Catchment Management Division

Departmental Managers' Update for period ending 21January 2009

Biosecurity (Ray Clarey, Acting Manager)

1. Pest Animals: (Ray Clarey)

1.1 Pukaha - Mount Bruce Predator Control Programme

Greater Wellington (GW) continues to contribute to the predator control programme at the Pukaha - Mt Bruce bird reserve, working in conjunction with the Department of Conservation (DOC) and Horizons Regional Council. Two Pest Animals staff worked in the reserve on 11th and 12th November, assisting with the 1080 application for rodent control. The bait stations were pre-fed by DOC staff, but the assistance of GW was required to lay the toxin because of a shortage of staff with Controlled Substances Licenses for the use of 1080.

1.2 Rook Nest Baiting

The annual aerial rook nest baiting for the Wellington region was completed on the 7th of November. As predicted there was a significant lift in the rook population this season. This trend is the result of media awareness to the rook menace, good aerial surveillance and compromised control results from the last two years of control.

A sizeable rookery was also reported at Otahome (south of Castlepoint) after the end of last years programme, which added further to the total population. Rookery numbers have increased from 12 rookeries, 130 nests and an estimated population of 585 rooks in 2007, to 24 rookeries, 239 nests and an estimated population of 1,076 rooks for 2008. Hawkes Bay and Horizons Regional Councils have also experienced population spikes this year. This increase will be a topic for discussion between the regional councils at the 'wash up' meeting to be held early in 2009.

The nest baiting has been compromised by strong northwest winds for the last two seasons, with the winds destroying nests and dispersing the birds. Baiting was undertaken earlier this season, targeting eggs and sitting birds, rather than waiting for the main hatch to occur. This meant the strong equinox winds were avoided and all the nests were successfully baited, which should result in reduced rook numbers next season.

1.3 Successful Morepork Nesting

In late November a morepork was discovered nesting in the Wi Tako Key Native Ecosystem Management Area (KNEMA) near Silverstream by monitoring contractor Lindsay Bowring. This area has been under possum and rat control since 2001 and this new family obviously

benefited from living in a safe, predator controlled area. A stoat trap was installed nearby to provide further protection for the nest.

Discovering a nest like this is rare, so it was decided to create a press release about the positives of the KNE programme to help counter some of the media criticism of our toxin use. The story and photo of the chicks received wide coverage and captured the attention of the public. Biosecurity staff continued to monitor the pair until they successfully fledged in mid December. This news release was an excellent way of promoting our efforts to improve the native flora and fauna of the region.

1.4 Long Gully Bush Reserve (WCC)

Ongoing possum and rat control is now being undertaken at the Long Gully Bush KNEMA, following on from the initial control undertaken as a bait trial in November 2007. The Wellington Natural Heritage Trust (WNHT) had difficulty raising volunteers to continue control in this rugged block. WNHT will now fund Biosecurity pest animals staff to do the work which has begun with another possum knock down. WNHT have also gained funding through Wellington City Council to install and maintain mustelid traps in the area. These will add to the network of mustelid traps that is being built around Karori Sanctuary to protect the saddleback, hihi and robins that are dispersing beyond the safety of the predator fence. GW mustelid traps are also in place in Wrights Hill and Denton Park/Polhill reserves, which are adjacent to the Sanctuary.

1.5 Fine-tuning of monitoring

The rodent and bird monitoring regime has been reviewed and fine-tuned to get the best results from less resources. Some sites have been abandoned and the rodent monitor will now be done bi-annually rather than quarterly. The invertebrate monitoring programme which is a valuable bio-diversity outcome monitor is also being re-evaluated. The feasibility of continuing this project with an amended methodology will be determined over the next few months.

We are broadening our working relationship with the regions TLA's, with several collaborative monitoring projects being considered for 2009. Results from the KNE survey conducted last year is being fed into a review of the KNE programme and has yielded insights and new ideas from contributors.

2. Pest Plants: (Richard Grimmett)

2.1 Didymo and Aquatic Pest Awareness

This summer's programme has commenced with improved planning, better information of water body users, better communications and with improved support from MAF BNZ. The programme has now been extended to apply the Check, Clean, Dry message to all aquatic pest plants.

Matthew Thorpe (MAF BNZ Didymo Communications Officer) gave an update on 1st December 2008 about the advocacy programme. He addressed Pest Plants and Parks Department staff involved in undertaking this season's contract activity.

The programme has gathered momentum from last year through earlier planning and being able to use the information gathered last year. The information handouts and signage requirements were arranged early and received prior to the start of advocacy operations. All signs at river sites were inspected and cleaned or replaced. Signs were erected at other new locations. A large amount of promotional material has been requested from MAF BNZ.

Our GW Corporate Communications team initiated radio advertisements for the summer, plus press releases that made front page news prior to Christmas. Planning is in progress for an internal training package to go to all staff via email. This advice to staff includes video footage of the threat this pest poses. It will also provide good background for the future training of field staff and their managers.

