

Catchment Management Group

Departmental Managers' update for period ending 23 July 2010

Biosecurity (Davor Bejakovich, Manager)

1. Pest Animals: (Ray Clarey)

1.1 Launch of the Pest Management Proposed National Plan of Action

It has been reported that pests cost the primary production sector nearly \$1.9 billion a year, \$1.15 billion in lost production and \$719 million in directly trying to prevent pest incursions and managing them once they are established. There are also additional environmental, social, cultural and economic costs.

Biosecurity staff attended the launch of the Pest Management Proposed National Plan of Action 2010 - 2025 on 30 June. This document outlines the proposed national plan of action for the future of pest management in New Zealand. The plan attempts to address the following issues in the current pest management sphere:

- Lack of clarity in overall roles and accountabilities for pest management.
- Crown obligations as a “good neighbour” landowner do not match those of other parties.
- The legislation underpinning pest management activities is outdated.
- Physical control and pest management monitoring tools are insufficient for future needs.
- Collective action and participation in pest management is insufficient.

For the past year, GW has been involved in the development of the Future of Pest Management Project led by MAF BNZ, including participation in two of the development work streams and attending a workshop to test part of the proposed future action plan. All regional councils have agreed to a joint submission on the document through Local Government New Zealand.

1.2 New Zealand Game Animal Council

Following a 2008 Ministerial report on the future management of deer, chamois, tahr and wild pigs in New Zealand, the Minister of Conservation moved to establish a national level body to manage and represent all interest groups. An establishment committee was set up, which in June released a paper of recommendations to the Minister. The establishment committee has proposed the formation of a group known as the New Zealand Game Animal Council, which will have 16 representatives and an independent Chair. The paper also recommends the appointment of six permanent staff, with responsibility for issuing permits for recreational and commercial hunting on public lands and balloting hunting blocks. A legislative change of status for game animals is also proposed, including amendments to the Conservation, Wild Animal Control and Wildlife Acts.

Feral deer and feral pigs are animals of concern in the Wellington region, particularly in some Key Native Ecosystems and large tracts of Regional Council parks and water catchment land. The formation of the Game Animal Council may lead to complications in the management and control of these animals on Council lands. GW commented on the initial Ministerial report in 2008. There is no opportunity for submissions on the current recommendations paper to the Minister of Conservation. It is clear that most hunters want species such as deer seen as game animals and not as pests.

1.3 Department of Conservation Lower North Island Managers Meeting

Representatives of the Biosecurity Department from the Pest Plants, Pest Animals and Bovine Tb Sections were invited to speak at the Department of Conservation (Wellington-Hawkes Bay) Threats Managers Meeting at Pukaha Mt Bruce in early July. The Biosecurity staff gave an overview of the relevant current programmes, and explained how these linked with the Department of Conservation operations and lands in the region. GW and DOC often operate in similar areas and increased communication will help to ensure that our operations work in conjunction wherever possible. The presentations were well received.

1.4 Environmental Protection Authority

A new stand alone Environmental Protection Authority (EPA) has been established effective from 1 July 2010. The EPA will undertake all of the functions previously performed by the Environmental Risk Management Authority (ERMA) under the Hazardous Substances and New Organisms Act 1996 (HSNO Act), as well as aligned functions and powers from the Ministry of Environment and Ministry of Economic Development. This change is not expected to affect the current HSNO process or regulations or to change either the test certification or periodic testing regimes.

1.5 KNE Programme

Western Zone - The servicing of KNE sites allocated to contractors continued to run to schedule but fell behind for some jobs allocated to staff. This was due to having staff on annual or sick leave, scheduled training and compulsory training together with a very wet period. As there is no ability to off load some of the core work onto contractors, consideration will have to be given to more stringent programming and prioritisation of works. Commitment will be given to maintenance of the current projects as a priority over new or reactionary requirements.

Eastern Zone – This programme has been effectively managed over the past financial year. It consists of 16 sites over 10,383 hectares and is undertaken by a mix of contractors (5,202ha) and pest animal team members (5,181ha). The accumulated annual cost was \$106,649 against a budget of \$104,450.

Contractors - All of the contractors employed last year and considered to be preferred suppliers to the Pest Animals Section have re-registered for the 2010-11 year. Contracts will be agreed during July 2010. The contract process is now more generic for the Biosecurity Department. Both parties are required to go through a more disciplined and formal process. The improvements are in line with what is considered best practice for GW.

1.6 Penguin Deaths at Burdan's Gate - Eastbourne

Some Little Blue Penguins were reported to have died on the Pencarrow Coast, just south of Burdens gate. The person who observed the dead penguins thought that a cat was responsible. Some abandoned cats had been destroyed previously in this area and recently one more wild or abandoned cat has been caught at Burdan's Gate. Dogs are walked along that coast line and stoats and weasels frequent the area. They may be implicated as well.

Following negotiations between various interested parties funding was made available from the GW Environmental Coastal budget to install mustelid traps from Burdan's Gate to the Pencarrow Lakes Block. These traps will complement the current trapping regime at the Pencarrow Lakes Block which is serviced monthly by the Pest Animals Team for GW Parks. Hutt City Council has agreed to pay for the servicing and installation of the traps. Consideration is also being given to the installation of dedicated cat traps at some stage. The type of trap used will need to be of a design that is safe for small dogs but effective against wild cats and will probably need to be elevated.

1.7 Western Zone rabbit blood sampling

The survey to sample wild rabbits in the Western Zone for rabbit calicivirus disease (RCD) immunity levels has been completed. Rabbits were sampled from eight properties ranging geographically from Ataturk Park on Miramar Peninsula to coastal property at Peka Peka. Only 75 samples were obtained which reflects the low rabbit infestation levels. The range of susceptibility to RCD was as low as there being no immunity in the samples from Kapiti Golf Course, Red Rocks, Whitireia Park and Queen Elizabeth Park through to 71% immunity level for the coastal type country at Peka Peka. The average RCD immunity was 33.3% which is lower than last years result of 37%. It is obvious that the disease is still cycling and culling rabbits. This is most fortunate as in the South Island RCD is not curbing rabbit populations and poisoning programmes together with other traditional control methods, have been re-introduced.

1.8 Proneness surveys and population trend monitoring

The annual rabbit and possum population trend night counting was completed in June. Rabbits are counted on a set route at Queen Elizabeth Park (Paekakariki) and possums at Belmont Regional Park. Only one rabbit was seen over the mandatory three consecutive nights which strongly suggests that an RCD event had occurred in this normally prolific rabbit area. Hares were also slightly lower in number than last year.

The number of possums sighted had also dropped a little at Belmont Regional Park. The fixed possum night count route had been very wet during the month leading up to the count. This may have been a factor in the possums being less conspicuous due to a change in possum browse habits.

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

The proneness surveys in the Eastern Zone were completed in March this year. Of thirteen formerly rabbit prone properties inspected throughout the Wairarapa only one had two small areas of concern with levels assessed as 5 on the Modified McLean Scale. This property is at Mount Bruce. The owner is not overly concerned as the population has

reduced markedly over the past year and the rabbits are not spilling over into anyone else's property. He encourages recreational shooters to keep his rabbits under control.

