

Catchment Management Division

Departmental Managers' update
for period ending 16 November 2009

Biosecurity (Davor Bejakovich, Manager)

1. Pest Animals: (Ray Clarey)

1.1 Key Native Ecosystems and Reserves Programme

The Key Native Ecosystems and Reserves programme is progressing satisfactorily. An improved electronic and visual operational planning system is being used and is instrumental in timelines being met by team members, contractors and volunteers. The larger complex blocks such as Otari-Wiltons Bush, Wrights Hill, Kelson Bush, Speedy's Reserve and the Wainuiomata Mainland Island are now serviced by the largest team available. This has proved to be more efficient and has given the team members satisfaction in completing these areas within a day or two and taking best advantage of better weather conditions.

The Western Zone team currently service 37 of the 83 sites. Contractors service 20 sites and the balance (26) are serviced either by volunteer groups such as the Upper Hutt Forest & Bird group or by private landowners. GW team members actively support the volunteers and landowners with supply of baits and hardware and up-skilling as new technology evolves. All sites are audited from time to time with contractors audited more regularly.

All bait station and track log data must now be submitted by team members and contractors on shape files from GPS. The information supplied is important and allows operations to be planned and executed more proficiently.

KNE servicing in the Eastern Zone is going like clockwork. These sites are all serviced monthly because all predator species are being targeted. The Tauherenikau Bush KNE has had extra bait stations installed as the rat population was not being controlled adequately and had risen to 50% tracking indices. This has now been reduced to zero and should be able to be maintained at fewer than 10% tracking indices. This will negate much of the threat to native birds eggs and chicks. This site is attractive to rodents because of the vicinity of the Tauherenikau riverbed and stables and horse feed.

The Pukaha Buffer project (under contract to BioWorks) is being reassessed to effect trials to identify potential operational improvements that could be utilised on a larger scale for the proposed regional possum/predator programme. About twenty five percent of the bait stations and traps have reached the end of their useful life and need to be replaced. This provides an opportunity to trial alternative equipment that may better withstand the rigours of the high rainfall and heavy soil conditions. Anything metal and not stainless or zinc coated has a short field life in that area.

1.2 Rooks

Information on the rook programme has been provided regularly to the Committee over the past year. A significant amount of effort has been expended on this pest in order to make further gains towards a long-term goal of eradication from the region. The second and final round of baiting was completed on 19 October in ideal weather conditions. There were only 150 nests found and baited at the 21 known rookeries within the Wairarapa. This was a significant reduction from 2008 when 239 nests were treated. No breeding rookery was disclosed in the Western Zone despite publicity and searching by staff. Of the 21 rookeries identified seven were new sites and five were old sites that had reactivated. Of note is that there were no incidences of arable crop damage by rooks reported by farmers during the past year. This has been the case over the past several years. This is a significant achievement. Rook numbers peaked in the region at 881 nests and around 4,000 birds in 1994 after a nine year period of restricted control to see if rook populations might reach a level where they didn't increase further. The trend displayed over the nine year period was that they would just continue to expand their territories and increase in numbers by 50% each year. Uncontrolled rook numbers could reach levels that would significantly thwart any potential agricultural development of the Wairarapa, or example following implementation of the current irrigation initiative.

Close liaison on rook control programmes is maintained with Horizons and Hawkes Bay Regional Councils. A meeting of the three councils is scheduled this month.

1.3 Department of Conservation – Project Kaka

The Department of Conservation announced on 30 October 2009 that it plans to conduct a new pest control programme within the Tararua Ranges. The programme is scheduled to commence in spring 2010 with rats, stoats and possums to be controlled every three years in a 22,000ha belt across the Tararua Forest Park from Otaki Forks to the Mount Holdsworth road end. The goal of the programme is to restore a diverse native forest bird community, including the native parrot kaka which are currently at low numbers in the forest park.

There is no doubt that this experimental programme has its merits and is very likely to achieve its goals. Unfortunately, DOC did not provide GW with an opportunity to comment on the programme before project boundaries and objectives were defined and set. GW biodiversity practitioners believe there are opportunities for synergies to be explored with GW's present and future biodiversity programmes, including the proposed regional possum and predator control programme. The GW programme will have a major influence on optimising ecological health in the region through the further establishment of wildlife corridors and special ecological sites, as and when funding and resources become available. GW staff will seek to work closely with DoC to maximise the potential benefits to both public and private land.

Of significant concern is the cessation of possum control operations in other parts of the DoC Tararua Estate once Operation Kaka proceeds. Historically, these areas have received possum control on a seven year rotation. With this work now ceasing, possum and predator numbers will steadily increase, impacting on adjacent private land. This has negative impacts for the AHB Tb control programme and the proposed GW programme in Tb free areas.

1.4 Landcare Research update on multi-species pest control

Landcare Research provided a one day workshop in Wellington on 4 November to update stakeholders and end-users of the preliminary results of a large multi-faceted programme of research aimed at the cost effectiveness of small mammal control in New Zealand. The 4-year research programme undertaken by Landcare Research is co-funded by the Foundation for Research, Science and Technology (FRST) and the Animal Health Board. It is closely aligned with complementary research by DOC on improving 1080 poisoning of rodents and stoats.

Of special interest to GW was the work undertaken to reduce 1080 sowing rates by cluster baiting. Cluster baiting in regard to possums refers to depositing a predetermined amount of bait (say 50 pellets) at 40 metre intervals on parallel flight lines up to 100 metres apart. This reduces the amount of bait per hectare to about 400 grams compared to the 2kg per hectare commonly used by sowing in swathes. The low sowing rate requires a new delivery mechanism on the sowing bucket. This delivery system also negates most of the bait fragmentation that can occur with swathe or flinging systems. Low sowing rates are really only applicable to possums. Efficient rat control requires baits to be applied at not more than 30 metre grid spacing. Previously 50 metre grids were considered to be sufficient.