Richard Grimmett has taken up a role within the Lower North Island Stakeholder Group and completed the Draft Response Plan to become active during late January 2009. He is also a member of the Regional Co-ordinators Group facilitated by MAF BNZ. This group communicates regularly. The Didymo.net site for practitioners is also gaining more use as a central repository to add documents or source information.

Work continues on the Draft GW Didymo Management Plan. The plan is ready for final review prior to becoming active in February 2009. The focus of the Plan is about developing a new work ethic designed for GW staff as many of our activities can influence the spread of Didymo and other aquatic pests. Work processes, route selection and scheduling must be considered by GW staff to reduce these risks.

2.2 Collaboration Initiatives

Work continues within the Wairarapa Moana Group to ensure pest plant issues are addressed in the lake restoration project. Information has been made available to help DoC with operational planning to control Hornwort in Boggy Pond and Mathews Lagoon. This area is part of the Lake Wairarapa Restoration area. The expertise, information, resources and permits that GW currently have on this species will save DoC valuable time and resources to achieve the control targets in a collaborative manner. This project is an extension of current work to develop practical long-term operational solutions for Hornwort. Input into the project plan has been requested from the various internal departments in both GW and DoC to enable the use of the wide range of expertise that exists in the fields of water quality, ecology and communication.

Staff member Mike Urlich organised and facilitated the formation of a stakeholders group to restore Forest Lakes Reserve situated near Otaki. This is a privately owned water body. The lake has deteriorated greatly during the last 15 years with the introduction of pest plants, exotic fish and waterfowl. The owners were looking at funding options and it was apparent that with the diverse range of water activities and groups on the lakes, that GW could provide expertise in developing a unified restoration project in support of the owners. The initial meeting was held 12th January 2009, with representation from the owners, DoC, Fish & Game, Coarse Fishing Association, Iwi and KCDC. A project proposal template has been supplied to all participants for them to register their ideas.

2.3 Manchurian wild rice

The contract for this season's control of Manchurian wild rice at Waikanae has been completed. GW resource consent was granted for Discharge to Water and fulfilled by having the water monitored during the control operations. At this stage the infestation levels are

extremely low with less than 300 sq m of live material over the 7 hectare operational area. This is the only known site of Manchurian wild rice in the region. MAF BNZ are funding the majority of the control costs.

2.4 Tauherenikau Outcome Monitoring

Tauherenikau was the site of the first GW initiated outcome weed monitor for the region. This small trial was established in November 2008 and will be used to assess and establish processes, costs and results generated from this type if monitoring. If successful, knowledge will be gained of the regeneration process following weed control. Tauherenikau will also be the site of vegetation monitoring to assess forest health and ecosystem functioning. This monitor will start in February 2009. These projects will allow GW to quantify recovery and determine the best value management practices. A report on this monitor is being generated and preparations for a follow up monitor in February are well underway.

2.5 Assessing Bio control Impacts

A two-tiered monitoring programme for pest plant bio control is to begin. The first stage will determine the distribution of agents currently at work in the region, and will start with gorse thrip, gorse seed weevil and boneseed leaf roller. The second stage will attempt to measure the impact of the agent on the "weediness" of the host species, and will use simple targets to assess the impact the agent is having. The target agents for this phase are boneseed leaf roller and gorse seed weevil.

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

3.1 2008/09 vector control programme

The AHB approved vector control programme for the 2008/09 year includes:

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

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

	Possum Control (ha)	Ferret Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GW BioWorks	87,952	0	26,161	0	114,113
J G McCaslin Ltd	23,262	0	0	0	23,262
Professional Guiding	78,172	0	14,132	0	92,304
M & M Contractors	7,823	0	0	0	7,823
T Oakly	0	0	0	210,670	210,670
Still to be let	4,049	0	0	0	4,049
Sub Total	201,258				
With drawn	2,852				2,852
Totals	204,110	0	40,293	210,670	455,073

The following table details areas of the 2008/09 control programme which have been completed as at 30 December 2008.

	Possum Control (ha)	Ferret Control (ha)	Ferret & Possum Surveys (ha)	Pig Survey (ha)	Total
GW BioWorks	33,050	0	1,060	0	34,110
J G McCaslin Ltd	9,325	0	0	0	9,325
Professional Guiding	32,930	0	0	0	32,930
M & M Contractors	0	0	0	0	0
T Oakly	0	0	0	0	0
Totals	75,305	0	1,060	0	76,365

For the possum control programme, 75,305 ha or 37.4 % has been completed and assessed by either a performance monitor or audit.

For the survey programme, only 1,060 ha (2.6 %) has been completed and assessed by audit.

An estimate of contractor possum control progress as at 30 December 2008 has been made following a review of their monthly reports. Contractors estimate they have completed approximately 83,227 ha (41.4 %). This total includes partial progress in several operations.

3.2 Monitoring

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

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

- Contract Monitoring Partnership
- Quality Control.

To date three trend monitors and 23 successful performance monitors have been completed. The majority of trend monitoring occurs from March onwards.

One performance monitor failure has occurred; BioWorks failed the Featherston HR 5 stratum, achieving an RTC of 1.73%. The required performance target was RTC 1.5%. Subsequently this project passed following rework, returning an RTC of 0.0%.

