed an opportunity to identify ways to minimise impacts on the tuna fishery. Subsequently land owners and iwi have expressed satisfaction with the manner of the operation and the results achieved.

## 2. Farm Plans (Don Bell)

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

Approvals to-date	New 10-year Plans,	Annual Plan	Total Programme	
	Reviews	Targets	Estimates	
New Sustainability	0	3	\$0	
Plans				
New Conservation	1	2	\$14,003	
Plans				
Ten Year Reviews	14	20	\$628,223	
Annual Programmes	114	130	\$544,201	
Programme	Annual	Annual	Expenditure to	Annual Plan
delivery	Programmes	Plan	date	Budget
	Undertaken	Target		
Annual Programmes	138	130	\$360,000	\$550,000
<ul> <li>Sustainability</li> </ul>				
plans				
<ul> <li>Conservation</li> </ul>				
plans				
Shelter plans				
Isolated works	2		\$6,518	\$10,000

## 2.2 Highlights

#### Riversdale Dune Restoration project

Angela Stead has been successful in gaining a \$24,000 grant from the DoC Community Conservation Fund for the Riversdale Dune Management Group. This will be used in a two-year project involving fencing and planting of two more dunes in front of the surf club and a 500-metre stretch in front of the wetland at the southern end of the township. Over 9000 native sand binding species of pingao, spinifex and matagouri will be planted.

## New Sustainability Plan format

Tony Faulkner has completed the Taniwha Sustainability Plan review which will now serve as a template for the new generation of Sustainability Plans. The new format has been designed to provide for Greater Wellington's WRECI programme along with Government initiatives related to the Afforestation Grant Scheme and emissions trading.

#### EnviroSchools project

Staff received a presentation from Karyn Burgess, Coordinator of GW's EnviroSchools project to provide information on the scope and content of this work and how it might integrate with Land Management's relationships with some of the region's primary

schools. There were very obvious synergies and opportunities to coordinate projects are to be explored.

#### **Ballance Farm Environment Awards**

The BFEA Awards evening was held on 2 April. This year's winners were a dairy farm couple from Kahutara, South Wairarapa. Tim and Jo Loe represent the first dairy farmers to take out the Supreme Award in the eight years of these awards.

A field day is to be held at the property on Wednesday, 6 May.

## 3. Akura Conservation Centre (Stan Braaksma)

## 3.1 Nursery operations

After the very good February rainfalls and a resurgence of poplar and willow growth, the March and April weather conditions have put the nursery back into soil moisture deficits, slow growth and the ingress of very active leaf rusts. The irrigator has been maintained on two shifts/day at Akura.

The irrigation upgrade costs are nearly completed for Akura. While most costs are close to the 2007 estimates, an upgraded irrigator and new hydrant network had to be designed and re-costed. Drilling will commence shortly on the installation and flow testing of the new bore. The results will enable early endorsement/adjustment to the current design proposed.

Land preparation at Mangapakeha nursery has progressed with 1.2 ha available for planting this winter. These blocks have been de-stumped and are undergoing a prewinter cultivation and weed control. This year some 6,000 new cuttings will be planted.

A Nursery Managers workshop is to be held in the third week of April and centred around Hawkes Bay, Wairoa and Gisborne.

## 3.2 Trading

Rail iron has recently been reordered to restock our current supplies. Both Rivers and Land Management have required railway irons for river protection projects.

Exotic tree orders are in for 2009, but the successful Afforestation Grant Scheme projects will necessitate some increases over and above existing supply contracts.

## 3.3 Budget

The Akura Business Unit operating surplus at the end of March was \$10,400.

The Nursery unit is exhibiting a significant loss relative to the overall budget. Revenue of \$6,000 is due from the supply of willow feed to a Massey University trial. The expenditure line to the end of the year will be offset by pole sales. The trading situation reflects a strong position for this time of the year.

The forecast operating surplus to 30 June 2009 of \$46,000 takes into account the projected movement of stock on hand at year end, and satisfactory sales for the month of June.

Activity	Budget 2008/09 - Operating Surplus	Operating Surplus to March 2009	Forecast Surplus to June 2009
Nurseries	(\$20,600)	(\$38,100)	(\$16,600)
Trading	\$66,600	\$48,500	\$62,600
Total	\$46,000	\$10,400	\$46,000

## 4. Biodiversity (Jacki Byrd)

## 4.1 Ohariu Voluntary Social Change Project

The Makara / Ohariu Landowners Workshop was held on 19th March with over 20 local landowners attending. This was the last major event in the Ohariu Voluntary Social Change Project. Talks on habitat restoration, afforestation, integrated catchment management and funding for environmental work on private land were all well received. Eight follow up site visits have been requested by locals, for LUC planning and stream side restoration advice.