The main benefits accruing from the low-sow concept is that less toxin and bait is applied per hectare. Less bait may increase the affordability for bait repellents or for utilisation of biocontrol. Of concern is that only one contractor has the experimental sowing bucket available. Other aerial contractors may loathe investing into low-sow equipment unless they have enough guaranteed baiting work. Most under-slung aerial buckets are designed for distribution of agricultural fertilisers and seeds with possum baiting as a sideline.

Other areas reported on included dual agent Tb control (BCG vaccine and 1080), having vaccinated possum buffers, possum and rodent 'mop ups' with non-acute toxins, proof of concept of Tb eradication, and the effects of rats on possum kill. Also discussed were new FRST funding directions, the AHB eradication and containment proposal as part of the future National Pest Management Strategy for Bovine Tb, and funding options for large scale low-sow trials, particularly for rats.

On 9 November a meeting hosted by FRST was held in Wellington to prioritise future possum and Tb research and the timings of required outcomes. This is a continuum of the research process reported on by Landcare Research and other agencies reported in this section. Representatives attended from AHB, DOC, MAF Biosecurity NZ, Crown Research Institutes, Universities and Regional Councils. John Simmons (Environment Waikato) and Davor Bejakovich (GW) attended on behalf of regional councils.

1.5 New capturing devices under trial

Four new to market pest animal trapping devices are being trialled by staff.

The CO₂ driven self resetting Henry Trap for rats and weasels and stoats has had a lot of publicity. The theory of the action and multiple self-setting abilities has appeal. The price at \$160 each prohibits purchasing many of these until they are tried and proven.

There is some criticism that they are not always sensitive enough for rats and there is no counter to state how many times the trap has been set off. Each gas cylinder is expected to provide up to twelve releases.

The Kamate rat and small mustelid snap-trap is a robust lightweight alloy and stainless steel kill trap with a unique trigger action. It allows for the use of a variety of bait types and has an automatic safety catch action when the striker bar is cocked. These traps retail for around \$19 each. Protective cover stations are also available at approximately \$27 each.

The DOC250 kill traps are a larger version of the proven DOC150 and 200 models used widely throughout NZ in ecological areas targeting the smaller mammalian predators. The DOC250s are more suitable for ferrets and can also be adapted to humanely destroy wild cats. DOC250 traps retail for approximately \$77 each complete with the wooden holding box.

The Trapinator possum trap is based on the swinging arm and keyhole shaped head entry principle of the Timms Trap which has been available for many years. The Trapinator differs in that it is smaller and may be secured to a tree or post. Possums are lured to place their heads into the trap from underneath. The trap has a metal setting arm that has been prone to leverage from possums climbing on the trap and setting it off. Once a possum has been frightened by a device it is less likely to revisit the site or device again. The trap retails for approximately \$35.

1.6 NZ Biosecurity Institute Annual Conference

The annual Biosecurity Institute National Education and Training Seminar (NETS2009) was held in Queenstown from 4 to 16 October 2009. Several Biosecurity staff attended. Some had roles as members of the executive or sub-committees or as session chairs.

The seminar was based on the traditional theme of education and training and covered a wide range of topics and issues on biodiversity and biosecurity. There was an expected bias towards topics that fitted the Southland and Otago landscapes. The opening address was provided by Dr Jan Wright (Parliamentary Commissioner for the Environment) who spoke about the biosecurity challenges and dilemmas that confront central government. She also spoke about the recent work from her office on “Change in the High Country: Environmental stewardship and tenure review”.

The plenary sessions were addressed by such people as Dr John Helstrom (Biosecurity Ltd), Graeme Martin (CEO Otago Regional Council), Ali Timms (Councillor, OTRC and Chair of Mid Dome Wilding Trees Charitable Trust), John Aspinall (Mount Aspiring Station), Professor Philip Hume (Lincoln University) and Ruud Kleinpaste (The Bugman). Their topics covered fully integrated biosecurity, regional and high country perspectives and issues, marine biosecurity, climate change, humane predator control and future weed threats.

The three parallel sessions (26 presentations) retained separate themes mainly centred on pest plants/aquatics and pest animals/conservation issues.

Field trips were arranged for an afternoon which gave practical insights into the impacts of wilding pines, issues about introduced and native vegetation, wild animal and weed control programmes, *Nasella tussock*, *Didymo*, *lagarosiphon*, and included some of the most severe rabbit prone land in NZ.

2. Pest Plants (Richard Grimmett)

2.1 Regional surveillance survey

Staff have continued surveying properties around known Total Control sites. A total of 361 properties were inspected. This effort reduced the number of remaining known sites to delimit from 40 to 24 for the year to date. Five new sites were discovered during surveys this period.

Staff have been assessing known sites of *Bomarea*, Asiatic knot weed and Giant hog weed to extend the current trials on control methods. This work will help justify proposed control cost and time estimates for completing risk assessments of these Surveillance species.

Staff have completed the majority of annual plant outlets inspections for NPPA species. Markets will be targeted during the year throughout the region.

MAFBNZ-led contracts to inspect National Interest species have been negotiated and programmes initiated to complete these to schedule. The target programmes are *Didymo* Advocacy, Cape Tulip and Water hyacinth inspection/control and Manchurian wild rice control.

2.2 Total Control species

Work on this programme is in full swing with staff working to the seasonal growth trends for each species. Staff and contractors are inspecting and applying control where necessary to ensure plants do not reach reproductive maturity.

Some of the climber species (*Madeira vine*, *Blue passion flower*) are proving to be difficult to access safely within some sites. A rope and harness fall restraint system was purchased to assist staff accessing these sites. A training session was held with all staff attending.

2.3 Containment species

Staff have completed annual inspections and control of *Boneseed*. Last season staff pushed control operations out to the boundary of each infestation. An inspection outside of the infestation boundaries found very few plants.

The section has two staff assessing viability of *Grass carp* for control of invasive aquatic species. The process to date included getting interest groups together to discuss the concept, opportunities, pilot areas and stakeholder issues. The meetings have been well attended. Within Council, Flood Protection and Environment staff have contributed to discussions. Ongoing work developing the operational application of this species is required to support a proposal to initiate a project.