3.3 Tendering progress

Only one project (Akatarawa HR 1 - 4,049ha) from the 2008/09 year is still to be let. This project was released in tender round two but no tenders were received. Negotiations have occurred with registered contractors operating in the region.

Re-stratification of the project may need to occur. This would alleviate some of the issues raised by contractors during discussions. A change request would need to be approved by AHB. A more acceptable price and control strategy may then be able to be negotiated.

During the 2007/08 year one Bovine Tb pig was captured from this area and another positive sample was caught approximately 1.2 km to the west in the Little Akatarawa River catchment.

3.4 Vector Control Withdrawal

The following projects were let to BioWorks during 2007/08 and were carried forward into the 2008/09 year. They have since been withdrawn from the 2008/09 programme. The accepted control technique was aerial 1080 pellets.

- Te Wharau HMR 1 474 hectares
- Te Wharau HMR 4 2,378 hectares

Adjoining landholders have grazing leases in the exotic pine forest of HMR 4, and currently have stock in the stratum which cannot be removed due to mustering difficulties created by recent thinning operations. Farmers involved have stated their willingness for aerial control methods but have requested that the operation be delayed until May 2010 when stock will be able to be removed easier.

Strata HMR 1 is the Department of Conservation, Rocky Hills Reserve. There is no boundary fence separating the HMR 4 strata.

Aerial control cannot proceed due to the risk of livestock coming into contact with 1080 pellets. This occurrence would be a breach of the Medical Officer of Health and Resource Consent approvals.

Treating both stratum by alternative methods would be far more expensive and time consuming.

3.5 Haurangi Crown Aerial 1080 Pellets.

The Haurangi Crown operation has been let to BioWorks to treat with aerial 1080 pellets during the 2009 autumn/winter period. The current RTC is 12.4%. Some adjoining farmland is also to be treated with aerial 1080 pellets. The proposed operation is approximately 7,300 hectares.

The operation is predominantly made up of the North Block of the Aorangi State Forest Park (5,952 ha), which has been set aside as a recreational hunting area. The tender has been let without including deer repellent on the baits.

The Department of Conservation are supportive of this operation but have recommended that the Vector Manager considers the use of deer repellent.

An investigation regarding the application of deer repellent onto the baits has been completed. Additional costs totalling approximately \$72,000 would arise. The AHB has been advised.

Further discussion with stakeholders and interested parties will occur to determine if deer repellent is used over the whole area or just partial areas.

Any additional funds for deer repellent would come from the AHB (87.14%) and GWRC (12.86%).

3.6 Pig Survey Progress

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

Project	Area (ha)	Required	Samples	
		Samples	received to date	
Akatarawa	20538	30	24	
Bideford	39023	40	8	
Castle Hill	4529	30	21	
East Alfredton	4900	20	8	
Homewood Riversdale	25789	120	27	
Kapiti	30,966	50	5	
Mataikona	6,779	40	37	
Moonshine	6,035	20	25	
Otaki Crown	3,551	15	4	
Pakowai	6,909	60	50	
Stronvar	25,976	85	23	
Tinui	35,675	120	120	
Totals	210,670	630	352	

3.7 Suspicious Bovine Tb Samples

AsureQuality has reported five suspicious Bovine Tb samples from the pig heads supplied so far during the 2008/09 year. These suspicions still need to be confirmed by culture.

- Mataikona Operation: Two samples have been caught approximately 2 km north of the Castlepoint golf club.
- Moonshine operation: Three samples have been caught between the Moonshine Road and Whakatikei River, immediately behind houses in the new Riverstone Terraces sub-division. This area has been let for vector control during the 2008/09 year. A further suspicious pig sample has been caught in an exotic pine forest, south of the Moonshine Road. This area has been proposed for vector control in the 2009/10 year.

3.8 Feral Cattle

In November contractors carried out a further inspection for feral cattle on Te Maunga Station in the South East Wairarapa Stage 2 operation, five feral cattle were seen. The landowner was notified and in early December he contacted Council staff to advise that two bulls have been destroyed.

		l Herds @ June 2008	I Herds @ end of December (one clear test in brackets)	Target I Herds @ June 2009
	Cattle	0	0	
VFA	Deer	0	0	9
VRA	Cattle	9	7 (4)	

3.9 Infected Herds

Flood Protection (Graeme Campbell)

1. Manager's comments

The period has been busy for the flood protection department with good progress being made on a number of capital works projects. These include:

- GWRC and HCC confirmation of funding for the Waiwhetu Stream clean up and channel improvement project
- Obtaining resource consents from HCC for the Waiwhetu Stream clean up and channel improvement project
- Appointing a consultant for completing the final design of the Boulcott/Hutt stopbank
- Making good progress on the Strand Park stopbank reconstruction project
- Commencing rock supply for rip rap edge protections in the Waikanae River near Otaihanga Boating Club

A number of key stakeholders including KCDC are yet to provide comments on the draft resource consent for the South Waitohu stopbank. It is very likely that the stopbank will not be constructed during this year. It is now proposed to consider the south Waitohu stopbank with the proposed Convent/Bennet Road hydraulic improvement works due for construction in 2010/11. This will provide the opportunity to address all flooding issues common to both Mangapouri and Waitohu streams.