## 5. Operations (Kevin Burdan)

## 5.1 OSH

Audits have been completed on a contractor's machinery operation and thirty of the department's identified hazards and their associated controls have been assessed and upgraded where necessary

Two staff members completed their tractor driving NZQA units.

#### 5.2 Silvilculture

Silviculture work has lifted in the last month with clients catching up on outstanding work. Low pruning though has generally been put on hold.

11.2ha of silviculture has been completed in the Metro forests, and 5.4ha of thinning and 16.3ha of pruning in the Wairarapa Reserve forests.

Activity	Completed	\$	Annual Plan Target (hectares)	Year to date	S
Thinning	27.8ha	10,376	100	62.9	23,972
Pruning	9.5ha	6,252	100	50.9ha	42,106
Total	37.3ha	16,628		113.8ha	66,078

## **Total Catchment Management (lan Gunn)**

Work continues on the super catchment concept. Analysis of the Eastern Wairarapa super catchment has been completed (refer below). Currently work is progressing on the Ruamahanga River and Wellington Harbour super catchments.

## 1. Eastern Wairarapa Supercatchment

The concept of supercatchments has been developed as a way of scoping common issues that exist with defined catchments. This information can then be used in future discussions with the affected communities and will assist in the formulation of regional planning documents with the aim of progressing the concept of total catchment management (TCM).

What is a supercatchment? A supercatchment is one or a series of catchments which have similar features. For example, all drain into one area such as Wellington Harbour or Porirua Harbour. They have similar geology and climate so there are similarities in the ecosystems found within the supercatchment and the dynamics within the catchments.

A catchment is an area which contributes to the flow within a river or stream.

The region has been divided up into 5 supercatchments, as follows:

- Eastern Wairarapa
- Ruamahanga River
- Wellington Harbour
- Porirua Harbour
- Kapiti coast

A draft assessment of the Eastern Wairarapa supercatchment has been prepared based on the four arms of the Local Government Act ie. cultural, social, economic and environmental. This has involved the preparation of a stocktake, SWOT analysis, identification of pressures and consideration of what the TCM concept could deliver.

#### Summary

The Eastern Wairarapa supercatchment is in decline whether it is the human population, sheep numbers, exotic forestry, biodiversity, loss of soil from the catchment, the number of wetlands, or fishing quota. There has been a positive decline in the number of Tb reactors and Tb infected herds. Change is occurring in terms of carbon farming, climate change, active involvement of central government in the protection of erosion prone soils, and the potential from the settlement of the Treaty of Waitangi claim or the delivery of electricity.

GW has a strong relationship with this community through the development and implementation of farm plans and the catchment schemes. By considering a wider number of issues within both the farm plans and the catchment schemes (e.g. by highlighting the benefits of improved biodiversity and pest management, demonstrating

linkages to water quality in the estuaries), the resilience of this community can be enhanced significantly. The various initiatives of "carbon farming" can also be built within the farm plan/catchment scheme framework.

Farming and forestry are the big earners. They also have had a profound effect on the majority of ecosystems.

Subdivision at the coast has been significant. The coast is the playground for many Wairarapa and Wellington residents. The protection of coastal values and continued development of the coastal facilities is considered in the Combined Wairarapa District Plan. The swell in population in the summer does impact on infrastructure and resources.

Development of a specific programme to substantially improve Maori capacity has the potential to stimulate, along with the Treaty settlement process, positive initiatives for this supercatchment.

The infrastructure, primarily roads and housing, are subjected to a number of natural hazards. These need constant maintenance and a programme of adaption to withstand the likely affects of climate change

Opportunities to utilise high quality soils, e.g. considering water storage potential and the potential for wind farms, could be investigated.

Avenues to improve consultation with this community should be pursued. Discussions with the community could include, what skills are needed in the community to thrive, how could those who are not qualified achieve these skills, carbon farming options etc.

Resources which would assist the development of this supercatchment are the availability of Land Use Capability information at a 1:10000 scale and up to date Land Use information.

## **Key Findings**

- Total area 2,500 square kilometres 30% of the region.
- Population decreased by 60 between 2001 and 2006 with 27% being under 19.
- Both iwi have sites of significance along the coast.
- Settlements are concentrated on the coast, all of which have boomed in the 1990"s-2000's.
- 95% of land is in private ownership.
- High quality soils, totalling 8% of the supercatchment area, are situated in the Whareama and Pahao River valleys and the coastal flats and terraces at Homewood.
- Some 26,300 hectares of highly erosion prone land do not have a farm plan. Nearly 60,000 hectares of highly erosion prone land do.