2.4 Site led & boundary control species

Staff have responded to all boundary complaints received for the period without an issue of Notices of Direction. The number of complaints is normal for this time of year (12-15 per week) and reflects the reasonable weather the region has experienced.

2.5 Key Native Ecosystems and TA Reserves

Staff are active on 38 sites at present to get at least 50% of contracts completed before Christmas holidays.

Staff have provided restoration training to many key council stakeholders. This included restoration practices and contractor management to Take Care co-ordinators, plant releasing to Take Care volunteers and weed control practices to Streams Alive landowners. Our Monitoring expert was a member of the team that spent a weekend training KNE owners and agency managers monitoring principles and practices.

2.6 Community Max

GW continues working with Work & Income NZ and our current biodiversity partners to take part in the Community Max employment scheme. Participation in the scheme will provide a significant boost for the biodiversity programmes in the region. A number of GW divisions, TLA's and DOC have committed to participating in this unique opportunity for improving social and biodiversity outcomes in our region. Currently this initiative has attracted support to warrant employing 12 temporary staff for the last six months of the 2009/2010 year. Approval for staff appointments have sought from GW management. The project application is with the Human Resources department and Work & Income NZ awaiting final fine tuning. If approved, the teams will be based at the Upper Hutt Depot and work on a number of approved programmes. The Pest Plants section is managing the recruitment, induction and training to ensure that high standard of training and service delivered is provided.

3. Bovine Tb Vector Management (Graeme Butcher and Grant Crawford)

3.1 2009/10 vector control programme

The 2009/10 programme has undergone some changes to that proposed in the Greater Wellington annual plan. Tables 1 and 2 summarise the proposed programme, and identifies projects which were not approved by AHB or subsequently withdrawn due to changes in control priorities.

Table 1- 2009/10 vector control programme

	Proposed 2009/10 programme		Not approved or withdrawn		Current 2009/10 programme	
	Projects	Hectares	Projects	Hectares	Projects	Hectares
Possum Control	72	208,281			72	208,281
Possum & Ferret surveys	29	87,690	8	28,264	21	59,426

Pig Surveys	15	249,039			15	249,039
Deer Survey	1	88,492			1	88,492
Feral Cattle Control	1	966			1	966
Performance Monitor	52				52	
Trend Monitor	106		10		96	

Table 2 - Summary of the projects let as at 10 November for the 2009/10 year

	Possum Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GW BioWorks	55,325	26,164	0	81,489
Professional Guiding Services	74,615	14,132	0	88,747
T Oakly	0	0	249,039	249,039
Totals	129,940	40,296	249,039	419,275

The following table details areas of the 2009/10 control programme which have been completed as at 10 November 2009.

	Possum Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GW BioWorks	8,438	3,083	0	11,521
Professional Guiding Services	16,699	0	0	16,699
T Oakly	0	0	6,909	6,909
Totals	25,137	3,083	6,909	35,129

Contractors have completed ten possum control projects and have commenced control activities within a further six projects. Contractors estimate that they have completed a further 16,069 ha of possum control but these areas are not yet ready for monitoring. Contractors estimate they have actually completed 19.0% of the programme but only 12.0% of the possum control programme has been completed and assessed by performance monitor or audit.

3.2 2009/10 monitoring

To date 10 performance monitors have been completed and no projects have failed to achieve the contracted performance target. Professional Guiding Services and BioWorks have completed five projects each.

22 trend monitors have been completed to date. RTC results are as follows

- 0.0% to 2.9% 13 projects
- 3.0% to 4.9% 9 projects
- 5.0% plus 0 projects

3.3 2009/10 possum and ferret surveys

The following table details possum and ferret surveys for the 2009/10 year. One survey has been completed. Contractors estimate 3,665 hectares (6.2% of survey programme) has been completed.

Project	Strata	Area (ha)	Progress (% completed)	Required Estimated Samples		Samples received to date		Suspicious Tb samples
				Possums	Ferrets	Possums	Ferrets	
Bideford	HMR 2	6688	<i>Withdrawn</i>	N/A	3	N/A		
Bideford	HMR 3	4824		N/A	5	N/A		
Bideford	HR 1	2640		N/A	5	N/A		
Bideford	HR 2	1013	<i>Withdrawn</i>	N/A	3	N/A		
Bideford	HR 3	815	<i>Withdrawn</i>	N/A	3	N/A		
Bideford	MR 1	3494		N/A	5	N/A		
Bideford	MR 4	9005	<i>Withdrawn</i>	N/A	9	N/A		
Bideford	MR 7	3173		N/A	5	N/A		
Bideford	MR 8	2812	<i>Withdrawn</i>	N/A	3	N/A		
Castlehill	HR 1	2016		45	N/A		N/A	
Masterton Flats	HR 1	1481		40	3			
Masterton Flats	MR 1	3546		60	4			
Mt Bruce Waipoua	HMR 4	417		25	N/A		N/A	
Mt Bruce Waipoua	HMR 5	642	90	25	N/A	27	N/A	0
Mt Bruce Waipoua	HR 1	3083	100	185	5	17	2	0
Mt Bruce Waipoua	HR 3	1798		100	3			
Mt Bruce Waipoua	HR 4	1816		50	3			
Mt Bruce Waipoua	MR 1	4266		100	5			
Mt Bruce Waipoua	MR 2	3301		150	5			
Otaki Buffer	HMR 1	3023		150	5			
Otaki Buffer	HMR 2	1586		80	N/A		N/A	
Otaki Buffer	HR 1	2403		130	5			
Pakowhai	HR 1	1829		100	N/A		N/A	
Whangaehu	HR 1	4582		250	5			
Whangaehu	HR 2	3942	<i>Withdrawn</i>	100	4			
Whangaehu	HR 3	2375		50	3			
Whangaehu	HR 4	1795	<i>Withdrawn</i>	100	3			
Whangaehu	MR 2	2190	<i>Withdrawn</i>	50	3			
Whangaehu	MR 3	7122		40	5			
Totals				1830	23	44	2	0

3.4 2009/10 pig survey

The following table details pig survey progress to date for the 2009/10 year.

