

Quarterly
REPORT 

30 June 2014

ENVIRONMENT MANAGEMENT
GROUP

1 TE UPOKO TAIAO NATURAL RESOURCE MANAGEMENT COMMITTEE

1.1 Environmental Policy



Overview

The development of the second generation regional plans continues, with both stakeholder and Te Upoko Taiao meetings

The Ruamāhanga Whaitua Committee's work programme is underway with two meetings held this quarter

Work to prepare for the establishment of the next whaitua committee is progressing, with the option of establishing Porirua Harbour Whaitua Committee next

The Department's implementation of the Regional Policy Statement is on-going

Tenders have been called for the Regional Hazard Management Review

Key results

- ▶ Reprioritising of the methods in the Regional Policy Statement
- ▶ Work is progressing on the implementation of the National Policy Statement for Freshwater Management with,
 - » the Ruamāhanga Whaitua Committee's programme of work in underway
 - » meetings with partners and stakeholders regarding the establishment of the Porirua Harbour Whaitua Committee
- ▶ Workshops and meetings continue to be held with stakeholder groups on preliminary policy and rule options, as part of our work towards a release of a draft regional plan in September 2014
- ▶ Te Upoko Taiao continues to meet and provided direction on a large number of policy areas ahead of the Draft Plan being released in September 2014

Looking ahead

- ▶ Meetings will be held with individual stakeholder groups in this quarter to clarify and make changes to the provisions contained in the Working Document for the Regional Plan leading to the Draft
- ▶ Engagement with individual landowners regarding possible 'sites of significance' on their land continues over the coming months
- ▶ The Ruamāhanga Whaitua Committee will continue to progress its work
- ▶ The establishment process for the Porirua Whaitua Committee will commence
- ▶ Meeting with councils around the region to explain the intention and process around the draft regional plan are being scheduled

Departmental activity

The department is currently working on the following activities to support its programmes, including;

- ▶ the review of the regional plans
- ▶ supporting the Ruamāhanga Whaitua Committee
- ▶ the establishment process for the Porirua Whaitua Committee
- ▶ the development of a Regional Hazard Management Strategy, and
- ▶ the implementation of the Regional Policy Statement

Implementation of the NPS for Freshwater Management

The Ruamāhanga Whaitua Committee is continuing its work programme, meeting approximately every six weeks at different locations around the catchment. The committee held a meeting on Monday 5 May at the Martinborough Town Hall. The meeting started with the election of a Ruamāhanga Whaitua Committee Chair and Deputy Chair, with Peter Gawith and Esther Dijkstra securing the respective roles. The agenda items focused on the physical environment of the catchment, the roles of regional and district councils, and the work programme of the Ruamāhanga Whaitua Committee over the coming two years.

The next Ruamāhanga Whaitua Committee meeting was held in Masterton on Monday 16 June 2014. It was pleasing to have an increased number of community members in attendance. There were four reports presented to the committee: Landuse and water quality; Implementing the National Policy Statement for Freshwater Management 2011; Water allocation; Community engagement.

Preliminary planning work had been undertaken to prepare for the formation of the Wellington Harbour/Hutt Valley Whaitua Committee. However, a number of factors have been taken into consideration and a decision has been made to establish the Porirua Whaitua Committee next. The key factors considered were:

- ▶ Aligns very well with the soon to be formalised PCC Porirua Harbour Joint Committee. momentum in the Porirua Harbour catchment (following on from the Porirua Harbour Strategy)
- ▶ Strong desire and readiness in Porirua from Ngati Toa, territorial authorities and the community generally
- ▶ Good political support for bringing the establishment of the Porirua Whaitua Committee forward

- Capacity, the major stakeholder within the Wellington Harbour/Hutt Valley whitua, has recently undergone restructuring and allow their re-structure to be completed and bedded in prior to the establishment of this whitua committee will provide for more effective and efficient work planning

The timing is for the Porirua Whitua Committee Terms of Reference to be approved and the selection process for community committee members to be underway by October 2014. Confirmation of membership should happen by the end of 2014, and the first Porirua Whitua Committee meeting will be held early in 2015.

Operative Regional Policy Statement

The methods have been reprioritised and this is being further developed. Activity planning is underway and this will be worked through with the Regional Planning Manager Group.

Regional Plan review

Te Upoko Taiao – Natural Resource Management Committee

Te Upoko Taiao had a meeting, followed by a workshop, scheduled for Thursday 1 May 2014. At the workshop, reports on three key topics of the Working Document for Discussion were presented: Taking water that exceeds the allocation regime; Wastewater; Trout fishery provisions.

Also presented at the 1 May Te Upoko Taiao workshop were a working copy of the Objectives and Policies for the Draft Regional Plan.

In addition to the reports presented, two verbal updates were also provided. Paul Denton gave Te Upoko Taiao an update on the development of the Section 32 process, and Alastair Smaill provided Te Upoko Taiao with an update on the whitua programme.