1.9 Rook Control

Approval has been received from the Medical Officer of Health for the annual rook nest baiting programme scheduled for late September 2010. The application was made early on this occasion as there was a long delay last year with processing due to public health staff being focussed on the influenza epidemic. These applications, even to apply a vertebrate toxic agent such as DRC1339, are now comprehensive and add to the cost of control. It is paramount however, that any risk to the public, their pets or livestock is well considered.

2. Pest Plants (Richard Grimmett)

2.1 Surveillance

MAFBNZ has confirmed continued support for the Didymo Advocacy programme for a further three years. A longer-term plan can now be developed for this programme.

A total of 753 properties were surveyed for Total Control (TC) species. Nine new TC sites and 19 Surveillance species sites were discovered. There are currently 10 Total Control sites and 40 Surveillance sites were discovered. Other regional councils have praised the success of this programme and are commencing similar programmes following GW approach. The programme methodology and progress has been presented at the national Biosecurity Institute conference twice and Mike Ulrich presented the programme at the EMAPI conference in South Africa last year.

Of note was the discovery of 17 Bomarea sites whilst delimiting a Climbing spindleberry site in the Hutt. There are very few sites of Spartina in the region. These infestations will be controlled by staff member currently completing their Aquatic Strand for Registered Applicator training course.

2.2 Total Control Species

More than 150 sites were inspected and control completed where TC plants were found. The season has generally been cool and moist. The result has been less favourable germination conditions generally. Most species and sites are responding well to the control programme that is now tailored to target unique survival attributes of each TC species. A few species are proving difficult to control due to terrain, viability and location. Perennial nettle located in rivers with rough cover of blackberry requires line cutting and control of both species. The river provides an ideal pathway for spread. Further delimiting focus on the rivers is needed to fully map future control of this and other species (e.g. Eel grass) in Wairarapa rivers. Madeira vine is located on old established sites with some on steep overgrown slopes. The massive amounts of tubers coupled with access difficulty hinder rapid reduction of viable plant material.

2.3 Containment Species

Planning and pre-operation inspections of Boneseed areas have been completed. In the coming season a helicopter service will be used on steep escarpments, on Wairarapa south coast and Pukerua Bay south, to spray or suspend an operator to cut and treat plants. Officers are controlling plants on the majority of steep slopes and contractors are inspecting coastal settlements. Plants are generally only small, mostly germinating since last October. Some locals have been helpful notifying staff of plants outside the current control areas.

Hornwort at the Lake Wairarapa and Forest Lakes is being assessed for control options and operations planning to support groups working to restore these sites. DOC is keen to continue control within the Boggy Pond area following successful control last year. A report outlining the activity and research to date is being prepared for the Wairarapa Moana wetlands group. Staff are supporting the Forest Lakes owners develop a restoration plan for the lake and surrounding land.

2.4 Key Native Ecosystem

Officers have been active supporting care groups to complete activities around annual planting programs. Advice is being given on restoration planning for next year and we provided assistance completing funding applications.

A lot of activity was centred on coastal restoration at 12 sites throughout the region. Staff have assisted at group planting days, transporting plants, equipment and providing planting plans and on site support generally on weekends. Schools have attended planting days at Riverdale dunes.

Staff assisted planting on the Ducks Unlimited/DOC lease on the eastern shore of Lake Wairarapa.

2.5 Communication and Community Engagement

Staff helped at a DOC Weed Swap at Greytown Memorial Park recently. The Minister of Conservation visited the event and was very impressed with the concept.

Staff have responded to many requests to support restoration groups plan their future activities. Staff also assisted care groups in reporting outcomes for the group's feedback to fund providers.

July was declared Biosecurity month in New Zealand. Our staff have raised the profile of the event by publishing articles on the web site, local newspapers and in national press.

Staff responded to many enquiries about old man's beard (OMB) during this period. The milder autumn has resulted in flowers persisting longer this season.

2.6 Community Max

This project is now nearing completion. The two crews employed in the Upper Hutt servicing the western area finished on 9 July. During this report period they cleared climbing asparagus at Haywards Reserve, cleared Boneseed and woody weeds at Eastbourne foreshore, prepared many sites for care groups to plant and removed OMB on the Hutt River. A farewell BBQ was held on the final day to celebrate the restoration

outcomes achieved on over 35 sites, and to celebrate the individual success of a number of employees who transitioned into full time employment. The celebration was supported by Cr Lamason, our partners from Wellington City Council, Ministry for Social Development and GW departments. The programme would not have happened if it was not for the commitment of the Wayne Cowan and his Upper Hutt team.

The Wairarapa crew continues until the end of July. This team is also contributing to many restoration sites. They have weeded and planted at Riverdale dunes, cleared OMB for Masterton District Council and Lower Valley Development Scheme, cut wilding pines for DOC, prepared sites for the Lake Wairarapa Reserve planting day, helped Land Management staff at three restoration sites and undertook release spraying for Eucalypt plantings.

3. Bovine Tb Vector Management (Graeme Butcher)

3.1 2009/10 Vector Control Programme

Table 1: Summary of the projects let for the 2009/10 year.

	Possum Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GW BioWorks	67,646	35,583	0	103,229
Professional Guiding Services	97,577	23,843	0	121,420
Central Districts Pest Control	24,481	0	0	24,481
J McCaslin	11,565	0	0	11,565
T Oakly	0	0	249,039	249,039
Totals	201,269	59,426	249,039	509,734

Table 2: The following table details areas of the 2009/10 control programme which have been completed as at the end of June 2010.

	Possum Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GW BioWorks	56,920	35,583	0	92,503
Professional Guiding Services	94,292	23,843	0	118,135
Central Districts Pest Control	15,457	0	0	15,457
J McCaslin	11,565	0	0	11,565
T Oakly	0	0	249,039	249,039
Totals	178,234	59,426	249,039	486,699

Contractors have completed 57 possum control projects (43 performance control and 16 input control operations) and have commenced control activities within all remaining activities (11 projects). 88.5% of the possum control program has been completed and assessed by performance monitor or audit.

Contractors estimate that they have completed a further 18,800 ha of possum control but these areas have not had the monitoring completed. Contractors estimate that 98% of the possum control program has been completed.

- Professional Guiding Services have completed 27 of 30 projects.
- BioWorks have completed 25 of 29 projects.
- CDPC has completed 3 of 7 projects.
- J McCaslin has completed 2 of 2 projects.