Project	Area (ha)	Progress	Estimated Samples	Samples received to date	Suspicious Tb samples	Positive Tb samples
Akatarawa	20,538	Commenced	30	29	3	1
Bideford	39,023	Commenced	40	9		
Castle Hill	4,500	Commenced	30	25		
East Alfredton	4,900	Commenced	20	3		
Featherston	5,325	Commenced	30	8		
Homewood Riversdale	25,789	Commenced	120	67		
Kapiti	22,486	Commenced	50	2		
Mataikona	6,779	Commenced	40	38	2	1
Moonshine	6,250	Commenced	20	7		
Otaki Crown	3,552	Commenced	15	11		
Pakowai	6,910	Completed	60	61		
Stronvar	25,976	Commenced	85	43		

Te Wharau	13,995	Commenced	100	23		
Tinui	35,675	Commenced	120	146	1	
Wellington	29,640	Commenced	50	13		
Totals			810	485	6	2

3.5 Feral deer survey

The AHB has approved a feral deer survey to be undertaken within the Tararua Forest Park during the 2009/10 year. Tender documents are still to be released.

This work will be undertaken under a Department of Conservation concession which aircraft companies already hold to hunt deer from within the Park.

3.6 Feral cattle control

The AHB has approved a feral cattle control operation in the South East Wairarapa operational areas. Tender documents are still to be released. This work will include the shooting of feral cattle, where occupiers grant consent and inspections to determine the locations of feral cattle.

3.7 2009/10 tender rounds

A number of projects are still to be let for the 2009/10 year. Approximately 41,000 hectares has been released in the AHB tender round 2 on 28 August and closed 12 October. Contract awarding is due to occur in early November.

BioWorks and Professional Guiding Services both have two year preferred supply contracts with AHB. They have been awarded a portion of these parcels following the submission of acceptable work plans.

Both contractors are currently preparing work plans for AHB assessment prior to the allocation of the remaining preferred supply parcel being awarded.

BioWorks was successful in winning the tender for the Moonshine HR 2 project, 2,038 hectares and advised of that by the tender evaluation team. However, AHB subsequently opposed the proposed aerial control method to be implemented by BioWorks over part of the project.

As a consequence BioWorks has withdrawn from the project and the project will be redesigned before negotiations to find alternative contractors occur.

3.8 AHB Vector Management Contract

Greater Wellington has a two year contract to provide Vector Management services to the AHB. This contract requires 1.5 staff members and includes 2,640 hours for the 2009/10 year.

The AHB have estimated they require approximately 51 hours per week (GW staff time) to undertake a range of activities.

To date (after 18 weeks) 918 hours were allocated. However, actual hours to deliver the programme to date are 973 (6.4% over estimate).

3.9 Infected herds 2009/10

		I Herds @ June 2008	I Herds @ end of August 2009 (one clear test in brackets)	Target I Herds @ June 2010
VFA	Cattle	0	0	8
	Deer	0	0	
VRA	Cattle	5	5 (3)	
	Deer	0	0	

3.10 Revision of 2009/10 programme

As a result of the planning for the AHB 2010/11 to 2012/13 programme, a number of approved 2009/10 Proof of Freedom surveys have been removed from the 2009/10 programme. These surveys were to be implemented as part of the current strategy but will now not be considered for Bovine Tb eradication in the new strategy.

Surveys in Whangaehu Mauriceville HR 2, HR 4 & MR 2 (7,928 ha) and Bideford HR 2, HR 3, HMR 2, MR 4 & MR 8 (20,335 ha) have been removed from the programme.

Table 1 details that 10 trend monitor projects and 8 survey projects which were proposed for 2009/10 will now not proceed.

In addition to the above projects not proceeding, it is highly likely that the Holdsworth to Woodside Crown operation will also be deferred to the 2010/11 year. This will allow the operation to be aligned with the Department of Conservation's "Project Kaka" operation (22,000ha). Treating both projects together will provide additional efficiencies in resourcing and implementation for AHB and DOC.

These adjustments indicate that approximately \$584,000 (budget estimates) of vector control will not occur. This should have an effect on the amount of regional share funding which Greater Wellington provides to the AHB.

3.11 2008/09 programme

The only projects of the 2008/09 year not yet complete include:

- Akatarawa HR 1 project - 90% complete
- Akatarawa HR 1 trend monitor - to be completed after control

3.12 AHB three year plan

Greater Wellington staff are assisting the AHB to prepare the Southern North Island rolling three year vector control programme for the 2010/11 to 2012/13 period. This proposal is expected to be completed late November.

This planning is taking into account the proposed new AHB national strategy. The Wellington Region has been split in to three areas as follows:

- VRA Eradication 282,265 ha
- VRA Containment Buffer 184,428 ha
- VRA Contained Core 330,597 ha

In the VRA Eradication area, 85,689 hectares are currently farmland areas proposed to be declared provisionally Tb free by June 2012.

A plan consisting of \$4.0M expenditure per year is under development. This is expected to include all performance and trend monitoring, vector surveys, and approximately 200,000 hectares of possum control per year. This is less than what was originally anticipated and should result in a reduced regional share requirement for the 2010/11 year, compared to budget.

Flood Protection (Graeme Campbell)

1. Manager's comments

A number of significant milestones were achieved over the last period that has allowed our major projects to progress well. The three key milestones were:

1. The Mills Street stopbank alignment was confirmed and two of the four houses required have been purchased. While ahead of schedule this work is a significant component of the City Centre upgrade and will make implementation a step easier when it commences in earnest in 2012-13.
2. The Waiwhetu cleanup is well underway with the first of 4 cells drained and excavation substantially complete. While the trial showed that the methodology would work it is always satisfying to get underway and complete the first section with no major issues.
3. The proposed merger of the Hutt and Boulcott Golf Clubs is considered a significant milestone and is expected to lead to the faster completion of the Hutt Boulcott stopbank project with significantly reduced risks to the Council.

More detail on these and the other projects the department is undertaking is given below.