On 11 June 2014, Te Upoko Taiao held a meeting followed by a workshop with the presentation of nine written reports: Contact recreation; Integrated management of livestock exclusions and riparian and wetland areas; Wastewater; Other methods; Wetland management and protection; Managing indigenous bird habitats; Reclamation; Lambton Harbour Development Area; The use of Te Reo Māori in the Regional Plan. Te Upoko Taiao was also presented with a working copy of the Rules, Definitions and Schedules sections of the Draft Plan.

Engagement

A programme of stakeholder meetings has been held during this quarter to focus on the specifics of particular policy and rule options. These meetings are part of the ongoing stakeholder engagement process. Individual meetings with some stakeholders are also taking place to get a greater understanding of the provisions and to highlight areas of particular interest.

Consultation and Engagement Plan

A number of meetings were held in this quarter around the regional plan review. Stakeholder workshops around values and water quality were also held.

Interagency/Interdepartmental Cooperation and Partnerships

Staff continue to hold discussions with staff from the Ministry of Primary Industries and Ministry for the Environment, as part of on-going efforts to work together better on the implementation of the National Policy Statement for Fresh Water Management and the development of farm plan tools.

Regional Council input into Statutory Planning

District Plan Changes

Wellington City Council

- ▶ Proposed plan change 77 – Curtis Street Business Area

Two independent mediation sessions (outside of the Environment Court) to resolve appeal matters have been held, with some small progress made to date. GWRC will continue to participate in the mediations as an interested party on the aspects of the plan change that affect biodiversity values and stormwater management.

Porirua City Council

- ▶ Proposed plan change 16 – Network Utilities
- ▶ Conversations still underway with hearing date in September
- ▶ Proposed plan change 17 – Aotea Supermarket Zone

This private Proposed District Plan Change was put forward by Progressive Enterprises in order to create a site-specific zoning for a supermarket and carpark on Whitford Brown Avenue, Aotea. GWRC made a neutral submission on the plan change, seeking amendments to provisions affecting the safety and efficiency of a local bus route, and to seek further management of the adverse effects of stormwater from the new development.

Hutt City Council

- ▶ Proposed plan change 33 – Amendments to the extraction activity area
- ▶ Prior to the hearing, GWRC officers met with Winstone Aggregates representatives on a number of occasions to discuss mitigation options that would satisfy the concerns addressed in our submission. As a consequence of these meetings, a legal agreement was drawn up and agreed to by both parties. GWRC officers attended the hearing on 5 and 6 June where we stated that our concerns had been addressed via the legal agreement. A decision on this plan change is anticipated towards the end of August

Notified resource consents

None received.

Natural hazards

Research Projects

Hikurangi Subduction Zone Tsunami Project

A project has been initiated to investigate the potential for the Hikurangi Subduction zone to generate large mega-thrust earthquakes and consequent tsunamis. The subduction Hikurangi Subduction zone is the tectonic interface between the Pacific Plate and the Australian Plate. The seabed expression of this is one of the deepest ocean trenches in the world 30km off the Wairarapa Coast; the Hikurangi Trench. The interface runs under Wellington at a depth of around 20km and under the Kapiti Coast at about 30km. Movements on the interface are responsible for the slow slip earthquakes that have been occurring on the Kapiti Coast, which are thought to be responsible for triggering other large regional earthquakes, such as the Cooks Straight sequence and the Eketahuna Earthquake. Features such as these have the potential to generate earthquakes, known as mega-

thrust events of over > M8.5. Consequently, they represent a severe risk to local communities. This project, initiated by Environment Canterbury and undertaken by GNS Science is bringing together councils from either side of Cooks Strait, including Nelson City Council, Marlborough District Council and the Greater Wellington Regional Council. The project will cost \$21,000, with GWRC contributing \$3,000. The project started with a workshop at GNS Science that brought together a group of geological and tsunami scientists and representatives from the partner councils to discuss the latest understanding of the Hikurangi Subduction Zone and to define parameters for a mega-thrust earthquake and agree on several credible earthquake scenarios. Work will now begin on modelling these scenarios.

Porirua Fault Trace Study

Work has nearly finished on this project which is identifying and updating information on the location, rupture frequency and earthquake magnitude potential of active faults running through the Porirua area. The work is being undertaken by GNS Science and is being part funded by GWRC and the Porirua City Council. The results indicate that the location of the Ohariu Fault through the CBD is approximately in line with previous work, but that there is greater uncertainty about its exact location due to the amount of earthworks that has occurred in the area over the past 60 years. A draft report will be completed by mid-July 2014 for feedback from GWRC and PCC.

Wellington Harbour Fault Investigation

Work conducted as part of the It's Our Fault project has revealed the presence of fault structures on the seabed of Wellington Harbour. GWRC is providing funds to allow a more thorough analysis of these faults and the seismic hazard implications they pose Wellington City. Preliminary analysis of the data indicates that these may be an extension of a fault that bisects Mt Victoria. The project is funded over two years, of which the first half of the project has been completed and an interim report has been filed. To date, an analysis of the faults and related sedimentary structures has been completed based on high-resolution geophysical data from Evans Bay, Lambton Harbour and the Kaiwharawhara regions of Wellington Harbour. The work is progressing satisfactorily, and is due to be completed by 30 September 2014.