2. Western Floodplain Management Plans [Daya Atapattu]

2.1 Ava to Ewen project

The Strand Park stopbank reconstruction works are now about 30% complete and progressing well. The contractor is currently forming the new stopbank between the Ewen Bridge and St Albans Grove. The stopbank construction process involves placing new fill on the riverside of the stopbank before cutting the existing stopbank. The contractor will construct a temporary stopbank at St Albans Grove before opening the existing stopbank to install the new stormwater pipe. Construction of the concrete retaining wall at Market Grove is complete and the foundation works for the floodwall has commenced.

Trees at the end of St Albans Grove have been removed for the stopbank and stormwater construction and the installation of electrical cables. A few replacement trees will be planted at the end of St Albans Grove once the construction works are complete. The contractor is using frequent water spraying to control dust on site. A dust suppressant was sprayed on to the new fill before closing down for the Christmas break. The contractor is regularly cleaning the Whites Line West access to minimise the dust build up.

2.2 Boulcott/Hutt stopbank project

Work has now commenced one Phase 2 of the Boulcott/Hutt project including the detailed design, statutory approvals and land entry agreements. Opus International Consultants,

appointed in January 2009, have now commenced the detailed design of the stopbank and the associated works. A meeting was held with a Rotary representative to discuss impacts on the Hutt River Trail from the proposed river works.

Preparation of designation/consent applications is now progressing. This process is managed in-house with the assistance from MWH NZ Ltd. A traffic assessment to investigate the traffic related impacts of relocating Boulcott clubrooms was completed.

Good progress has been made in preparing the land entry agreements with the two golf clubs. Copies of the draft agreements were given to the two clubs in January 2009 for further discussion.

2.3 Whirinaki Crescent stopbank

Wellington Golf Club has now agreed to a new site filling proposal to reduce the number of trees required removal from 5 to 2. The consent application has been amended and resubmitted and is awaiting UHCC response.

2.4 Maoribank investigations

Preparation of concept designs and cost estimates for three options to reduce the Maoribank erosion risk to an acceptable level is now complete. The consultant is now progressing with the technical report.

2.5 Kapiti floodplain management

2.5.1 Waikanae River

Tenders were received for the supply and delivery of 2400m³ Grade A rock for the proposed rip rap edge protection on the left bank of the Waikanae River near to the Otaihanga Boating Club. The successful tenderer was John Ray Ltd and to date 1400m³ has been delivered to the site. Rock placement will commence in February 2009.

Following discussions with the Otaihanga Boating Club the rip rap edge protection was amended to incorporate a 1 in 4 ramp in order to provide easier access to the river for recreational activities such as canoeing and whitebaiting.

A limited cross section survey carried out in the lower reach of the river showed that 20,000m³ of gravel and sand has accumulated between Tutere Street and the Otaihanga Boating Club ramp. Consideration is being given as to whether this gravel/sand, which lies within the DOC Scientific Reserve, should be removed.

A request has been received from KCDC to increasing the hardstand area at the end of Greenaway Road so that horse floats can be easily parked and turned and to increase the amenity value of the area. This is similar to the proposal previously considered by GW for environmental enhancement associated with the Jim Cooke Park realignment project. As GW decided to use the environmental enhancement funds to contribute towards a new footbridge instead, KCDC have now decided to fund the carpark extension themselves.

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2.5.2 Waikanae River FMP Review

NIWA has now completed a review of flood hydrology for the Waikanae and Otaki Rivers. The recommended increases in the flood estimates in the Waikanae River are of order 5% - 8% above those recommended in the 1991 report. They are however slightly lower than the estimates adopted on 1992, which were increased from the NIWA figures to allow for uncertainties There is now greater certainty in the NIWA figures because of the doubled length of records from 17 to 34 years. The NIWA report also indicates that further increases in flood peak flows of the order 10% and 20% are possible as a consequence of global warming in 50 years and 100 years respectively.

2.5.3 Friends of the Waikanae River (FWR)

In late 2008, Friends of the Waikanae River applied to DoC for funding to restore the Oxbow - one of the last unmodified geological areas on the lower Waikanae River. The Community Conservation Fund applications closed in November 2008. Kapiti Coast District Council has supported the Friends on their application, as the Oxbow is on their land. The next executive meeting for the FWR group is in February 2009.

The Friends are considering a number of initiatives to involve the community and private landowners in restoration efforts along the river corridor.

2.5.4 Otaki River

Maintenance work has been undertaken on the Chrystalls Extended Stopbank by the contractor. The contractor is responsible for the maintenance work until the end of the maintenance period on 18 March, 2009.

2.5.5 Friends of the Otaki River (FOR)

Friends of the Otaki River have been busy in their nursery over the Christmas period. They are looking to develop a planting plan in the New Year for potential restoration sites on the Otaki River corridor. This will be developed in conjunction with GW staff. The Friends are also waiting on the outcome of their application for DoC Community Conservation funding for the restoration of the Otaki Estuary. The next executive meeting is in early 2009.