2. Western Floodplain Management Plans (Daya Atapattu)

2.1 Ava to Ewen project

The contractor is now close to completing the tidying up works on the Strand Park stopbank and the berm area. The lighting contractor is currently preparing a proposal to illuminate the foot path from Wakefield Street to Ava Rail Bridge.

2.2 Boulcott/Hutt stopbank project

Both golf clubs have now approved the merger proposal. The merger will involve developing one superior golf course with the associated facilities on land currently occupied by both clubs. The two clubs aim to merge into a single entity with the aim of occupying a new purpose built clubhouse at the northern end of the Hutt course. We believe that the proposed merger will reduce the disruption to golf during construction and will make construction easier. The merger, however, will require re-negotiation of land entry agreements on the basis of one entity. We expect to commence these negotiations in mid November 2009.

The detailed design at the Connolly Street crossing was further refined to reduce the impacts on the adjoining residents and to reduce the works relocating services, 11 Kv cables and sewer pipe. The designation application for the Boulcott/Hutt stopbank is now under preparation separated from the river channel improvements. At this stage, we expect to lodge the applications before Christmas 2009.

2.3 Whirinaki Crescent stopbank

Site clearance for earthworks to connect the stopbank to the high ground has commenced. The total project costs have increased by \$38,000 to \$955,000. Council approval has been sought separately.

2.4 KGB to Ewen project

The proposed process and programme for implementing the KGB to Ewen upgrades has been prepared and was presented to the HRAS on 12 November 2009. The KGB to Ewen upgrades includes the Boulcott/Hutt stopbank, City Centre stopbank from Safeway to Ewen and the channel improvements from KGB to Ewen.

2.5 Maoribank and Ebdentown works

The proposed process and programme for completing the Ebdentown edge protections and the Maoribank urgent works was presented the HRAS on 12 November 2009. The extent and timing of Ebdentown works is dependant on NZTA funding and the programme will be confirmed following discussions with NZTA. Urgent works at Maoribank will be completed by March 2010.

2.6 District plan changes

UHCC officers will shortly commence consultation on the proposed plan change 15 to update the Hutt River flood hazard information in the district plan.

2.7 Kapiti floodplain management

2.7.1 Waikanae Floodplain Management Plan

A meeting was held with the NZTA and staff to discuss the potential effects of the various options of the proposed Kapiti State Highway 1 Expressway routes on the Department's management of the rivers, streams and floodplain. The consultation period for options between MacKays Crossing and Otaki closed on 30 October 2009. Following this, the NZ Transport Agency Board aims to make a decision before the end of 2009 on which route to progress.

The 10 year review of the Waikanae Floodplain Management Plan has progressed to the stage where the detailed evaluation of the performance of the Plan has been completed and we are now consulting with affected parties and the community.

2.7.2 Otaki Floodplain Management Plan

Flood protection managers and staff held their annual walkover of the Otaki River on 20 October. Staff inspected the flood protection assets along the river, assessed future operational and improvement works and considered planning/environmental matters. Overall the assets are in good condition, however, there are concerns with erosion to "the cliffs," debris fence edge protection at Upper Rahui and erosion to the river edges along sections in the lower reaches. Capital improvement works have been programmed over the next 10 years to provide a permanent solution at the most critical locations.

2.7.3 Friends of the Waikanae River (FWR)

The FWR and Consents annual walkover of the Waikanae River was held on the 14 October 2009. There was a turnout of 19 people from Friends of the Waikanae River, KCDC, GW and the general public. The main concerns that were raised were weed infestation of the river berms, quality of the walkway on the south bank, private property in the river corridor and effects of the proposed Jim Cooke Park stopbank upgrade commencing 2013/14.

2.7.4 Friends of the Otaki River (FOTOR)

The Friends have completed their first milestone for Sustainable Management Funding on the 30th of September. The annual walkover of the river was held on the 4th of November, with the AGM on the 11th of November. The Minister for Conservation, Nick Smith, the local MP, Nathan Guy, and the Mayor, Jenny Rowan, attended the walkover starting at the Otaki Depot at 9.00am and finishing about 1.00pm. Approximately 100 people attended the walkover.

3. Western Operations (Jeff Evans)

3.1 Hutt River

Willow layering on the Hutt River is now complete. Work continues on installing vehicle bollards at Poets Park in Upper Hutt. Flood gate maintenance is in progress and repair work and painting is underway on all Hutt River outlet structures. Preparations are also in progress for the start of construction for the Whirinaki stopbank extension and the Maoribank rock groyne.

Asset inspections of river trail bridges in the Taita Gorge revealed that the bridge supporting brackets had been stolen. These were replaced.

3.2 Hutt River ranging services

Work continues with ranging and enforcement where required on the river berms. The spring weather continued to be changeable through out the last period, with the river having a number of small flood events. The river and its environs continued to be well patronised throughout this period. With the school holidays late in the month there were a steady flow of families out enjoying the trail.

A summary of usage of the trail is in progress as part of the consultation for the proposed river widening below KGB to Ewen. Staff also attended the Belmont Spring festival with a high level of interest in the GW display.

3.3 Otaki River

Willow layering is complete on the Otaki River, bed re contouring has been undertaken opposite Lutz's to protect exposed debris fences and willow planting. Beach grooming is underway to remove vegetation off the gravel beaches opposite Wallaces. The Otaki River mouth was cut on the 27th September to relieve water built up behind the Rangiora Stream flood gates, which was threatening to flood adjacent properties.

3.4 Waikanae River

Willow layering is also complete on the Waikanae River and the consent walkover with interest groups has also been carried out for the year.

3.5 Watercourses

Stream runs have been carried out in Pinehaven Stream and Hulls Creek and the mouth of the Waimeha has been cut to stop further erosion to the beach side properties.

4. Wairarapa Operations [Mike Longworth]

4.1 Wairarapa River Schemes

General

The work programmes in the Wairarapa Rivers for 2009/10 are progressing with the planting programmes completed and tree lopping work underway. The main construction work will commence once the summer starts and river levels are lower.

Gravel

The gravel returns for last year were 25% less than the previous year. The number of gravel licences issued so far this year are similar to previous years but whether the returns will be higher than last year remains to be seen.