Lower Hutt Seismic Event Related Geotectonic Investigation

Greater Wellington Regional Council is working with the Hutt City Council and GNS Science to fund a study that will investigate in more detail the type of fault movement that may occur in Lower Hutt and the potential magnitude of any subsidence that may occur. It is thought that Lower Hutt may experience subsidence from a Wellington Fault event of up to 2.0m. The Fault runs along the western side of the Valley and poses a major risk to communities living in the area. Data is currently being analysed and a report is due to be completed by August 2014.

Regional Natural Hazards Management Strategy

A 'request for proposals' tender was advertised in mid-April for a consultant to help prepare the strategy. The tender was advertised online and in the Dominion Post. There were 30 registrations of interest and an information session was held in mid-May for interested parties, which was attended by around 40 people. Fran Wilde is the political sponsor for the project and the tender advertisement was accompanied by a media release that resulted in a radio interview on National Radio and article in the Dominion Post.

The tender review team comprised Iain Dawe, Jonathan Streat, Matt Trlin (PCC), Sarah Gauden-ing (WREMO) and Sharyn Westlake. The team met in early June to discuss the tenders with the contract being awarded to a MWH led consortium.

Significant progress was made with the Kapiti Coast District Council agreeing to join the partnering councils and contribute \$30,000 to the strategy development fund. This followed a presentation by Project Manager, GW hazards analyst to a full Kapiti Coast council meeting, at which they agreed to Kapiti joining the programme.

Greater Wellington Regional Council is managing the expenses for the project through the natural hazards budget. Councils are being invoiced by GWRC and the money is being held for later payments. Currently the project fund sits at \$200,000, which includes \$50,000 from the Greater Wellington Regional Council and \$30,000 from each of the partner TAs.

Civil Defence and Emergency Management

Wellington region civil defence and emergency management group plan

The department continues to work with civil defence emergency management. The Wellington regional CDEM group is currently in the process of working on tsunami preparedness. Environmental Policy has been involved in providing advice and feedback on regional tsunami hazards, attending workshops and reviewing documents and providing regional hazards and planning advice.

Presentations/Publications/Media

There have been a number of media articles surrounding the work of the Ruamāhanga Whaitua Committee, both on the GWRC website and in local newspapers.

Environment Policy Senior Policy Advisor (hazards) was interviewed, along with Cr Fran Wilde and Cr Paul Bruce, by The Dominion Post in March on climate change related natural hazards and sea level rise.

Financial reports

Policy Income Statement Period ending 30 June 2014	30 June 2014			30 June 2013
	Actual \$000	Budget \$000	Variance \$000	FY Actual \$000
Rates & Levies	2,717	2,717	-	2,170
Government Grants & Subsidies	-	-	-	-
External Revenue	26	-	26	-
Investment Revenue	-	-	-	6
Internal Revenue	25	25	-	25
TOTAL INCOME	2,768	2,742	26	2,201
less:				
Personnel Costs	1,527	1,528	1	1,351
Materials, Supplies & Services	77	46	(31)	46
Travel & Transport Costs	25	7	(18)	30
Contractor & Consultants	289	537	248	320
Grants and Subsidies Expenditure	-	-	-	-
Internal Charges	235	210	(25)	195
Total Direct Expenditure	2,153	2,328	175	1,942
Financial Costs	-	-	-	-
Bad Debts	-	-	-	(3)
Corporate & Department Overheads	415	415	-	390
Depreciation	7	6	(1)	7
Loss(Gain) on Sale of Assets / Investments	-	-	-	-
TOTAL EXPENDITURE	2,575	2,749	174	2,336
OPERATING SURPLUS/(DEFICIT)	193	(7)	200	(135)
Add Back Depreciation	7	6	1	7
Other Non Cash	-	-	-	-
Net Asset Acquisitions	-	-	-	(11)
Net External Investment Movements	-	-	-	-
NET FUNDING BEFORE DEBT AND RESE	200	(1)	201	(139)
Debt Additions / (decrease)	-	-	-	-
Debt Repaid	-	-	-	-
Net Reserves (Increase) / decrease	-	-	-	118
NET FUNDING SURPLUS (DEFICIT)	200	(1)	201	(21)

Financial variance analysis

- ▶ Policy has a net surplus of \$193k which is \$200k better than budget deficit of \$7k. This result is in line with the year end forecast
- ▶ Personnel, materials & travel costs are all close to budget
- ▶ Consultants' costs are only \$289k so the budget is \$248k underspent. There was less need for external consultants as more work was done by the inhouse staff

- ▶ There is no capital budget or spend

Performance Measure	Performance Target		Comment
	Baseline	2013/14	
That the Regional Policy Statement is reviewed and adopted	The Regional Policy Statement was approved by the Council in May 2010 and is subject to a number of appeals	Establish a work programme for methods in the RPS	The RPS was made operative in March 2013 and a programme is required to progress the methods and monitoring.
That regional plans are reviewed and adopted	Review of regional plans has been underway since 2009	Review of regional plans continues	The Regional plan review continues and it is expected that a draft will be made public in 2014.