3. Western Operations [Jeff Evans]

3.1 Hutt River

Gravel extraction continued below the Kennedy Good Bridge. Bed re-contouring has been undertaken at Avalon and Totara Park in Upper Hutt. Survey and site line maintenance is still underway in the upper river and willow layering is also in progress.

3.2 Hutt River Ranging Services

With the increase of warmer days and evenings the river has been well used by walkers, runners, dog owners, cyclists and swimmers. The grass growth has been intense and the mowing contractors have been busy cutting back long grass and unfortunately the odd native tree, in areas not properly fenced off and over grown by grass.

There has been several presentations made over the last period and a number of recreational events held on the trail.

3.3 Otaki River

Bed re-contouring has been undertaken in the upper river opposite Lutz's, to protect a length of eroding debris fences and the channel has been re-cut above that to take the pressure off the cliff faces on the left bank. A new block and rock groyne has been built opposite Mangahene Island to deflect the water away from the right bank and push the flow back towards the river mouth.

3.4 Waikanae River

Spraying has been undertaken for the friends planting at Dricon and a new pipe has been installed across the access track opposite Greenaway Road to help clear the water away faster from the drainage channel after flood events.

3.5 Western Watercourses

Stream maintenance runs have been undertaken in the Pinehaven Stream, Wainuiomata Rivers, Stebbings Dam, Seton Nossiter Dam and Pukenamu Drain. Fallen trees have been removed from the Waitohu Stream, Collins Creek and Porirua Stream. Site lines and survey point clearing is also underway in the Waitohu Stream prior to the surveyors starting work in February.

4. Wairarapa Operations [Mike Longworth]

4.1 Wairarapa River Schemes

General

The work programmes in the Wairarapa Rivers for 2008/09 are progressing with planting and tree work being completed. The main construction work is underway.

The upper valley flood on 7 October caused a significant amount of flood damage in the Upper Ruamahanga, Waipoua, Waingawa and Waiohine Rivers which has required the most vulnerable damage sites to be repaired and the balance will be repaired once Council authorise the funding. (See separate report)

The repair work involves more work than the current global river works consents allow. Following discussion with the Council's consents staff, the work to date has been carried out under section 330 of the RMA and urgent works internal protocols. Retrospective consents have been applied for and the Fish and Game environmental officer inspected the works with the various scheme managers. This year a review and possible variation to the older global river consents will be initiated.

4.2 Lower Wairarapa Valley Development Scheme

Development Work

Construction work has now started. The development work programme was reviewed and some small changes made (see Report 09.06) which have been discussed with the scheme advisory committee and have their support.

4.3 Gravel Extraction

Most of the gravel extraction licences for 2008/09 have been issued which takes up close to the full year's allocation of gravel in the upper Wairarapa valley. In the main Wairarapa river system 445,000 cum is available for extraction under the gravel consent. 359,400 (81%) has been allocated and in the first 3 months 55,473 cum (15%) was extracted.

4.4 Investigations and Technical Advice

Waingawa River Scheme Review

The next step in the review requires the completion of the hydraulic modelling work to finalise the analysis of gravel transport and flood extent under various flooding scenarios. This work is currently under way.

Waiohine Floodplain Management Plan

Work has commenced on a floodplain management plan for the Waiohine River floodplain. Work had originally been programmed to start in the 2009/10 financial year. The process has been brought forward with the transfer of \$150,000 of the budgeted \$5.5 million total into the 2008/09 financial year. A project team has been formed to supervise the development of a project plan and programme for Phase 1 of the floodplain management planning work. James Flanagan is the project manager and is reporting to Graham Reidy the Central Area Engineer.

Technical Advice

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

4.5 Drainage Schemes

The wet winter causing higher than normal power usage and unplanned electrical maintenance at both the Pouawha and Te Hopai pump stations has resulted in budgets for the drainage schemes being over expended for this time of the year. Expenditure will be closely monitored to ensure budgets are not exceeded by year end.

5. Investigations and Assets [John Eyles]

5.1 Waiwhetu cleanup project

Resource consent applications for the clean up and stream channel improvements were lodged with GWRC and Hutt City Council in October. The consents were publically notified on 25 October in *The Dominion Post* and *The Hutt News*, with submissions closing on 25 November. Sixteen submissions were received, with only one submission (from the Department of Conservation) in opposition. Staff held a pre hearing meeting with DoC in December and resolved their primary concerns. Hutt City Council granted consent on 23 December. We are waiting for consent to be granted by GWRC which should be given in January 2009.

A paper requesting full funding for the flood protection parts of the project of \$7.062M went to full council on 8 December and was passed. A paper also went to HCC seeking additional funding for the clean up and was also passed.

Contract documents were sent to the four shortlisted contractors on 19 December, with a closing date set for the end of January 2009. A site visit for the contractors is set for 16 January. Construction is scheduled to begin in March 2009. However, the unknowns in the consenting and tendering processes may impact on the proposed start date.