- There are no major sources of water.
- Surface water quality is fair in the lower reaches of the catchments where sampled failing clarity and E. coli guidelines.
- Groundwater quality occasionally exceeds guidelines for nitrate nitrogen, nitrite nitrogen and faecal bacteria at Riversdale. Masterton District Council is pursuing a sewage treatment scheme for this area.
- Most watercourses have estuaries. Recent study of Whareama estuary showed the estuary to be in good to fair condition being muddy, poorly oxygenated with potential for increased algal growth. Nutrient loadings are moderate.
- Castlepoint and Palliser Bay consistently measure some of the strongest winds in NZ.
- Biodiversity is highly modified with most habitats having less than 30% of their original cover with many less than 10%. There is a mosaic of small indigenous habitat fragments scattered amongst farmland and radiate pine forest with a low level of protection. There are only two Key Native Ecosystems totalling 25 hectares. Wetlands are depleted.
- There are a number of iconic landscapes eg Kupes Sail, Taipo's, Castle Rock.
- A high vulnerability to natural hazards with the vulnerability likely to increase with climate change e.g. this coast has one of the highest tsunami risks in NZ; landslides are second only to flooding in terms of economic cost; there are a number of sections of coast subject to coastal erosion; wildfires are a risk high between Castlepoint and Flatpoint especially in dry scrub and gorse.
- Significant inshore fishery exists.
- Oil has been drilled for off the coast of Mataikona in the recent past.
- Large number of alien species eg pigs, deer, goats, possums, mustelids, rodents, magpies, old mans beard, cape ivy, marram, boneseed and wilding pine. Intensive Bovine Tb possum control has improved flora and fauna eg native Whitehead is now making a comeback.
- 238 resource consents issued out of 6264 total within the region. Mostly for earthworks and streamwork.
- Economic data is not available for this specific supercatchment so activities with the largest impact on the Eastern Wairarapa have been identified:
  - i. Sheep farming biggest single value added activity totalling \$48M (2006) down from \$55M (2001). Shearing services contribute \$20M ranked #6/20.

- ii. Four forestry activities totalled \$78M down from \$98M in 2001. This includes plywood and veneer manufacture, logging, services to forestry and log sawmilling.
- iii. Commercial property owners and developers ranked #4/20 with a total of \$27M up from \$13M in 2001.
- iv. Road freight and real estate agents contribute \$14-15M.
- v. Beekeeping was the largest growth in agricultural employment in 2005/05 with 15 employees.

The information provided above is a condensed version of the work completed.

The draft analysis highlights some of the challenges facing the Eastern Wairarapa supercatchment. There needs to be further discussion within GW and with the community of interest. Similar analysis should be completed on the remaining four supercatchments.

## 2. TCM Workshop

A workshop with Councillors to consider the relationship of the next raft of regional planning documents, including possible total catchment management approaches, was held in late March. Further discussions are ongoing with our Environment Division colleagues.

## 3. Ministry of Civil Defence and Emergency Management

I attended a Regional Controllers Forum held by the Ministry of Civil Defence and Emergency Management. This was the first forum organised by the Ministry of Civil Defence and Emergency Management for regional controllers. It is likely these will continue on a regular basis.

## 1. Plantation forests (Wellington)

## 1.1 Log Harvest Contract

The result for March was reasonable at \$142,874 but less acceptable when it is realised that it took the harvest of 9,361 tonnes to achieve it. The combination of dry weather and short settings allowed the three crews to maximise their volumes. Since December the average stumpage return per tonne for each month has been \$0.69 per tonne, \$7.83 per tonne, \$13.63 per tonne and \$15.26 per tonne. While this shows a good recovery, there is still a long way to go to reach the November figure of \$39.79. In the current month, prices increased a further \$US5 only to have the benefit eroded by the exchange rate.

Log 5, the ground based crew, has continued in Mangaroa and has only about one month left. The present proposal is that the crew will move to Centre South in Puketiro to road line and set up skids for the hauler. This block has difficulties because of the three sets of high transmission lines that pass through the block. United Group, a contractor to Transpower, has marked trees within the block that only they may fell and further trees where they want an observer present while we fell them. The majority of the block will be harvested by hauler and the need to keep all cables and anchor ropes clear of the overhead lines will compromise the harvest. Log 6, the other ground based crew, has been working out of Glider Club in Pakuratahi West and has been very lucky with the amount of fine weather. The clays in this block can become impassable after rain and we had to withdraw a crew a couple of years ago because of the weather. This crew will move to Boiler Gully in Valley View next.

The hauler crew (Log 36) have been based in Kilometre and Maori Redoubt in Valley View. The crew has been operating as both a hauler crew and a ground based crew. This block is 3-4 weeks from completion when they will either set up to assist Log 6 in Boiler Gully or, if the prices are good enough, set up in Centre South.