Risk analysis

No significant risks for the operation of this department are identified.

1.2 Environmental Regulation



Overview

The current peak in notified and national consenting workload was down slightly in the last quarter, but is expected to rise again for the remainder of 2014. This quarter's major consenting work was dominated by a flow on from hearings in December, and the annual influx of 'replacement' dairy effluent discharge and water take consent applications

Non-notified consent workload peaked over the last six months, up from the December quarter

Ongoing high enforcement and investigations load including significant inquiries and court work and the flow on from appeals, judicial reviews and declaration applications to the Environment Court lodged in the December quarter

Annual overview:

- Resource consents processed: Considerably up on 2012-13 at 635
- Consent inspections: Considerably up from 2012-13 at 2,257
- Enforcement: Prosecutions initiated down this year – but similar overall ongoing case load
- Appeals, declarations and objections: Number of actions doubled 2012-13

Incidents down on 2012-13 at 939

Key results for the year

- ▶ Consenting – Ongoing replacement consenting across the region for municipal waste water plant treatment and infrastructure overflows at South Wairarapa and Hutt Councils; and processing of significant applications including WCC Southern Landfill, Burrell Demolition Ltd C n D Landfill, GW Flood Protection Western Rivers global consents, Te Marua Golf Club erosion protection and SWDC's waste water treatment plants suite
- ▶ Roads of National Significance – Significant ongoing workload in the Transmission Gully pre-construction work programme prior to 30 July PPP 'Financial Close'. Also significant ongoing projects in Basin Bridge Board of Inquiry; and in MacKays to Peka Peka construction work
- ▶ Appeals, declarations and judicial reviews – A substantial case load in appeals, and judicial review, injunction and declaration proceedings (in the Supreme, High and Environment Courts)

- ▶ Enforcement – Ongoing enforcement cases including the Jefferies before the District Court; and recent cases in C&M Transport/Mayall Properties and PCC prosecutions resolved in the District Court; and a number of significant investigations in progress
- ▶ Compliance – Completion of annual scheduled compliance programme
- ▶ Completion and roll-out of the Ozone Call Centre database and new Incidents module
- ▶ Regional Plan review input, incorporating significant input into draft plan provisions in the June quarter
- ▶ Continued roll out of programmes for land development activities including roll out of the revised protocol winter works earthworks; and development of a revised Erosion and Sediment Control Guideline with industry
- ▶ Ongoing roll-out of the dairy effluent pond storage calculator, and continuing implementation of the water management project around water data collection and reporting (national regulations) compliance requirements
- ▶ Ongoing work to both implement the Resource Management Amendment Act (RMAA) 2013 consenting provisions, and review proposed reforms under the Government’s Phase Three reforms package; and work to develop processes ahead of the 2014 roll-out of the Building Act Dam Safety Scheme
- ▶ Ongoing work on major revisions of procedures manuals and further development of a revised QMS for Environmental Regulation statutory process work

Looking ahead

- ▶ Ongoing management of core statutory work with particularly heavy loads in major enforcement investigations, a range of notified consenting projects, and RoNS projects (pre-lodgement to implementation) and Board of Inquiry work, and winter earthworks compliance
- ▶ Development of a comprehensive ‘strategic compliance’ framework for our RMA compliance programme
- ▶ Completing the review of the GWRC Erosion & Sediment Control Guidelines
- ▶ Rolling out revised Environmental Regulation Quality Management System
- ▶ Commencing Take Charge Porirua Area Assessment
- ▶ Ongoing work with Regional Sector groups and the Ministry for the Environment on RMA reforms; and the development and implementation of processes and procedures in response to the RMAA 2013
- ▶ Ongoing work in Regional Sector groups in responding to developing amendments to the Building Act 1991 regarding large dam and the pending implementation of the Dam Safety Scheme

Resource consents

Non-notified consents

In the past quarter we have received fewer applications than the March quarter, yet processed substantially more – with an ongoing high number of replacement applications for existing water take and dairy effluent resource consents that expire this year (carried over from the March quarter), bore permits, and RoNS project consents.

Overall, we are well up on the number of consents processed compared to the 2012-13 year.

Consents summary * Figures exclude applications to the EPA

Item	June Quarter 2014	Mar Quarter 2014	June Quarter 2013
Consents received	126	167	165
Consents issued	164	95	211

Item	2013-14 year	2012-13 year
Consents received	591	552
Consents issued	635	457

Item	June Quarter 2014	Mar Quarter 2014
Median processing time frame	18	18

Item	2013-14 year	2012-13 year
Median processing time frame	18	16

Notified and limited notified consents

A high load in assessments, pre-hearings and hearings has been completed and/or decisions has plateaued in the last quarter:

- ▶ **South Wairarapa District Council – Martinborough:** The final Martinborough application has now been formally received and was publicly notified on 9 July 2014. The proposal is essentially looking at a staged approach to upgrading the infrastructure and reducing overall discharges into the river by utilising adjacent land disposal options. Stage 1 (2012-2022) involves minor upgrades (stage 1A) and then 24% of the waste water discharged to 5.3ha of vacant land during low flows in the Ruamahanga (Stage 1B). Stage 2 involves irrigation of 42% of wastewater to a council owned property and stage 2B involves additional storage on site to contain all treated wastewater.
- ▶ **South Wairarapa District Council - Featherston and Greytown wastewater treatment plants re-consenting:** SWDC has now completed the majority of the investigations programme which has enabled associated additional information to be provided. A completed application is expected for Featherston WWTP shortly and provided the information is sufficient notification will occur soon after after that. The Greytown WWTP is expected after notification for Featherston has occurred.
- ▶ **Masterton District Council – Te Ore Ore water race re-consenting:** All parties are continuing to attempt to resolve the issues without the need for a formal hearing. A set of draft conditions are currently being devised and will be circulated to all the parties. Ultimately it is hoped that agreement can be reached and thus a formal hearing will not be required.
- ▶ **Juken New Zealand Ltd – Ongoing pant discharges to air:** After a couple of pre-hearings and further negotiation all parties have formally agreed to a set of conditions thereby negating the need for a formal hearing. The final report is currently being finalised with a decision due shortly. Conditions will deal with reducing particulate matter (PM10), dust management, and a requirement to trigger a Community Liaison Group if there are any dust or odour issues.
- ▶ **Burrell Demolition Limited – re-consenting and demolition fill extension at C n D Landfill:** Following a drawn-out adjournment and reconvening process from December 2013 onwards (to address technical matters), the application for consents for this project was finally determined in June 2014, with the commissioners granting the applications to GWRC and WCC. The hearing panel set down a robust set of consent conditions with some of the key outcomes being: monitoring of water quality and the setting of environmental limits on contaminants; a mitigation package to ‘offset’ for the loss of aquatic and terrestrial habitat; a specific acceptable materials ‘list’ allowed to be deposited; limits on height and extent of the fill areas and batter slope steepness. GWRC will now begin discussions regarding the implementation of these consents with the operators.
- ▶ **Wellington City Council – Southern Landfill extension (Stage 4):** – This project has slowed slightly, with the technical matters (including stormwater design and management, leachate treatment, odour management, hydrogeology and geotechnical issues) taking longer than expected to resolve that originally envisaged. We have set down technical roundtables with all the experts in late July. We are now expecting any hearing to be in the latter part of 2014.
- ▶ **CentrePort Limited – Stage 1 Harbour Dredging:** CentrePort has applied to renew their existing consent to deepen the Wellington Harbour navigational channel and specified berths (existing consent expires in 2015). To date no dredging has occurred under the existing consents. CentrePort seeks to obtain new resource consent for the same proposed dredging and disposal activity, with a reduced ‘maximum’ depth of 12.2m (below chart datum) to align with the currently consented dredge volume. CentrePort is also now considering a Stage 2 option to increase the current depth of dredging in the Harbour. If they proceed with this option, Stage 2 would likely supersede Stage 1. Notification of Stage 1 is therefore on hold until CentrePort has confirmed plans ahead for Stages 1 and 2.

- ▶ **GWRC (Flood Protection) – Western Region global rivers consents:** Throughout 2013 GWRC Flood Protection department lodged consent applications to continue flood protection and erosion control operations and maintenance activities on the Hutt, Waikanae and Otaki Rivers. Applications seek a continuation of their existing activities. Further information has been requested and notification of these applications will likely occur in the next quarter. In the meantime, we are working with GWRC Flood Protection around possible options for running combined hearings for these applications.
- ▶ **Aquacom NZ Ltd – Aotea Lagoon wakeboard proposal:** Aquacom NZ Ltd has applied for resource consent to construct and operate a cable wakeboard facility within the Aotea Lagoon, Porirua City. This application will more than likely be jointly notified with PCC as the activity of wakeboarding will be carried out in the CMA while the other facilities will be within the jurisdiction of PCC. Notification, if confirmed, is expected sometime in next quarter.
- ▶ **Te Marua Golf Club – erosion protection works:** The Te Marua Golf Club is seeking resource consent to undertake erosion control works on the Hutt River along the north-western edge of the golf course. The application was limited notified on 4 March 2014, due to an affected neighbour not wishing to sign off on the proposal. The neighbour subsequently lodged a submission in opposition, citing potentially increased erosion risk along their own property river margin. A hearing was held on 3 July, the decision is due for release by 25 July 2014.

Major pre-application discussions continue for:

- ▶ **Aotea Block:** Carrus intends to lodge a global consent for the remainder of the development in relation to land use consents and discharge permits for bulk earthworks, in mid 2014. This application is likely to be publicly notified.
- ▶ **Woodridge Block:** Cardno is currently preparing to lodge consent application for the remainder of the Woodridge development in relation to land use consents and discharge permits for bulk earthworks, in mid-2014. This application is likely to be publicly notified.