3.2 2009/10 Monitoring

To date 43 performance monitors have been completed,

All 93 trend monitors programmed have been completed to date. Trend RTC results are as follows:

- 0.0% to 2.9% 40 projects (132,786 ha)
- 3.0% to 4.9% 35 projects (93,517 ha)
- 5.0% plus 18 projects (68,691 ha)

3.3 2009/10 Possum and Ferret Surveys

The following table details possum and ferret surveys for the 2009/10 year. All surveys have been completed

Project	Strata	Area (ha)	Progress (% completed)	Required Estimated Samples		Samples received to date		Suspicious Tb samples
				<i>Possums</i>	<i>Ferrets</i>	<i>Possums</i>	<i>Ferrets</i>	
Bideford	HMR 3	4824	100	N/A	5	N/A	3	0
Bideford	HR 1	2641	100	N/A	5	N/A	5	0
Bideford	MR 1	3494	100	N/A	5	N/A	5	0
Bideford	MR 7	3173	100	N/A	5	N/A	5	0
Castlehill	HR 1	2017	100	45	N/A	76	N/A	0
Masterton Flats	HR 1	1482	100	40	3	3	1	0
Masterton Flats	MR 1	3546	100	60	4	23	0	0
Mt Bruce Waipoua	HMR 4	418	100	25	N/A	14	N/A	0
Mt Bruce Waipoua	HMR 5	642	100	25	N/A	30	N/A	0
Mt Bruce Waipoua	HR 1	3083	100	185	5	25	2	0
Mt Bruce Waipoua	HR 3	1799	100	100	3	46	5	0
Mt Bruce Waipoua	HR 4	1816	100	50	3	46	4	0
Mt Bruce Waipoua	MR 1	4266	100	100	5	98	6	0
Mt Bruce Waipoua	MR 2	3301	100	150	5	19	1	0
Otaki Buffer	HMR 1	3023	100	150	5	20	3	0
Otaki Buffer	HMR 2	1587	100	80	N/A	87	N/A	0
Otaki Buffer	HR 1	2404	100	130	5	19	0	0
Pakowhai	HR 1	1829	100	100	N/A	28	N/A	0
Whangaehu	HR 1	4583	100	250	5	7	1	0
Whangaehu	HR 3	2375	100	50	3	14	1	0
Whangaehu	MR 3	7123	100	40	5	335	2	0
Totals		59426		1580	71	890	44	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 % completed	Estimated Samples	Samples received to date	Positive Tb samples
Akatarawa	20,538	100	30	47	5
Bideford	39,023	100	40	36	3
Castle Hill	4,500	100	30	34	0
East Alfredton	4,900	100	20	5	0
Featherston	5,325	100	30	13	0
Homewood Riversdale	25,789	100	120	86	0
Kapiti	22,486	100	50	16	0
Mataikona	6,779	100	40	50	1
Moonshine	6,250	100	20	14	0
Otaki Crown	3,552	100	15	25	0
Pakowai	6,910	100	60	61	0
Stronvar	25,976	100	85	65	0
Te Wharau	13,995	100	100	103	0
Tinui	35,675	100	120	154	0
Wellington	29,640	100	50	36	0
Totals			810	745	9

3.5 2009/10 Feral Deer Survey

A feral deer survey was undertaken within the Tararua Forest Park over approximately 88,500 hectares. This survey was completed in conjunction with the normal activities of the contracted helicopter company.

168 samples were autopsied and none were positively identified with bovine tuberculosis.

3.6 2009/10 Feral Cattle Control

This project was completed within the South East Wairarapa operational areas. Five feral cattle were destroyed, three by landowners and two by AHB contractors.

A final helicopter inspection occurred in late June throughout the area, but no feral cattle were spotted.

3.7 Tararua Range Aerial Project

Planning for this operation is well advanced, the operation areas includes:

- Holdsworth Woodside Crown (8,000ha)
- Project Kaka (22,000ha)

Consultation is completed and statutory consents from the following bodies have been applied for:

- Department of Conservation
- Medical Officer of Health
- Greater Wellington (Resource Consent)

The AHB have released tender documents to interested and qualified contractors. Tenders close on 19 July.

It was hoped to commence control early August, (before the start of the bird breeding season) however, due to the amount of preparatory work required a commencement date of mid August now seems more likely.

3.8 2009/10 Infected herds

		I Herds @ June 2009	I Herds @ end of April 2010 (one clear test in brackets)	Target I Herds @ June 2010
VFA	Cattle	0	0	8
	Deer	0	0	
VRA	Cattle	5	5 (4)	
	Deer	0	0	

Flood Protection (Graeme Campbell)

1. Manager's comments

The Flood Protection team have completed another very busy and successful year. The capital works programme in particular has been very challenging as has the completion and release of further flood hazard information for the region. With the physical works the Waiwhetu now complete the team is focusing on wrapping up the final contractors claims so that we can complete the financial reporting for the project and finalise the respective Councils contributions. We have also kept the Boulcott Hutt stopbank project on track.

Staff are now taking time to plan the works and investigations programme for the coming year. How early the construction programme commences will be very dependant on the outcome of Boulcott Hutt hearing and whether there are any objections to the decisions.

2. Western Floodplain Management Plans [Daya Atapattu]

2.1 Ava to Ewen project

The Strand Park stopbank construction contract including the maintenance works is now complete.

2.2 Boulcott/Hutt stopbank project (23 July 2010)

The Boulcott/Hutt stopbank NOR/Consent hearing is now scheduled for 9 August 2010. Following a large number of submissions objecting to the use of residential streets for transporting construction materials, HCC consenting authority has asked for further information particularly concerning the effects of construction traffic. A traffic management plan was prepared and field tests were conducted to assess vibration impacts from construction traffic. The vibration tests indicate that construction traffic induced vibrations in the Stage 2 access areas (Stellin Street etc) are below the perception levels and not strong enough to induce any land subsidence. This information was submitted to HCC on 21 July 10.

A public meeting was held on 21 July to provide up to date information on the project to the community. About 100 residents and Councillors from GW and HCC attended the meeting.

Following a public 'Registration of Interest' process, five contractors were pre-qualified to tender for the construction contract.

The stopbank construction is scheduled to commence in October 2010. However, the commencement of works in time to complete Stage 1 during the summer of 2010/11 is dependant on the timing of the NOR decision. Staff will review the programme following the consent hearing scheduled for 9 August.

2.3 Whirinaki Crescent stopbank

The Whirinaki Crescent project is now complete. A community planting day was held on 19 June 2010.

2.4 Maoribank and Ebdentown works

The Maoribank urgent works are now complete. The option investigation for the design of the Ebdentown rock line is progressing. The timing of Ebdentown works is dependant on NZTA funding. Staff are currently working with NZTA to renew the River Works Agreement for the Upper Hutt by pass. This agreement makes provision for cost sharing between GW and NZTA for capital works.

2.5 Kapiti floodplain management

2.5.1 Otaki Floodplain Management Plan

Construction of the three rock groynes on the right bank of the Otaki River, upstream of the railway bridge, has been completed well within the budget. In addition to the groynes, construction of pier protection rip-rap around SH1 bridge piers on both sides of the river was completed. This work was managed by FP staff on behalf of NZTA. Overall 4000 tonnes of rock have been placed as part of these Otaki River edge scour protection improvements.

Construction of a walkway between the public carpark behind the FP depot and the Chrystalls walkway entrance has also been completed within budget. This now provides a safe public walkway along side the haul road and passing beneath the SH1 and rail bridges. In addition a detailed planting plan has been produced for the river berms adjacent to the walkway. NZTA have provided a contribution of \$2000 to purchase the native plants. FOTOR have agreed to grow the plants in their nursery, undertake planting and manage the overall project.