5.2 Asset management

The next generation of asset management plans is nearing completion.

Staff are also continuing their involvement in the blueprinting of asset requirements for the new asset management software by SAP. A test bed should be available in February for user testing.

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 1 November 2008 – 9 January 2009. These include information requests from the public, local authorities and also Flood Protection comment on resource consent applications to GWRC.

	1 November 2008 – 9 January 2009	YTD
Requests brought forward	2	2
Additional requests received	51	177
Responses provided	53	179
Outstanding requests	0	0

Over this reporting period the Strategy and Technical Support team have provided comment to Local Government New Zealand's Flood Risk Subcommittee on the draft National Policy Statement for Flood Risk Management. Staff have also contributed to the development of relevant parts of the LTCCP and continued to work with Mike Longworth and his team in relation to the designations in the Wairarapa Combined District Plan.

Staff have also submitted on Plan Changes 81 and 83 for the Kapiti Coast District Council District Plan, and given evidence at the Hearing for Plan Change 20 for the Upper Hutt City Council District Plan and also at the Resource Consent Hearing for the Flotilla Place subdivision on Duck Creek in Porirua City.

Land Management (Dave Cameron)

1. Manager's comments

1.1 Akura and Mangapakeha nurseries

Pruning operations are in full swing at both nurseries and are scheduled to be completed by the end of February. The irrigator has been in use at Akura since the middle of November. Rainfall at Akura since the beginning of December has totalled 40mm, with the rains that occurred on Xmas Eve a very timely event. Nursery health is very good and there is currently no sign of any rusts or blights in either the poplars or willows.

Mangapakeha nursery is also exhibiting good growth. There have been no incidences of stock incursion over the last month, and adequate rainfall is maintaining target growth rates.

1.2 Afforestation Grant Scheme

The regional council pool of the Government's Afforestation Grant Scheme is now up and running. The first round of applications for 2009 close on 31 January and a second round will close on 31 July.

A small amount of publicity has been possible over the Xmas period and a number of phone calls have been received. Staff are currently assessing five blocks totalling 250 hectares. Once applications have been received at each of the ten participating regional councils, the National Allocation Panel will make a final determination of successful applications. Those not successful will be directed to the MAF pool which closes at the end of April.

1.3 Farm Plan Mapping

Mapping of Farm Plans is contracted out to consultants. Two consultants are used, both with extensive experience in Land Use Capability mapping in the Wairarapa whilst staff have fundamental training in this discipline, consultants have been used for the last fifteen years, enabling staff to focus on the works implementation aspect of Farm Plans.

Dr Doug Hicks is one of the most respected land mapping consultants in New Zealand and has completed a wide range of work for Greater Wellington. Unfortunately Doug is reducing his current workload and is no longer available for Farm Plan mapping. Terry Crippen will continue to be available for the next two or three years. New practitioners will need to be found to cover the short term requirements.

Options for the future include

- Locating other suitably qualified consultants
- In-house mapping surveys completed by staff
- Training new consultants

1.4 Landcover Database

Landcover Database II was released in July 2004 and was compiled from imagery taken in 2001/02. A 'whole of government' approach has been launched to acquire new imagery and produce Land Cover Database III (LCDB3). End users, including Regional Councils, Animal

Health Board, MAF, DOC and TLA's have met to discuss how the new version will best meet end-user needs.

The LCDB3 project has strong links to work that MfE is doing around the country's carbon stocks under the Land Use and Carbon Analysis System (LUCAS). Baseline 1990 imagery will be compared with 2008 imagery to assess the change in carbon stocks. This imagery is able to differentiate poplars and willows in a pastoral setting and can be made available to regional councils once it is completed in September 2009. Its value to Greater Wellington will be in State of the Environment monitoring, carbon assessment of conservation plantings, and progress in achieving long term Land Management objectives.

2. Farm Plans (Don Bell)

Approvals to date	New 10-year	Annual Plan	Total	
	Plans,	Targets	Programme	
	Reviews		Estimates	
New Sustainability Plans	0	3	\$0	
New Conservation Plans	0	2	\$0	
Ten Year Reviews	6	20	\$205,836	
Annual Programmes	103	130	\$412,197	
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Programme delivery	Annual	Annual Plan	Expenditure	Annual
	Programmes	Target	to date	Plan
	Undertaken			Budget
Works Programmes, incl.	138	150	\$333,600	\$565,000
• Sustainability plans				
Conservation plans				
• Shelter plans				
Isolated works	3	5	\$7,400	\$10,000

2.1 Delegated approvals - New Plans, Reviews and Annual programmes

2.2 Planning Comment

In the period 7 November 2008 to 21 January 2009, 4 hill country erosion control annual programmes totalling \$8,100 (\$2,430 regional grant) and 4 reviews totalling \$121,076 (\$36,326 regional grant) were approved.

The period either side of Christmas is a relatively quiet period for works, predominantly involving plan administration and mapping for reviews.

Claims of \$86,300 for conservation works undertaken by landowners have so far been processed with an estimated \$34,000 outstanding.