Board of Inquiry – national consenting projects

- ▶ **NZTA – Transmission Gully RoNS:** ‘Financial close’ on the PPP contract has been shifted out to the end of July. Leading up to financial close, GWRC has been working closely and intensively with the four participating territorial authorities (TAs) (PCC, WCC, KCDC, UHCC) to address the consenting and outline plan requirements of NZTA and WGP deemed critical to the PPP contract. Applications to GWRC for changes to conditions and new consents have been made by NZTA to provide for the changes in streamworks associated with the WGP scheme design. A decision on those applications is likely to be made before then end of July, prior to financial close. Applications have also been made to GWRC and the four TAs for changes to conditions to facilitate enabling works in the second half of 2014. GWRC has also provided interim and conditional certification of the partial Ecological Monitoring and Management Plan (EMMP) and has certified relevant aspects of the Landscape and Urban Design Management Plan (LUDMP). Additional consents are expected to be lodged post financial close. In addition, full management plans will be lodged post financial close, with site specific management plans to be provided throughout the construction of the project over the next five years. Subject to the confirmation of WGP as successful bidder, GWRC, together with the TAs, will be meeting with WGP and NZTA to discuss expectations of all parties and however to ensure a successful project implementation and relationship going forward.
- ▶ **NZTA/MacKays to Peka Peka Alliance – MacKays to Peka Peka RoNS:** Construction of the M2PP expressway is ongoing, with bulk earthworks commencing earlier in 2014. GWRC site audits are

occurring weekly. Good levels of compliance on site are being achieved generally – and multiple management plans are still being received and certified almost on a daily basis, as are new consent applications for ancillary works and changes to conditions. Fortnightly meetings between the Project Leader, Statutory Projects, and M2PP planners and compliance managers, also continues.

- ▶ **NZTA – Basin Reserve RoNS:** The application was notified on 10 August 2013. GWRC made a submission in support of the application, primarily covering strategic and public transport matters. Regulatory and environmental matters were also covered but are considered to be minor. The hearing began on 3 February 2014. GWRC’s Public Transport, Strategic Planning and Resource Management experts presented evidence through the course of the 73-day hearing. Ongoing discussions with NZTA and other parties through the hearing regarding proposed consent conditions have occurred, and it was pleasing to see that GWRC’s concerns raised in its submission were addressed. GWRC’s closing submission largely focussed on points of disagreement between the Council and other submitters regarding public transport issues. It noted that there would be significant short and long term benefits for transportation utilising the Basin Reserve, and that it is an important next step in the development of the city's transport infrastructure. The date for release of the draft decision is 22 July 2014, and 30 August 2014 for the final decision, in line with the time extension granted by the Minister for the Environment.
- ▶ **NZTA – Mt Victoria Tunnel duplication:** Pre-application consultation has commenced with NZTA on this project. NZTA is currently working up the design and consultation will be ongoing.

Appeals, objections, and declarations

One new appeal was lodged in the March Quarter, with ongoing work on a number of existing appeals, objections, judicial reviews and declarations:

- ▶ **Alan Jefferies declaration:** GWRC is defending a declaration sought by Mr Jefferies on 18 November 2013 in the Environment Court that a crossing on a tributary of the Akatarawa River does not require resource consent. Evidence was filed with the Environment Court on 21 January 2014 and mediation was held on 25 February 2014; no agreement was reached. The matter was heard by Judge Thompson in the Environment Court on 12 June 2014.

On 16 June 2014, the Declaration was declined by Judge Thompson who stated “*Mr Jefferies made a point of saying that he regards himself as much wronged and victimised by the Council in all of this. I should record that from an objective observer’s viewpoint I do not agree with this. The considerable chain of correspondence from the Council’s officers to him about these issues, exhibited in the evidence, is both fulsomely helpful and courteous in tone. Far from being victimised, Mr Jefferies just must accept that he too is required to comply with the law*”
- ▶ **Alan Jefferies judicial review and application for injunction:** GWRC is defended a statement of claim for judicial review including damages, filed in the High Court on 15 November 2013. This claim relates to two matters: the charges laid in the Criminal Court following the diversion of the Mangaroa River (see above); and the setting of Regional Council rates for flood protection activities and associated works expected. The matter was heard in the High Court on 5 May 2014 by Justice J Collins who, on 6 May 2014, struck out the applications. Costs were awarded to GWRC totalling \$24,972.
- ▶ **A J Barton consent application objection:** A J Barton has objected under s357 of the RMA to GWRC's decision to return his application for a water take under s88 of the Act as there was insufficient information to process the application. Mr Barton agreed to a meeting in April where it appeared that a way forward had been reached; however, it is now not certain if Mr Barton

wishes to pursue the agreed option. We are currently waiting to hear back from Mr Barton and if agreement cannot be reached a hearing will be held.