On 22 May, GW Flood Protection joined GW Biosecurity, GW Land Management and Horizons Flood Protection in providing a public display at the Otaki Lifestyle Farms Field Day. Horizons Regional Council provided their big green rig and marquee for the display facility. There was considerable public interest in the displays with over 900 people in attendance.

Staff are working with FOTOR to finalise plans and apply for resource consent for an observation platform at the Rangiora carpark. FOTOR, KCDC and the Otaki Community Board will substantially fund the project. The GW contribution will be assistance with planning and project management.

2.5.2 Friends of the Waikanae River (FWR)

The Friends held their first Honda Treefund public planting day on 12 July. This took place at the partially restored Dricon site below State Highway 1 and included the newly created heritage trails. The heritage trails have been established by community workers, through the partnership between GW and the Department of Corrections. The final Honda Treefund planting day is scheduled for 19 July. The group are continuing major restoration work at the Oxbow opposite Otaihangā Domain on the Waikanae River. The

last executive meeting was held in May 2010. FWR are holding their Annual General Meeting on 29 July 2010.

2.5.3 Friends of the Otaki River (FOTOR)

The Friends have completed their sixth and last milestone for Sustainable Management Funding from the Ministry for the Environment on the 30th of June 2010. In 2010, work is continuing down at the Otaki Estuary in preparation for restoration planting over winter, the first planting of node sites commenced on 29 May. The Friends have also been nominated to receive the Honda Treefund funding for restoration work on the Otaki River corridor (specifically, at Chrystalls Flats) this year. The restoration planting for this site was completed in June 2010.

3. Western Operations – Jeff Evans

3.1 Hutt River

Staff are busy preparing planting areas for Willow and native planting. Willow re-vegetation work has been carried out to remove dying Willows in the Avalon area and these will be replaced with Matsudana Moutere hybrid Willows, these have a longer life span and can be more easily layered.

3.2 Hutt River Ranging Services

With the winter weather the use along the trail has dropped off, vehicle damage has also increased in a number of places on the river berms. Staff will continue to closely monitor these sites. Progress continued with asphaltting of the multi use river trail through Harcourt Werry by Hutt City Council.

The annual Crazyman was held early in the period and the event attracted 400 participants, there has also been two school athletics days held at Strand Park.

3.3 Otaki River

A number of native planting sites have been prepared at Crystall's and the Otaki river mouth for the Otaki Friends group and the RB stopbank below SH1 Bridge has been reshaped to help with maintenance.

3.4 Waikanae River

Preparation for planting has been undertaken at Greenaway Road and large overgrown Willow trees have been removed from the berm in the same area to allow for flood overflows during high river levels.

3.5 Western Watercourses

Stream runs have continued over the period, a number of fallen trees have been removed and vegetation cut back has been carried out in the Waiwhetu Stream to increase flood flows, a low dish has been put in the bank on the Waitohu Stream at Wotton's property to allow the wet land area to flood during high flows, this work has been carried out in conjunction with Environment Management Group staff.

4. Wairarapa Operations [Mike Longworth]

4.1 Wairarapa River Schemes

General

The work programmes in the Wairarapa Rivers for 2009/10 were completed. The new work programmes for 2010/11 have been developed and planting work is now under way. Staff are completing documentation associated with last years work.

Development Work Programme for the LWVDS

The development work programme for 2009/10 was completed. The 2010/11 work programme consisting of:

- Construction of the final stage of the stopbank to contain the gravel at the Tauanui delta.
- Construction of bank protection works with rock & river boulders.
- Planting will commence with the planting work first.

4.2 Investigations and Technical Advice

Waingawa River Scheme Review

Future work involves 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 process of varying the conditions of the existing consents is nearing a conclusion which should satisfy all interested parties. It is anticipated that one more meeting of the working group will be needed to sign off on both the quantum of work and a MOU that describes how the interested parties' interests will be catered for.

Tawaha Catchment Diversion

A consultant was engaged to investigate various options and a report was submitted to the last LWVDS Advisory Committee Meeting to outline the options. Consultation with the affected landowners is now being carried out.

Waiohine Floodplain Management Plan

Waiohine River FMP is progressing with the first phase of the process near completion. The geotechnical investigation, which will allow the performance and risk of failure of the existing stopbanks to be assessed, is the main work out standing to complete phase one. All of the existing information will be summarised in a report, which will be used for consultation in the following phase.

4.3 Drainage Schemes

A report outlining the maintenance requirements into the future and the rate income to meet these costs was presented to meetings held with the five pump scheme committees in December 2009. The scheme committees agreed to significant rate increases in 2010/11 to repay the deficits and build reserves to cope with unplanned maintenance items.

5. Investigations and Assets

5.1 Waiwhetu cleanup project

The bulk of the civil engineering works have been completed for the Waiwhetu project with the last precast concrete panel placed in the U channel in early June. There is much property reinstatement work to do as well as installing floodgates and wing walls on all the stormwater outlets. Works remaining include the ecological enhancements with the planting of over 20,000 eco sourced natives underway but progress has been hampered due to poor weather in June.

The final costs for the job will not be known for a while as the contractor has yet to make a final claim and contract variations need to be evaluated.

A successful closing ceremony was held on 17 June with the Chair, Dr Nick Smith, Mayor Ogden, and Cr Lamason presenting.

The next Waiwhetu Stream Advisory Subcommittee meeting is scheduled for 1 September.

5.2 Pinehaven flood hazard assessment

Stage one of the project, to deliver flood hazard maps for the Pinehaven stream, is complete. A project scope for the next stage (options identification) is being developed with Capacity and UHCC.

In mid June, about 800 flood information sheets were posted to property owners at risk of flooding in the 100 year return period event from the Pinehaven stream. Flood Protection staff have been busy fielding calls from residents and providing detailed flood information upon request.

5.3 Asset management

At the end of June, we hosted Operations staff from Horizons Regional Council as they conducted their two yearly review of asset management practices for our Department. The independent review provides useful feedback to the way we maintain and manage our assets. The exchange of ideas was mutually beneficial.

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 22 May – 12 July 2010. These include information requests from the public, local authorities and also Flood Protection comment on resource consent applications to Greater Wellington.

	22 May – 12 July 2010	YTD
Requests brought forward	4	6
Additional requests received	91	442
Responses provided	91	443
Outstanding requests	4	5

The flood hazard awareness from the data sheets for the Wainuiomata River, Hutt River and Waiwhetu/Awamutu Streams continues to result in requests for information, and this has been joined by a small flurry of requests about the Pinehaven Stream flood hazard following an additional data sheet mail out in June.

Over this period, the Strategy and Technical Support team have supported Upper Hutt City Council (UHCC) staff at a pre consultation meeting with representatives from St Patricks College for the Hutt River Floodplain Management Plan District Plan Change (UHCC PC15).

Staff have provided technical support for Greater Wellington Environmental Policy at the Plan Change Hearing for Wellington City Council Proposed District Plan Change 73 (Centres and Business Areas Review), and at a mediation discussion over Greater Wellington's appeal to Hutt City Council's Plan Change 12 (Amendments to the Residential Provisions and Financial Contributions Chapter to better enable infill and multi-unit development to accommodate population growth).