Mapping for new 10-year plans and reviews has almost been completed for this year by our consultants and senior staff. Because Land-use-capability (LUC) underpins decisions on erosion control requirements, training for new staff has also been a focus over this period.

Our involvement in a Meat & Wool NZ mentor group, overseeing the development of a Land Environment Plan for their industry, has come to an end with the release of their package of three increasingly advanced levels of plans, a toolkit and guidelines. These will be promoted at future MWNZ field days.

3. Akura Conservation Centre (Stan Braaksma)

3.1 Nursery Operations

- The row spraying has been completed and both Nurseries have received a full mulching and mowing. Nursery poplar and willow growth has been good on the back of good mid-summer rainfalls combined with irrigation.
- The annual fertiliser application has been completed. The annual soil testing showed the nurseries nutrient readings are at optimal levels and only need maintenance levels of the key growth elements.
- Preventative spraying is required at this time of year to reduce spore counts of rusts and fungi. Serious production losses are likely if trees are affected before the growing season is over. Premature leaf fall and a reduction in rates of photosynthesis are the primary causes of lost production.
- Mangapakeha nursery is recovering well from an extremely wet winter and sporadic stock ingress. Good growth has been exhibited over the last month and stock ingress has been stopped.
- Tenders have been let for stump and high pruning. All pruning will be completed by the end of February. Stump pruning will involve the harvesting of 350kgs of willow foliage per week supplied for research purposes to Massey University. This research will be part of an evaluation on the climate change gases expelled using alternative feed sources in sheep.

3.2 Trading

Very little trading takes place at this time of the year. The main items sold in the last two months have been 5,530 metres of cable, 460 metres of wire rope, and associated hardware such as grips and bolts.

3.3 Staffing

The Nursery officer has been kept busy over the last two months, including regular shifting of the irrigator, supervision of pruning crews, mowing and mulching between rows and around the headlands, and spraying for weeds and possible fungal infection.

3.4 Budget

The Akura Business Unit operating surplus at the end of December is showing a significant surplus in Nurseries, relative to the overall budget, and a small surplus in Trading. The Trading situation reflects a large amount of unsold stock, notably, sleeves, railway irons and

netting. A stocktake has been held to quantify the various levels of stock on hand and how this will relate to the end of year position.

The nursery surplus will be reduced in the next quarter with the completion of stump and high prune operations.

Activity	Budget 2008/09 – Operating Surplus	Operating Surplus to December 2008	
Nurseries	9,000	(13,100)	
Trading	(44,000)	(27,900)	
Total	(35,000)	(41,000)	

4. Biodiversity (Michelle Bird and Jacki Byrd)

Activities undertaken in the Western Zone include:

- Spraying to release recent native plantings Otaki, Mangaroa, Karori, Wainuiomata, Upper Ruamahunga.
- Ohariu Project planning for community day meeting and Environmentalists Day

General activities have included:

- Setting up sites and finalising plant orders for this winter's plantings
- 'Mind the Stream' review and print preparation
- Liaison meeting with iwi in Otaki on waterway health
- Attended meeting on ecosourcing, minute taking and circulation
- Freshwater ecosystems action plan questionnaire

5. Operations (Kevin Burdan)

- Commenced willow lopping in the Stoney Creek reserve
- Completed Blackberry & Pampas control on Forestry tracks
- Completed dewatering and tree lopping on the Tora slump (AOS)

5.1 OSH

- Organised and ran Manual Training Course for twenty staff
- Organised a 4WD training course for two staff

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- Organised First Aid Training for thirteen staff
- Organised a think tank on upgrading the ATV safe operating procedures

5.2 Silviculture

Activity	Completed	\$	Annual Plan Target (hectares)	Year to date	\$
Thinning	16.7ha	6,423		17.7ha	6,783
Pruning	41.7ha	27,180		43.7ha	27,894
Total	58.4ha	33,603		61.4ha	34,677

- Silviculture has been carried out on ten properties
- 11.2ha of silviculture has been completed in the Metro forests, and 2ha of thinning in the Reserve forests
- Client reluctance to fund silviculture is becoming more apparent with last minute cancellation of work in recent days

Total Catchment Management (Ian Gunn)

6. Introduction

I propose to report in future under the headings outlined in the last paper which went to the Committee in mid 2008. The three headings are:

- Governance
- Operational
- What we are doing now

6.1 Governance

The Regional Policy Statement (RPS) review has moved to the development of a proposed document. Council is scheduled to review this proposal in February. The TCM model is included in the proposed RPS both in the introduction (see below) and a non-regulatory method. Method 29 relates to taking a whole catchment approach to works, operations and services. This method is identified to implement the following policies:

- No.16: protecting aquatic ecological function of water bodies
- No.42: protecting aquatic ecological function of water bodies
- No.64: supporting environmental enhancement initiatives
- No.68: minimising soil erosion
- No.69: preventing long term soil deterioration

Section 2.4 of the proposed RPS is headed 'Integrating Management of Natural and Physical Resources'. It is provided below in full.