Rayonier New Zealand Ltd has had representatives in China who have returned advising that there is very high demand for New Zealand logs at current prices. They expect this demand to be sustainable and for prices to slowly increase over time. They note that they are unlikely to reach the levels of last November.

While a shortage of road transport was a difficulty in the middle of the month, all stocks were cleared by month end.

For March, Log 5 harvested 2,529 tonnes for \$47,408 at an average of \$17.27, Log 6 3,015 tonnes for \$44,360 at an average of \$14.60 and Log 36 3,798 tonnes for \$51,197 at an average of \$13.48. In total the month's returns were 9,361 tonnes for \$142,874 at an average of \$15.26.

#### 1.1 1.2 Silviculture Contract

In March 7 ha of silviculture was completed. The Contractor also assisted with the cleaning of bridges prior to their bi annual engineering inspection.

## 1.2 1.3 Plantation forestry operations

Although the incidence of vandalism has reduced, it is still occurring in Valley view.

• The results of the foliage analysis for nine sets of samples taken from Pakuratahi West showed one satisfactory block, with the other eight requiring fertiliser, mainly because of deficiency in nitrogen and, phosphorus.

Staff members have continued to supervise the Silvicultural Contractors and monitor the quality control plots.

#### 1.3 Forest Access

The lack of access into Maungakotukutuku remains.

All main roads are in good order. Valley View roads were graded and required metal after the rain, as the soils mixed to produce copious quantities of mud.

With the proposed move into Boiler Gully there is the need to realign Raupo Saddle Road to enable logging trucks to access the lower sectors of the block. This road will also give access to the two Lindsay blocks and Ragwort Hill. The total area of these blocks is 200 ha.

A successful meeting was held with Rayonier New Zealand Ltd, the logging crews and Greater Wellington Regional Council, and a tentative harvesting schedule for the next six months has been agreed. The unknown is whether prices will allow harvesting to move back into Puketiro this spring.

#### 1.4 Market Trends

Domestic demand remains steady, but flat, although for the first time this year there is talk of greater volumes. We will see if the orders roll in!

As stated earlier, demand appears strong in China and India but very depressed in Korea and Japan. There is a Chinese buyer visiting in mid-April seeking further volumes.

We can only react to the markets as each opportunity presents itself.

## 1.5 Bio-energy

While the drying of the forest residues turned out far better than anticipated, the whole trial was frustrated by the cost of the equipment. Consequently a smaller trial supplying the Upper Hutt pool has been agreed and this will be in the main by forestry waste from the Eurocell sawmill. Although they took the third set of samples for calculation and sampling purposes, the project no longer includes the use of residues out of the forest.

## 2. Reserve Forests (Wairarapa)

## 2.1 Tauanui logging

March was a good month for harvesting, with limited rainfall (59 mm), good demand, particularly for export logs, and continuing reasonable prices.

A total of 1341 tonnes of logs were uplifted for a net return of \$19.18, which is considerably up on the two previous months.

Kiwi Lumber complimented the crew on the quality of the saw-logs produced and an arranged inspection of 6 reject logs was cancelled after the mill decided that those logs were so much better than logs from other sources that they would saw them anyway. Not only is the area that the crew is currently working producing a higher proportion of logs that meet the Kiwi specification, quotas are being marginally exceeded, with well prepared logs that the mill is keen to accept.

The state of the domestic sawmill scene is still precarious, with a Masterton sawmill recently going into receivership with 25 redundancies.

#### 2.2 Silviculture

Silviculture is proceeding only on stands that have already been partially treated.

A total of 2.7 hectares of pruning were carried out in March for a total of 16.3 hectares for year to date.

A total of 3.4 hectares of thinning have been completed (March and year to date).

#### 2.3 Rural Fire

The fire season officially ended on 31 March. However, with low rainfall, fire dangers are at medium level and prolonged periods of northwesterly winds will give cause for concern.

A significant feature has again been the number of fires originating from power lines. One of these fires, on private land, burning 4 hectares of semi-mature pines caused major concerns, as it was surrounded by a further 15,000 hectares of exotic forest. Had it not been quickly contained, it had the potential to escalate into a very serious fire.

There is a particularly high incidence of fires from power lines within the Wairarapa. It is uncertain at this stage if this is because of better investigation and reporting (they may have been miscellaneous or unknown in the past) or that the extensive power line network over vast rural areas combined with strong northwesterly conditions makes the probability of these fires greater within the Wairarapa.

The cost recovery from these fires (while not a responsibility of Greater Wellington Regional Council) is notoriously difficult and can result in Court action to achieve settlement.