Additionally, staff have discussed Hutt City Council's 'Making Places' proposal and aspects of a proposed development around Duck Creek in Porirua City with their respective staff.

An update on available flood hazard information was requested by the public and TA's. The following information was provided:

Kapiti Coast

- Otaki River – in the Otaki River Floodplain Management Plan (1998) and on the Kapiti Coast District Council (KCDC) web site
- Waikanae River - in the Waikanae River Floodplain Management Plan (1997) and on KCDC web site
- Waitohu Stream – in the Waitohu Stream Study 2006 and on the KCDC web site
- Mangaone Stream – Flood Hazard Assessment report June 2002

- Stormwater modelling has been carried out by KCDC for Otaki and Waikanae Rivers. Current information is available on the KCDC website. We understand KCDC are presently carrying out modelling on the Mazengarb Drain and the Waimeha/Ngarara Streams.

Hutt City

- Hutt River – in the Hutt River Floodplain Management Plan (2001) and March 2010 Flood Hazard Information Sheets
- Waiwhetu/Awamutu Streams – January 2010 Flood Hazard Information Sheets
- Wainuiomata River – in the Wainuiomata River Flood Hazard Assessment 2000 and the April 2010 Flood Hazard Information Sheets

Upper Hutt City

- Mangaroa River – Hazard Maps and draft design alignment sent to residents January 2010 and on UHCC web site
- Pinehaven Stream – June 2010 Flood Hazard Information Sheets

Porirua/Wellington City

- Porirua Stream – Greater Wellington has a hard copy of Wellington City Council's 1998 Flood Hazard information.
- Pauatahanui Stream - Greater Wellington has a hard copy of the 2006 flood hazard mapping carried out by Connell Wagner

Wairarapa

- Waiohine – 2010 flood hazard information available
- Waingawa River – 2009 flood hazard information available
- Ruamahanga River -1995 flood hazard information available for Mt Bruce to Waiohine Confluence, and GW has access to the 2007 Te Ore Ore to Wardells Beca model.
- Ruamahanga River – 2003 Waiohine to sea flood hazard information available
- Tauherenikau River - 2003 flood hazard information available
- Waipoua River – 1994 model flood hazard information, and 2008 information downstream of Serpentine Creek
- Kopuaranga – 2006 flood hazard information available.
- Mangatarere River - 1997 flood hazard information available and aerial photos of 50 year event
- Turanganui River - 1999 flood hazard information available
- Lower Tauweru - 1997 flood hazard information and aerial photos of 20 year event
- Donalds Creek Featherston - 1998 flood hazard information available
- Huangarua River - flood hazard information on GIS from aerial photos of 50 year event
- Lower Whangaehu River - flood hazard information on GIS from aerial photos of 20 year event

Land Management (Dave Cameron)

1. Manager's comments

1.1 Winter Planting programme

Significant rainfall in the latter part of May and through most of June resulted in soil conditions that were very conducive for pole and seedling planting. A start was made to planting in mid June and to date three large Afforestation Grant Scheme projects have been completed and 6,000 poles have been helicoptered into the hill country. Additional poles have been delivered to properties not requiring the services of the helicopter. This signals a very good start to the winter planting programme and by the end of August 90% of the programme will be completed.

Rainfall in the last two months has averaged more than 400mm across the Wairarapa hill country. This accounts for 40% of the annual rainfall and has fully saturated all soils. Any future events in excess of 50-100mm could easily trigger soil movement as there are signs already that the ground is cracking under the weight of water.

1.2 Afforestation Grant Scheme

The Regional Council Allocation Panel met in early July to consider 42 applications for AGS funding in 2011/12. A total of \$2.75M was available. Twenty seven applications were approved covering an area of 1,252 hectares. Three applications were placed on a Reserves list should any of the 27 approved projects not proceed.

One large project of 313 hectares in southern Hawkes Bay was partially funded to allow allocation of funds to six smaller projects.

Six projects from the Greater Wellington region were in the mix and three were approved and one placed on the Reserves list. The three successful applications total 150 hectares and are located at Tinui, Tukurumuri and Palliser Bay.

1.3 Wellington Regional Erosion Control Initiative

The Wellington Regional Erosion Control Initiative (WRECI) is progressing very well with the completion of the first ten WRECI Plans and a start on the works programme. Most of the works centre on pole planting and the full complement of 2,500 poles will be planted over the next six weeks. Additionally an area of 25 hectares has been fenced and the eroding land will be allowed to revert to native scrub.

The next fifteen WRECI Plans are currently being finalised and landowners will be approached in the spring to determine the final list. It is envisaged that the final number will be made up from properties within the Whareama and Awhera catchments, along with two or three from the erosion hotspots identified in the implementation plan.

1.4 Issues for the next period

- Completion of the works programme on the first ten WRECI Sustainability Plans
- Completion of the Streams Alive riparian planting programme
- Completion of the establishment of new forests under the Afforestation Grant Scheme
- Participation in the Greenhouse Gas Focus Farm programme at Ponatahi
- Completion of the works programme for 130 Farm Plans

2. Farm Plans (Don Bell)

2.1 Delegated approvals - New Plans, Reviews and Annual programmes

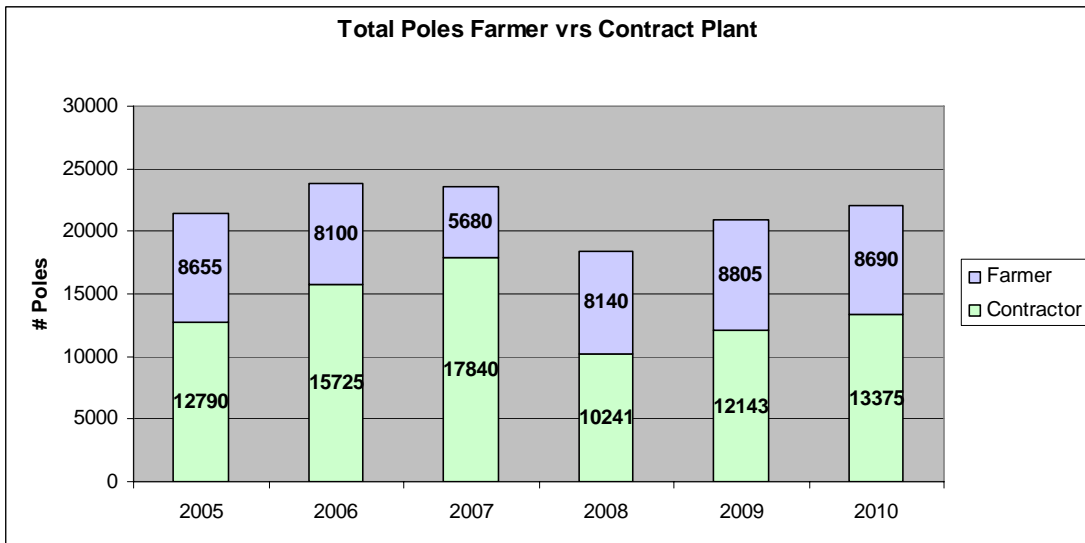
Farm Plan Programmes 2009/10	Approved to Date	Annual Plan Targets	Budget Estimates	Expenditure to date
WRECI Plans	10	10	\$80,000	\$71,729
New Sustainability Plans	-	3	\$15,000	-
New Conservation Plans	3	2	\$4,000	\$5,684
Ten Year Reviews	18	20	\$60,000	\$51,088