Development work programme for the LWVDS

Some of this years work is under way but the majority will be done in the second half of the year when it is dry enough for earth works construction. This years planting programme is complete and willow cabling work is underway. The land purchase for the gravel deposition area at the Tauanui delta will be completed now that Council approval has been granted.

4.2 Investigations and Technical Advice

Waingawa River Scheme Review

Work on the review has progressed with most of the back ground technical analysis being completed. The hydraulic model was refined once the accurate ground levels became available following the Lidar survey. The results of the work have been reported to the Waingawa River scheme committee. Future work will involve determining the environmental impact of the scheme work on the river. Once this work is completed a number of river management options will be assessed as to their suitability and affordability for discussion with the community.

River management consents

The existing global consents for carrying out the river management work have proved to be inadequate for the scope of work that is planned in the upper valley rivers. This position has gradually occurred as the various river scheme budgets have increased following scheme reviews to meet the adjacent land owner's expectations. Geoff Dick has been engaged to help with the process of varying the conditions of the existing consents. Initial discussions have been held with a number of the stakeholders associated with the consents. A work shop will be held in early December with all the stakeholders to work through issues associated with the consents with the aim of getting agreement to vary the consents.

Waiohine Floodplain Management Plan

Work has progressed on the Floodplain Management Plan (FMP) for the Waiohine River floodplain. The hydraulic modelling is being finalised with flood hazard maps expected to be ready for presentation at the inaugural meeting of the FMP committee. These flood hazard maps will allow the remaining items in phase one of the FMP process to be completed. The new Waiohine Floodplain Management Plan Advisory Committee will meet and elect a chair at an inaugural meeting on 27th November 2009. This meeting will also be briefed on the work to date including the new flood extent maps from the river modelling.

4.3 Drainage Schemes

A series of unplanned electrical and mechanical maintenance problems at three of the pump stations have meant that the budgets for the drainage schemes have been over expended. Rate increases will be necessary for those schemes that do not have adequate reserves. Meetings to propose rate increases on the five pumped schemes will be held over the next month. The drainage schemes are entirely self funded so the unfavourable expenditure does not have an impact on the Councils rate. A report outlining the maintenance requirements into the future has been prepared and will be presented at the scheme meetings.

5. Investigations and Assets (John Eyles)

5.1 Waiwhetu cleanup project

While work has been progressing well in other areas of the Waiwhetu site, the unsettled weather in October delayed the start of clean up works by about 3 weeks. The cofferdams have now been closed off and the first cell successfully dewatered. The contaminated excavations commenced on 2 November.

The piling work in the U channel continues to schedule with good progress being made. The first precast facing panels on the right bank were installed in the first week in November. The establishment of a causeway on the true left bank is underway.

The Waiwhetu Stream Advisory Subcommittee met at the Pelorous Sports House on 10 November at 2pm. A site visit followed.

5.2 Pinehaven flood hazard assessment

Stage one of the project, to deliver flood hazard maps for the Pinehaven stream, is nearly complete. A draft report, including scoping for the next stage (options identification) is expected by the end of November.

5.3 Asset management

SAP went live for Mabey Road on 10 August, followed closely by Wairarapa and Kapiti operations on 17 August. This represents a considerable step forward for the department in terms of asset management and the ability to report on asset management and operational activities.

As at November, 133 notifications have been lodged within SAP for work, 603 works orders have been created to a total value of \$772,226.63, with total planned costs for the year at \$3,088,497.15.

Over the next six months, we will continue to optimise our business and operational processes within SAP to identify the better ways of working as a Department.

Annual asset inspections were completed at the end of October and reported separately in the order paper.

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 19 August - 18 September 2009. These include information requests from the public, local authorities and also Flood Protection comment on resource consent applications to GWRC.

	19 September - 29 October 2009	YTD
Requests brought forward	2	6
Additional requests received	25	102
Responses provided	27	108
Outstanding requests	0	0

Over this period, the Strategy and Technical Support team have met with Upper Hutt City Council (UHCC) officers to progress the Hutt River Floodplain Management Plan District Plan Change. The draft flood and erosion hazard maps for the Mangaroa River have also been forwarded to UHCC officers for comment, with the intent of consulting with the groups of residents before Christmas. We are also assisting Hutt City Council with preparing information to remind people about flood and erosion hazard from the Hutt and Wainuiomata Rivers and Waiwhetu/Awamutu Streams. Hutt City Council intends to include this information in Land Information Memoranda (LIM), and also as at present, take this information into account when Hutt City Council officers process Property Information Memoranda (PIM), Building Consents and Resource consents (both subdivision resource consents and land use consents).

Land Management (Dave Cameron)

1. Manager's comments

1.1 NZARM Conference

The New Zealand Association of Resource Management held its annual conference in Northland recently and staff from Land Management attended. The conference was co-hosted by the Grasslands Association and focussed on issues relating to Northland along with the international issues of climate change and global warming. Two field trips gave ample opportunity to consider environmental management in a sub-tropical climate. Especially evident were the effects of land disturbance on estuarine environments and the large number of pest plants that thrive in the warmer climate.

1.2 New irrigation at Akura

There has been good progress with the installation of the new irrigation system at Akura. Three phase power has been connected to the switchboard and the contractor has completed laying of electric cable and installation of all underground irrigation pipe and hydrants. The irrigator should arrive at end of November and it is hoped that the system will be fully operative before year end.

1.3 Afforestation Grant Scheme update

The most recent application round closed on 31 October. Applications from the Wellington region totalled 10 and covered 590 hectares. These applications, along with others from around the country, will be considered by the National Allocation panel on 1 December 2009. It is anticipated that total applications will exceed 2,000 hectares. There is only sufficient funding for approximately 1,400 hectares.