- ▶ **A J Barton - GWRC (Flood Protection) Whakawhiriwhiri Stream works:** As previously reported, the hearing panel decided to grant consents for this activity. The main issues covered by conditions included regulating outflows from the Tawaha Floodway; and mitigation of potential effects on water quality and habitat – including the provision of refuge areas of aquatic life and marginal vegetation, and riparian planting requirements. An appeal against some of the conditions has been received from one of the adjacent landowners, namely with regard to issues such as culvert designs, creation of refuge areas/riparian planting and the operational management plan – believing the consent requirements to be too onerous.
- ▶ **NZTA consent condition objection – consent to discharge de-icing/prevention chemical calcium magnesium acetate to the State Highway network:** NZTA objected to a monitoring condition on a non-notified resource consent granted in September 2013. We worked through their concerns around water quality monitoring requirements – and consequently removed unnecessary monitoring conditions. NZTA agree to the revised conditions, and as anticipated withdrew their objection on 5 May 2014.
- ▶ **Winstone Aggregates Ltd – Dry Creek Cleanfill:** This is an appeal relating to the January 2014 decision of the hearing panel to decline consents to establish a cleanfill at Dry Creek near Judgeford. The joint application with PCC and HCC was to develop, operate and maintain a cleanfill on rural land near Judgeford, Porirua. The hearing panel decided to decline all council consents for reasons based on proposed location and configuration of access to the site; site safety; on-site provisions for erosion and sediment control. The decision also raised important planning matters regarding the consideration of significant reclamations and policies related to impacts on Pauatahanui Stream – finding that on both counts the proposal failed against the ‘gateway test’ of the Act.

On 9 May 2014, Winstone Aggregates formally withdrew their appeal against the decision.

Consented compliance monitoring

- ▶ **Kapiti Coast District Council – public water supply project:** With the extensive set of baseline monitoring plans now approved, KCDC is implementing these consents and collecting environmental information to inform the development of long term triggers. KCDC is permitted to use the borefield while they collect this information, but the takes are subject to ‘interim’ compliance limits for matters such as saline intrusion and groundwater level changes. KCDC has also engaged BECA consultancy to assist with the compliance programme for these consents.
- ▶ **PCC Porirua wastewater treatment plant – discharge to CMA at Rukatane Point:** Following the laying of charges, we have stepped up our already robust compliance programme for this plant. With the continued issues of the bypassing and discharge to the sea of partially treated effluent, we have asked Capacity to commence work on a methodology to assess the environmental effects of the discharge on the environment – including effects on contact recreation or the gathering and consumption of kai moana. Capacity has also engaged MWH to complete a full plant/ process review.
- ▶ **Hutt Valley wastewater treatment plant – maintenance discharges to eastern bays/Waiwhetu Stream:** HCC carried out scheduled maintenance of the plant’s main outfall pipeline to replace sections of pipeline determined structurally compromised in the 2013 pipeline assessment, and to repair a minor leak notified by a member of the public in May 2014. In mid June 2014 the pipeline was partially drained over a short period via three scour valves (mainly around Burdens Gate) to Wellington Harbour. Two sections of pipework were then replaced over a three week

period. During this time all treated effluent was discharged to Waiwhetu Stream. The main outfall pipeline was put back online 4 July 2014. During these events the consent holder is required to monitor and report on the effects of the discharge.

Environmental incidents

228 incidents were notified and responded to in the quarter, down from 249 in the previous quarter. A summary breakdown of incidents is reported 6-weekly through the Councillor's Bulletin.

Enforcement

Abatement and infringement notices

Item	June Quarter 2014	Dec Quarter 2013	June Quarter 2013
Abatement notices	6	45	4
Infringement notices	0	12	33

Item	2013-14 year to date	2012-13 year
Abatement notices	81	61
Infringement notices	36	53

Prosecutions and enforcement orders

Significant prosecutions and enforcement order work in the last quarter includes:

- ▶ **Alan Jefferies prosecution:** Four charges were laid in 2010 relating to the diversion of the Mangaroa River, associated river works and deposition of fill. Mr Jefferies pleaded not guilty and requested a jury trial. The jury trial is set down for 4-8 August 2014. A one-day Pre-Jury Trial hearing was heard in the Wellington District Court on 18 March 2014 to establish matters of law (scope of the jury trial). Judge Harland ruled on 25 June 2014 that the Crown's pre-trial applications were granted. This means that the area of land where the alleged activities took place is confirmed to be riverbed (under the RMA), and the associated resource consent, and relevant permitted rules of the Regional Freshwater Plan do not permit the alleged works/activities.
- ▶ **Mayall Properties Ltd and C & M Transport Ltd prosecution:** Four charges were laid in the Wellington District Court on 19 December 2013 relating to the reclamation of the bed and