Programme delivery 2009/10	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 	145	130	\$544,300	\$565,000
Isolated works	5	10	\$2,700	\$10,000

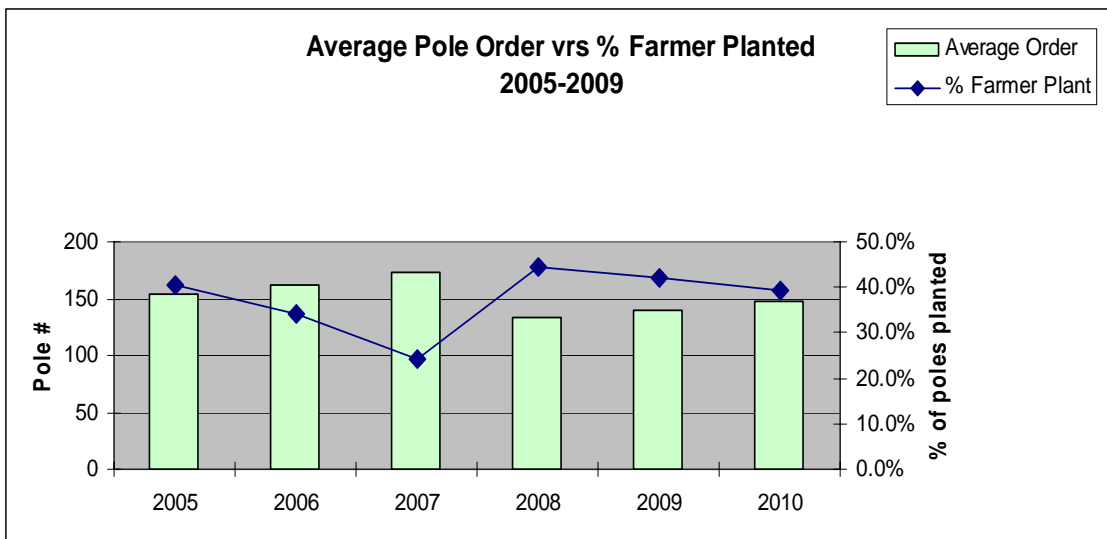
2.2 Pole Planting

The planting of poplar and willow poles is a key part of the Land Management programmes within the hill country environments. Over the years techniques have been refined and establishment rates are often in excess of 90%. While Land Management can arrange contractors to plant these poles many landowners choose to plant their own.

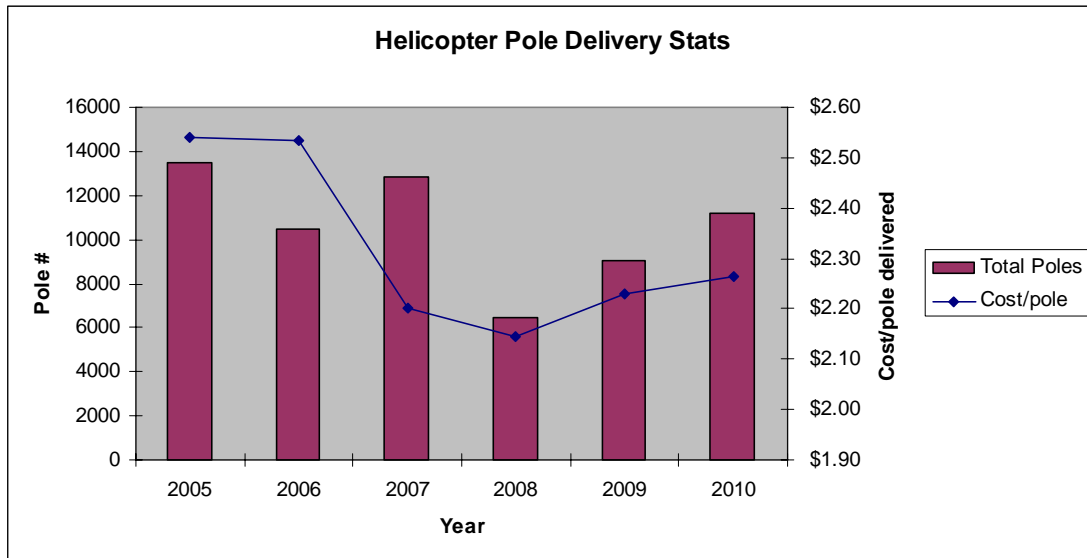
This graph records the total number planted over the last six years, and whether the poles are planted by the farmer or one of Greater Wellington’s contractors.



The following graph shows that around 40% of poles are planted by landowners. Additionally it records that on average 150 poles per property are planted, either by the landowner or by contractors.



Many of the poles are transported to remote sites within properties by helicopter. The graph below records the average per pole cost of delivering the poles (overall average of \$2.40) and the total number of poles ferried by the helicopter. This number is often between 40-50% of the total number planted each year.



2.3 Community Events

- Community consultation training and subsequent participation in the three Wairarapa community meetings to begin the process of preparing the Natural Resource Management Plan.
- Community Max work has been undertaken at a range of sites within the Wairarapa. Included in this has been weeding at the Homebush eucalypt trial and planting as part of the Wairio restoration project adjacent to Lake Wairarapa. As part of the Wairio project willows and alders were also removed from the lake margin.
- 30 Dalefield school children, teachers and parents assisted with riparian planting along the Enaki Stream. A total of 400 plants were planted. Forest and Bird members provided a BBQ lunch which was followed by a walk through the Fensham Reserve.
- Papawai Stream – Hadlow junior school (5-6 yr olds), Kuranui College students and locals planted 460 natives along a section of the Papawai Stream near the marae.
- The custodians of the Wairio restoration project which include members of Ducks Unlimited, NZ Farm Forestry Association, and South Wairarapa Rotary were assisted by staff from Greater Wellington, DoC, Forest and Bird and pupils from Pirinoa and Kahutara schools to plant 900 native shrubs and trees.

3. Akura Conservation Centre (Stan Braaksma)

3.1 Nursery Operations

From a significant soil moisture deficit in April, Akura now has soils that are fully saturated. Since late May the weather has been wet and cold leading to very wet conditions underfoot but at no stage has this restricted the pole cutting crews output. Cutting started in the first week in June and as a result pole supply has generally kept ahead of demand. There has been increased demand for willows from Flood Protection and Horizons Regional Council has been supplied with some 2,000 surplus three metre poles. The current soil conditions make pole extraction difficult as every effort is made to minimise headland and track damage and limit the amount of mud entering the yard area. Mangapakeha nursery also poses similar difficulties with pole extraction.