1.4 Issues for the next period

- WRECI strategy approved
- Installation of the new irrigation system at Akura
- Securing a nursery lease at Homebush
- Finalising LUC maps for Farm Plan reviews

2. Farm Plans (Don Bell)

2.1 Delegated approvals - New Plans, Reviews and Annual programmes

Approvals to-date	New 10-year Plans, Reviews	Annual Plan Targets	Total Programme Estimates	
New Sustainability Plans		3		
New Conservation Plans		2		
Ten Year Reviews	1	20	\$10,000	
Annual Programmes	35	130	\$111,371	
Isolated works		10		
Programme delivery	Annual Programmes Undertaken	Annual Plan Target	Expenditure to date	Annual Plan Budget
Annual Programmes <ul style="list-style-type: none"> • Sustainability plans • Conservation plans • Shelter plans 	136	130	\$379,200	\$550,000
Isolated works	4	10	\$2,600	\$10,000

2.2 Highlights

Winter works programme

The last six weeks has been essentially a period of follow-up for winter works programmes to ensure all standards have been met. Weed control has been a dominant focus. Continuing periods of showers have elevated soil moisture levels in most areas, thus providing some comfort ahead of the anticipated equinoxial winds and dry summer.

Promotion & education

Staff assisted Opaki School to establish a strip of native riparian planting along the Waipipi Stream, north of Masterton. The project was undertaken by the school as part of "350 Day", where events were organised by groups trying to encourage world leaders to commit to setting a target for greenhouse gas emissions.

2.3 New staff appointments

Scott Andrew joined the team on 2 November, taking over from Andrew Patrick. Scott has a rural Wairarapa upbringing and brings 10 years of central North Island commercial forestry experience into the Department. Along with his regular land management duties, Scott will administer the Department's role in the Afforestation Grant Scheme.

3. Akura Conservation Centre (Stan Braaksma)

3.1 Nursery Operations

A notable feature this year has been the early completion of all post harvest operations. Row spraying, block mulching and new cutting planting completed in September and early October. The cuttings (2ha) have shown excellent survival (100%) after considerable effort was made in cutting preparation, grading and timely land preparation. To date the cold and moist October is slowing new growth. Similarly all existing nursery beds are displaying slow regrowth, however soil moisture levels are very high compared to the end of September.

All pole and stake material has now been charged and summaries of total production and sales for the year have been collated. The pole production spreadsheet shows good pole numbers available for next season from our own nurseries. There is a potential 28,000 3m poles available, a projected usage at 25,500 compared to sales of 22,000 for last year. There has been good feedback on pole grade and quality this year, with most poles making an excellent start to the season.

Massey University has engaged Akura to supply Tangoio willow for a feeding trial for six weeks. The first shipment has been delivered and positive feedback has been received.

The annual fertiliser application to all nurseries was completed in early November and will coincide with warming soil conditions. It is anticipated that there will be an earlier than usual start to poplar and willow rust spraying.

Advertising for pruning contracts is underway and contractors should be confirmed for the 2009/10 pruning contracts towards the end of November.

3.2 Trading

The annual Akura sale on Friday 2 October started with a flurry but then slowed markedly. Lists of sale material were made available to staff and others. There has been strong demand in after season materials such as rabbit repellent, hare protectors and tree releasing chemical.

Orders for 150,000 GF 19 P.radiata have been placed with Cambridge Nurseries and others will be ordered depending on the outcome of the new round of AGS applications. Any large orders through Akura from clients will require a deposit (firm commitment). Both Cambridge and Arborgen are carrying spare seedling stocks at

present. Cambridge will also contract to grow the 3,500 poplar and willow rooted cuttings for next year.

Contact has been made with a new company to research the recycling of some 4 tonnes of recovered Dynex sleeves. The new company is located in Palmerston North which should reduce the current cost of 50 cents per sleeve to return used sleeves to Auckland.

Tree orders have been lodged with Morgans Road and Norfolk Road nurseries for the supply of root trainer stock and an ex Wairarapa Star's Trust employee will continue to collect native seeds for 2010.

3.4 Budget

The Akura Business Unit has an operating surplus at the end of October totalling \$123,100, against a budgeted annual surplus of \$28,600.

The Nursery unit is exhibiting a reasonable surplus for this time of the year. Over the summer contracted pruning services will gradually reduce this surplus.

The October result for trading is well above the projected annual surplus of \$42,900. 80% of the trading income arrives in the first quarter and this surplus is projected to remain relatively static over the rest of the year.

Activity	Operating Surplus - Annual Budget 2009/10	Operating Surplus - Actual October 2009
Nurseries	(14,300)	42,900
Trading	42,900	80,200
Total	28,600	123,100

4. Biodiversity (Jacki Byrd)

4.1 Ongoing works

A practical weed control follow up day was held with landowners. This covered environmental weed control and release spraying, to encourage landowners to maintain their riparian margins once the Streams Alive programme finishes on a property after two years.

A new contract has been let for the Mangaroa, Wainuiomata and Karori catchment spraying and planting work for the remainder of the year. Three tenders were received. The successful tender was from Te Ngahere, who had the contract last year.

Spring release spraying is complete on the Kapiti Coast and has begun in Mangaroa.

4.2 Restoration planning and monitoring workshop

A restoration planning and monitoring weekend was held in October for landowners to learn how to write a restoration plan and to monitor the success of their plans. The workshop was a big success, and will be held again next year. This was a joint project with the Department of Conservation and Queen Elizabeth II National Trust. Funding for the workshop was supplied by the Biodiversity Advice Fund.

4.3 Expenditure to date

	Budget 2009/10	Expenditure to date	% of Budget
Riparian Management	\$196,200	\$105,077	53.6%
Streams Alive	\$100,000	\$79,267	79.3%

5. Operations (Kevin Burdan)

5.1 Completion of AGS

The past month has seen the completion of release spraying within seven of the AGS forests. The area covered was 245 hectares.

Operations staff have been busy verifying areas of established forests and altering the GIS shapefiles where survival rates are less than the minimum standards required by MAF.