"The management of activities so that the life supporting capacity of natural and physical resources is sustained can only be achieved if there is consideration of multiple resources and processes. A prime role of the Regional Policy Statement is to integrate management of the natural and physical resources of the region in response to issues of regional significance, including those issues of significance to iwi authorities. But what does 'integrated management' mean, and why is this approach so important? Resources co-exist and interact with one another and are impacted on by the activities people undertake. Kaitiakitanga, the environmental guardianship practiced by tangata whenua, has its foundation in the world view that all life and the elements within the natural world which support life – such as land and water – are connected. People are a part of the natural order, not superior to it. The land and everything within and upon it is interrelated. Land management, river management, and maintaining and developing transport or housing infrastructure all utilise resources and can have an effect upon natural processes.

Integration must occur at a range of scales and in a variety of contexts. The effects of activities can be localised or extensive, or they can be temporary or permanent. For example,

an industry may subject a local community to objectionable odour, while runoff from rural land into

streams can have adverse effects throughout the catchment or in the receiving environment in the coastal marine area, some distance away. Similarly, visual effects may be significant for some distance, perhaps even in a neighbouring region. Water catchments are often an appropriate scale for assessing effects because many effects are generally contained within a catchment and assume relevance to a definable community of interest. In an urban context, specified distances or travel times to essential services – such as transit nodes, a central business district, fire station, school or hospital – often provide an equivalent to 'catchment' in considering the inter-relationships between where people live, work and play, and how they access various places and services in going about their life. Integrated management is relevant to managing the inter-relationships between infrastructure and its associated services and any natural resource associated with it. It is also relevant to productive enterprise in rural areas and the natural resources upon which these enterprises rely.

Taking a whole of catchment approach is promoted within this Regional Policy Statement. It means considering the full mix of purposes, uses or activities within a catchment, in terms of how these interact and contribute to outcomes within the catchment and for receiving environments beyond – such as in relation to indigenous ecosystems, soil productivity, water quality, erosion and stormwater control, or natural hazards. This approach suggests a need to work with multiple parties to establish shared objectives for a catchment and to ensure uses and activities are working towards the same goals or at least are not working against their attainment.

Just as it is essential to recognise and manage resources in an interconnected way, it is also vital to involve people in a meaningful way. Natural and physical resources are better managed when the social, economic and cultural factors that surround and drive their use or protection is taken into account. Decisions made about the management of resources are more effective and lasting if they reflect choices made by the community in terms of what it is best or most able to do. If integrated management is to be successful, it must recognise differing community and customary values, interests, skills, capacity and aspirations. Many agencies share responsibility for providing direction to ensure resources are sustainably managed. To ensure that their objectives and policies are coherent and mutually supportive, it is essential that a common understanding of resource issues and sustainable management is shared. The processes adopted in dealing with day-to-day issues need to be closely aligned.

Wellington Regional Council and the region's city and district councils oversee the management of natural and physical resources on behalf of the community. Although legislation such as the Resource Management Act directs councils to perform certain functions and to manage defined resources, there is considerable discretion in terms of how this is to be achieved. In practical terms, councils make judgements about the appropriateness of a particular activity in a particular place. All places are part of a wider context and community.

It is for the community to provide direction to the council on many of the effects arising from new activities. In attributing value to the environment, councils need to engage with communities and provide appropriate opportunities for comment about the management of resources. The Resource Management Act also charges councils with the responsibility of taking into account the principles of the Treaty of Waitangi when managing natural and physical resources. This includes the right of Maori to retain rangatiratanga and manage resources according to kaitiakitanga. This Regional Policy Statement for the Wellington region has a key role in integrating the management of natural and physical resources. It identifies the resource management issues of regional significance, recognising the shared responsibility and the need for a common understanding of issues. It then sets out objectives, policies and methods that recognise the interaction and connection between different resources, the range of scales in which an issue can be addressed and the need to consider the social, economic cultural and environmental factors alongside one another. Ultimately, the Regional Policy Statement focuses on the matters that it can influence to make progress towards a sustainable region."

6.2 Operational

This is focussing on the way we work, initially those who impact on private land. I hope to soon place in front of the Establishment Committee the recently developed computer based modules by the Department of Conservation called Introduction to Natural Heritage. These modules clarify terms and concepts, explain why NZ is unique and why its biodiversity is under threat. They describe different management practices, such as key biodiversity principles, ecological and management processes. Getting all staff to the same understanding is the challenge.

6.3 What we are doing

Currently a preliminary assessment is being prepared for what I've called "super catchments". To identify issues/themes/gaps the region has been split into 5 "super catchments':

- 1. Eastern Wairarapa Hill Country catchments draining into the Pacific Ocean
- 2. Ruamahanga river catchment
- 3. Wellington Harbour catchment including the rivers draining into Cook Strait as far east as the Makara Stream
- 3. Porirua Harbour catchment
- 4. Kapiti Coast catchments

Once compiled the preliminary assessments will be placed in front of the Establishment Committee to brainstorm for issues/gaps.

Other projects include involvement in the Primary Sector Water Partnership, Wairarapa Moana and the Wairarapa Hill Country Advisory Committee.