Pole quality is probably at its best ever with most lines of 3m poles cut to maximum butt and top diameters. Clients in general are very pleased with the grade and there has been little resistance to the current price. Cutting material (Fraser, Pecam, and Maxi x Nigra clones) have been harvested and are ready for use when beds are replanted in the spring. Besides meeting Akura's requirements it is expected that orders will also be received from Hawkes Bay and Horizons Regional Council's.

3.2 Trading

There has been an increasing interest in understanding eco-sourcing in natives shrubs and trees. The area set aside for eco-sourced trees at Akura has expanded this year as demand increases for this product line. New to the nursery this year are increases in the numbers of open grown natives being sold. Other than flax which has always been a good seller, the nursery is selling a wide range of open grown stock. There are good levels of support from Greater Wellington projects and other internal consultancies.

Morgans Road nursery (Blenheim) has again supplied well grown, quality tree stocks this year. Norfolk Road nursery (Masterton) is in its first year of root trainer production with some very good lines of natives, but in general the plants tend to be smaller and less advanced. Open grown natives from Coppermine also have been of good quality.

Cambridge nursery continues to supply the bulk of the exotic tree seedling supply with tree quality and grade generally very good.

3.3 Budget

The Akura Business Unit has an operating surplus at the end of June 2010 of \$17,900 against a budgeted annual surplus of \$28,600. The end of year forecast was revised as part of the Six Month review to show a surplus of \$2,100, however good trading figures for June have resulted in an improved result.

The Nursery unit has produced a small surplus of \$800. Again this is an improvement on the forecast position of some \$18,000.

The end of year result for Trading is shows a surplus of \$17,100 which is slightly down on the forecast position.

Activity	Operating Surplus – Annual Budget 2009/10	Forecast End of Year Position	Operating Surplus - Actual to 30 June 2010
Nurseries	(14,300)	(20,000)	800
Trading	42,900	22,100	17,100
Total	28,600	2,100	17,900

4. Biodiversity (Anna Burrows)

4.1 Staffing

Jacki Byrd's replacement Anna Burrows started earlier this month. She comes with a background in conservation and has spent the past few years in Scotland undertaking habitat survey and restoration work for the Forestry Commission. She has also spent time working for DoC on the West Coast and for Landcare. Anna's induction to the Streams Alive programme is overseen by Michelle Bird who was the original manager of the Streams Alive programme. Michelle is working two days a week to the end of August to assist Anna.

4.2 Ongoing works

The Streams Alive planting programme is well underway. There has been one delivery of the bare rooted (open grown) plants which are being trialled alongside the traditional PB3s. The final instalment will arrive next week. A walkthrough of the Karori catchment to assess the progress and future requirements for weed control and planting with members of the local community and various other parties is scheduled for August.

4.3 Expenditure to 30 June 2010

	Budget 2009/10	Expenditure to June 2010	% of Budget
Riparian Management	\$196,200	\$220,800	112.5%
Streams Alive	\$100,000	\$106,805	106.8%

Although expenditure is \$24,600 over budget, additional revenue of \$25,000 was received from Flood Protection for biodiversity enhancement work completed in the lower reaches of the Ruamahanga River. Overall the riparian budget made a surplus of \$400.

5. Operations (Kevin Burdan)

5.1 Silviculture

Activity	Completed this period 2009/10	\$	Annual Plan Target (hectares)	Year to date 2009/10	\$	Budget
Thinning	0	0	100ha	70.2ha	29,504	50,000
Pruning	9.2ha	4,396	100ha	75.0ha	52,151	75,000
Total	9.2ha	\$4,396	200ha	145.2ha	\$81,655	\$125,000

- Silviculture was carried out on one property during the last month. In total twelve properties have had silviculture work completed.
- Over the last twelve months an additional 15ha of pruning and 5.5ha of thinning has been completed in the Hiwinui Forest.

BioWorks (Richard Grimmett)

BioWorks has 2010/11 contracts covering 57% of current staff capacity. The Tararua Range aerial tender potentially covers another 8% if the Unit is successful. The next and final tender parcel will be offered in September. BioWorks has retained 3 FTE for four months to get operations ahead of schedule. BioWorks want to be favourably placed next May to start 2011/12 contracts during June.

Crew progress was hindered with persistent wet weather during the period. The last two output contract monitors failed marginally. Reworks are underway for completion in July. All input contracts are completed with some bait stations still being retrieved.

BioWorks completed tender documents for the Southern North Island Tararua Range aerial programme (Project Kaka). Only two weeks were allowed to investigate and complete the work plan and pricing. If successful, the entire team will focus on this operation in August.

BioWorks was unsuccessful in securing any additional contracts from the latest tender parcel for the four projects submitted. From the initial feedback pricing was the only limiting factor. There appears to be contracts moving out of the Hawkes Bay region as contract programmes shrink.

The Preferred Supplier parcel has been negotiated with only one contract not yet agreed and received. The issue is the wide disparity in price.

Activity is underway gaining access and starting new contracts. Conditions are very wet but staff are ensuring that they create minimum disturbance to pasture and tracks.

Senior staff met with the AHB to discuss contract administration. It was very productive. We believe that the advanced Technology Council can be used to report more efficiently and effectively. AHB are very interested in working with us to develop electronic data capture and delivery systems. AHB are currently putting together business plans to address this opportunity and may use our business as a pilot. All of these initiatives will improve BioWorks attributes and maintain our low risk service delivery status.

Contract Operations Progress				
AHB	In Progress Completed Ha	Await Monitor	Completed for Payment	Overall %
2008/09 Reworks 2 Strata 1846 Ha			2 Strata 1846 Ha	100%
2008/09 Aerial carry over 2 Strata 5952 Ha			2 Strata 5952 Ha	100%
2009/10 13 Projects 47 Strata 134,372 Ha	0%	5 Strata 3,944 Ha 2.94%	4 Strata 130,428 Ha 97.06%	97.06%
Re-Works F10 year 2 Strata 3 2100 Ha	Holdsworth- Carterton HR4 1296 Ha	Moonshine HR1 903 Ha	0	0%
Biosecurity Mt Bruce Pukaha 50 man days			55 man days	110%

Integrated Catchment (Ian Gunn)

1. Training

The bulk of staff from within the Catchment Management Group have completed the first of two modules on Biodiversity. As reported previously, Natural Heritage training modules recently developed by the Department of Conservation were selected to upskill staff on the subject of Biodiversity. The module introduces a range of terms and an approach in assessing biodiversity while also highlighting some unique features of New Zealand's flora and fauna. The module also shows how interconnected everything is and that our operational activities are often occurring in sensitive environments. Our rivers, for example, only have a few native species with species such as tuna (eels) being under threat.

The training has been to mixed staffing sessions. This has highlighted that there needs to be improvements in our cross-departmental understanding of each other's activities. There have been some interesting debates on the use of natives and exotics and aspects of our pest control measures.

The second module will be undertaken in late July-mid August. Land Management and BioWorks staff will complete their training as their work programmes permit.

The training is available to anyone with a computer at <http://www.doc.govt.nz/training>. This site has three training modules in Natural Heritage.