5.2 Silviculture

Activity	Completed	\$	Annual Plan Target (hectares)	Year to date	\$
Thinning			100		
Pruning	3.2ha	3,870	100	3.2ha	3,870
Total	3.2ha	3,870	200	3.2ha	3,870

Integrated Catchment (Ian Gunn)

Focus has shifted from further work on supercatchments to support the work of the new Natural Resource Management Plan Committee (Te Upoko Taiao). Current work includes researching the various communities and stakeholders, and the status of our current relationship with them to determine the key people to involve in the engagement process proposed for early next year.

Wairarapa based staff have completed an exercise prior to the Emergency Management's Operation Phoenix exercise. Two areas were worked on: the preparation of the situation report and determining the potential of the Westpac Trust Stadium for sheltering people following a major disaster. The compilation of the situation report will be tested further in Operation Phoenix. The situation report will be live and up to date at all times rather than in the past where it was a document prepared for a specific time of the day.

Work continues with tidying up the designations of stopbanks for the river schemes in the Wairarapa for the Combined District Plan. Research and analysis on the impact of river management practises on the environment continues in relation to the proposed review of the global consents.

Forestry (Barry Leonard)

Review of operations for the period ended 31 October 2009

1. Plantation Forests (Wellington)

1.1 Log Harvest Contract

Prices have continued to inch up for both October and November and have now reached a point where the improvement since July is now over \$10 per tonne. It is disappointing this has been undermined by shipping cost increases.

Table 1 - Export prices (\$NZ/JAS AWG)

	AO	A	K	KI	KX	Shipping \$US
July	73.84	67.65	61.46	55.26	42.88	38.00
August	82.32	76.27	71.73	65.67	52.05	38.00
September	82.96	77.12	72.75	66.91	56.70	43.00
October	82.98	77.41	73.22	67.65	57.89	40.70
November	83.40	77.90	73.78	68.29	58.67	43.30

Domestic prices have tended to be stable but with increasing demand and a number of “one-off” orders for special cuts.

With the crews set up in Boiler Gully and Maori Redoubt, the quality of the sawlog has been high and the proportion of AO grade (large sawlog) better than anticipated

Log 36, the hauler crew, harvested 3,370 tonnes for \$77,433 in September and 3,662 tonnes for \$85,430 in October. This was at an average stumpage of \$22.97 for September and \$23.21 for October.

The ground based crew (Log 6) harvested 2,596 tonnes for \$42,990 and 2,830 tonnes for \$57,562 for the same periods. Log 6 averaged only \$16.56 in September while they were in an area with significant wind-throw, improving to \$20.34 in their more recent location behind Stanton Park (the Farm Forestry Block)

The crew clearing remnants at Mangaroa managed only 191 tonnes for \$2,334, at an average of \$12.23 for September, but was unable to access the block at all during October because of wet soil conditions.

In total, harvesting produced 6,157 tonnes for \$ 122,755 at an average of \$19.93 for September and 6,492 tonnes for \$142,993 at an average of \$22.03 for October.

At year to date we have harvested a total of 23,380 tonnes for \$413,781 at an average of \$17.70. The low average reflects the volume of wind-throw at the higher parts of Kilometre Paddock and Maori Redoubt.

1.2 Silviculture Contract

In September and October 28.32 hectares of silviculture was completed.

All Contractors are now operating on their new (2009/10) Contracts.

The last of the planting was carried out in October and the total number of seedlings planted this season was 185,300, which equates to 130 hectares. The persistent rain through October allowed the planting season to be extended.

1.3 Plantation Forestry operations

With both crews still in Valley View, the road is used on an average of 16 return trips per working day. This, with the increased interest in firewood because of the financial situation and a number of Army exercises, has made for a very busy forest. The regular rainfall resulted in the need to restore the running surface regularly on the part of the road under the canopy to maintain traction.

There was an incident in the forest when one of the loggers support vehicles collided with an empty logging truck, despite having radio communication. As a consequence, we intend to reissue the roading protocol and stress the need to drive with care. Following a discussion with the Bush Inspector from OSH we will also amend the firewood permits to better stress the need for safe operations and correct safety equipment.

We managed to obtain several loads of asphalt millings, some of which were used to repair potholes in the sealed area of the road.

There has been no progress on the Raupo Swamp Road upgrade this month.

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

1.4 Forest Access

The lack of access into Maungakotukutuku remains. The proposal to log the neighbour's forest through Maungakotukutuku has been delayed because of the inability of loaded trucks to negotiate one corner on Maungakotukutuku Road. The Contractor hopes to get Kapiti Coast District Council permission to widen the corner next week.

All main roads are in good order.

1.5 Market Trends

Domestic markets are showing signs of improving, with Kiwi Masterton still short of logs and Davis at Featherston purchasing "one-off" lines of niche grades, as well as the standard orders.

The export market remains strong and we are able to dispose of the entire product we offer. As a country, we are approaching 1 million tonnes of logs per month into China.

The next issue will be the Chinese New Year in January, which is a period of

depressed purchases. With the slow but continuing growth in interest from Korea and India, we may well not notice any reduction in demand. There is no further progress with Eurocell, Upper Hutt.

The New Zealand dollar and shipping rates are still of concern and effectively nullify the greater part of any increases gain at destination.

1.6 2010 – 2014 Forest Harvest Contract

The invitation to Tender was issued on Friday, 6 November, and 10 copies of the Tender Documents have been despatched. Tenders close on 11 December.

2. Reserve forests (Wairarapa)

2.1 Tauanui logging

Production was significantly down for this month.

A total of only 698 tonnes was a result of a combination of negative influences on the Contractor's performance.

Most significantly, three separate machinery breakdowns resulted in several days downtime. These breakdowns, along with maximum distance cartage back to the skid site from an exposed area with poor quality trees, combined to severely limit production for the month.

2.2 Road maintenance

Further grading was required to deal with potholes on the Tauanui access road.

Rotary slasher trimming was required on the main access roadsides within Stoney Creek, as roadside vegetation encroaching on the roads and damaging larger vehicles using the roads.

2.3 Silviculture

A small area (2.2 hectares) was medium pruned in Hiwinui.

2.4 Rainfall

A total of 220.5 mm of rain were recorded in the rain gauge at Tauanui. This is the highest monthly rainfall recorded this year.