2. Te Upoko Taio Engagement

The engagement phase of the development of our new regional plan has commenced. Just over 160 people participated in three workshops held in the Wairarapa. This is considered a good response given that the meetings were held during the school holidays and just prior to lambing and calving.

The participants have worked hard and created considerable energy. So much so they are often reluctant to leave the hall. The comments and feedback has been very positive with several commending GW for its open approach. The format of the template does challenge those in attendance but once they get started it works very well.

3. River Protection Asset Benchmark Proposal

A cross-Regional Council team has prepared a draft benchmark proposal for the Chief Executives Group. This is an initiative taken by the Chief Executives given the Minister of Local Government's desire to benchmark everything. It is recognised within Flood Protection that there is "no one size fits all" so an attempt has been made to highlight the difference between regions. It is also accepted that it will be a work in progress. Staff from within GW have worked hard to have the planning/risk approach recognised. Three benchmarks are proposed, covering what the flooding issues are in a region, a list of the suite of activities completed by a council to give a ranking and a pass/fail approach for the ability of the flood protection assets to deliver what they have been designed to deliver.

This is quite a different approach to the benchmarks used in the United Kingdom which focus on whether a particular project has been completed and within budget. In the UK central government provides a high percentage of the funding for the development of flood protection assets.

Forestry (Barry Leonard)

Review of operations for the period ended 30 June 2010

1. Plantation forests (Wellington)

1.1 Log Harvest Contract

May prices fell slightly at destination and there were further increases in shipping (US\$1.00) and exchange rates (up to 0.7219).

June export prices continued the recent trend by easing further. Prices at destination eased by between \$ US 1 and US\$5. Shipping increased by US\$2.50 but the exchange rate broke the trend by moving in our favour – from 0.7219 to 0.6794. The result was minor increases for the better grades and minor reduction for lesser grades.

We are advised by Rayonier that these reductions are seasonal and the fourth quarter outlook is still positive.

Table 1 - At Wharf Gate prices NZD per JAS

	P	PP	AO	A	K	KI	KX	Shipping \$US
July 2009			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
December			91.78	86.16	81.94	76.32	66.49	46.00
January 2010			91.66	86.09	81.91	76.34	66.58	45.50
February	144.86	123.48	114.92	109.22	104.95	92.12	89.26	47.00
March	151.99	130.52	121.93	116.20	111.91	99.02	96.16	46.50
April	146.85	125.75	117.31	111.69	107.47	96.22	90.60	48.00
May	124.95	111.10	102.79	98.63	93.09	82.01	77.85	49.00
June	129.00	114.28	103.97	99.56	89.26	81.90	76.01	51.50
July	125.19	110.48	95.78	91.36	85.48	81.07	73.72	49.00

Domestic prices remained unaltered for the third quarter and there was no effective movement in haulage or harvest rates after the quarterly review, as the price of diesel did not vary by more than 4 cents per litre which is the level at which rates change.

Log 6, the ground based crew, has spent most of the month on the main ridge of Valley View with a high production of KI and KX logs because of the wind-run. This has put the onus on Log 36, which was initially based in Kilometre and latterly in Boiler Gully, to fill both its own domestic orders and the greater part of Log 6's.

Log 6 has just moved into Airstrip to take those trees to the east of the road. The trees, while only 27 years old, are far better quality and include both fully pruned and partially pruned. Of late we have had little problem filling our domestic orders.

Log 6, the Tuckey ground based crew, has been based on the main ridge at Valley View and in May produced 2,260 tonnes for revenue of \$60,805. Log 36, the hauler crew, also based in Maori Redoubt, harvested 4,023 tonnes for a return of \$ 150,352.

In June Log 6 produced 3,107 tonnes for \$85,562 with only 115 tonnes from Airstrip and Log 36 in Kilometre and Boiler Gully produced 2,322 tonnes for \$97,310.

In summary May was 6,254 tonnes for \$209,390 at an average of \$33.48 and June 5,545 tonnes for \$186,220 at an average of \$33.58

3.1 Silviculture Contract

June silviculture was 4.2 hectares at a cost of \$2,426.

The Contractor was diverted to clear fence lines on our boundary with Gratton Brothers. Both Ragwort Hill and Raupo Saddle were logged through Grattons.

To date 72 percent of the 2009/10 Contract silviculture has been completed.

Planting for the current season commenced on Wednesday, 7 July. The delay was because the seedlings had to “harden off” and the lack of frost at the Nelson nursery.

3.2 Plantation forestry operations

Although the rainfall in May and June combined was about average, it seems to have been nine days rain out of every 10 days. With the increased volumes being trucked out, the shading of the road by standing trees between the 5.8 km to the 7.5 km on Valley View Road and the challenge of realigning the Lindsay’s Road hill, it has been a difficult two months from a roading perspective. We have now moved Log 6 into Airstrip, which will gradually overcome the shading problem, but thus far we have been unable to create a suitably firm surface on the section of road on Lindsay’s Road hill and along the base of the valley.

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

3.3 Forest access

The lack of access into Maungakotukutuku remains. The proposal to log the neighbour’s forest through Maungakotukutuku has been delayed and no progress has been made. All main roads are in good order.

3.4 Market trends

The demand from the domestic mills appears to be continuing with no sign of softening. For the first time since Eurocell (Upper Hutt) reopened they suspended deliveries recently as their yards were full. This is a good sign as they need ongoing supply to ensure the mill remains viable.

Export demand continues but is unfortunately accompanied with a softening of prices. I would have expected load out from the Wairarapa to have eased with the bad weather that affects access to woodlots but there still seems to be plenty of wood coming over the hill.

2. Reserve forests

2.1 Forest logging

There was no logging during this period. Logging commenced in early July under the new Contract with John Turkington Ltd.

2.2 Silviculture

There was no silviculture activity this month.

2.3 Road maintenance

A resource consent has been issued for the road extension from the present skid site to the top of the northern ridge in Tauanui. From here the road will run both east and west to service the new skids to be constructed. The pilot track along the most difficult section has been completed and work has now commenced widening this for logging truck use. Little work was able to be undertaken while we went through the period of persistent rain.

2.4 Lincoln students

A day was spent assisting Lincoln University with their second year Farm Management Students on their annual North Island tour.

The Stoney Creek DVD is used to introduce the process of afforestation on erodible hill country sites and forestry as a land use concept. This generates a robust question and answer session followed by a bus ride to an accessible private forest site to illustrate and discuss forest management techniques and processes.

Commentary is provided en route to the Pottinger farm at Tinui. During the tour of the Pottinger farm discussions on the forest management options demonstrated on this property generate further opportunities for education of the students.

2.5 Rural fire

Several workshop sessions were attended to continue the development of training material for the Planning and Intelligence unit of Incident Management Teams.

GWRC Rural Fire Committee meetings were attended in Porirua and Avalon.

Wairarapa Rural Fire District meetings were attended in Carterton and South Wairarapa. Following these meetings a working group has been developing a basis for buy back of in kind contributions within the Wairarapa Rural Fire District. This is innovative work that could form the basis of preparedness and recovery for the new generation of enlarged Rural Fire Districts throughout New Zealand.