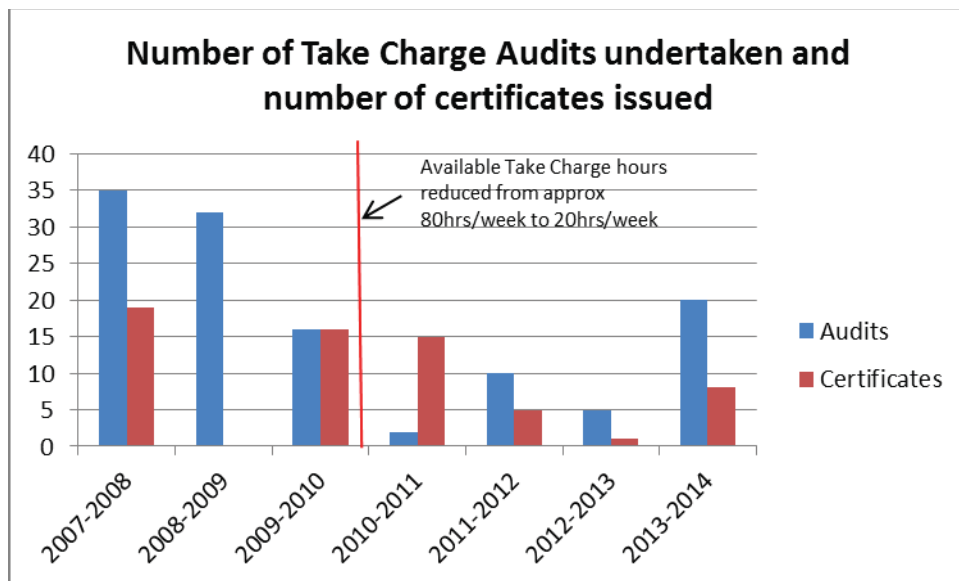
diversion of the Korimako Stream. The parties pleaded guilty on 12 March 2014, and were convicted and fined \$3,200 on each charge on 4 July 2014. Ultimately, the lower fine resulted from Judge Thompson’s view that heavy rainfall around the time of the incident (July 2013), WCC’s request to the parties that the overflow be dealt with, together with the defendant’s offer to consent existing works, equated to a lower level of offending.

- ▶ **Porirua City Council:** One charge was laid in Porirua District Court on 24 March 2014 relating to the unauthorised discharge of partially treated wastewater to land where it entered a stream and the coastal marine area. A guilty plea was entered on 6 May 2014, and subsequently an offer of environmental restitution by PCC – to be used in a project benefiting the local environment. PCC paid \$39,375 to Takapuwahia Stream Restoration Project. This project, which is being coordinated by Ngati Toa Rangatira, aims to see an improvement in the quality of water flowing into the Porirua Harbour – so the money will remain in the community where the incident occurred. \$2,500 costs were also paid to GWRC. Subsequently on 26 June 2014, Judge Dwyer convicted and discharged PCC.

Take Charge Programme

The last of the Take Charge audits took place in the Naenae industrial area this quarter. The strategy and procedure to engage businesses introduced in October 2013 worked well, although a small number of businesses required some persuasion to take part in the programme.

Four new businesses were audited in the April/June quarter bringing the total number of audits for the 2013-2014 year to 20.



Eight Take Charge certificates have now been issued to businesses in the Naenae industrial area. Certificates are issued to those businesses that have met the Take Charge programme requirements and are complying with our regional rules. Certificates have been issued to Naenae Panelbeaters, DIC (printing ink and chemical supplier), Trethewey Stone, Hoults Doors, Thorndon Rubber, Arrow Matting, ATCO Steel Developments and The Good Shed. A further seven businesses are actively working towards meeting their Take Charge requirements.

Letters were sent to the remaining five businesses which are all complying with the Resource Management Act 1991 (the Act) and the permitted activities in our regional plans. These businesses were reminded of their obligations to comply with the Resource Management Act 1991 and by

completing the requirements of the Take Charge programme they would be reducing their risk of breaching the Act.

Projects work programme

Progress on recent significant projects include:

Ozone Call Centre

Work with ICT and Environment Support staff to develop and implement the Ozone Call Centre (OCC) module of the Ozone regulatory database has now been completed – with the new database going live on 1 July 2014. The OCC replaces the current Incident Database. The Incident Database was no longer supported by ICT and does not perform the services required as the GWRC operating system, duty role and reporting requirements have evolved over time. During this quarter procedures for use of OCC were developed; testing undertaken, training resources written and training delivered. Completion of the OCC Database has been a significant achievement, given that the project to develop OCC was only confirmed in late 2013 after initial product viability testing.

Review of Erosion and Sediment Control Guidelines

Our review of the Erosion and Sediment Control Guidelines is now approaching completion, following some very productive engagement with key stakeholders including our external industry advisory group. We expect to roll out the Guidelines to the Land Development sector in the next quarter.

Sampling Toolbox

Sampling procedures have been developed during the last year and finalized in this quarter. The purpose of the procedure is to assist field officers in making decisions on when to sample, what to sample and how to use the other tools available to them, eg, conductivity meter, dissolved oxygen meter, etc. Environmental Science has been consulted during the process to ensure the sampling undertaken is useful in quantifying environmental effects from the data collected. Training in the use of the procedure will be rolled out next year.

Dam Safety Scheme

The commencement date of the Building Act (2004) Dam Safety Regulations – Dam Safety Scheme roll out has been further delayed until 1 July 2015. This is as a result of amendments to the Regulations taking longer than anticipated. We are continuing to work with other regional councils to ensure a consistent approach to implementing the Regulations.

Financial reports

Regulation Income Statement Period ending 30 June 2014	30 June 2014			30 June 2013
	Actual \$000	Budget \$000	Variance \$000	FY Actual \$000
Rates & Levies	2,265	2,265	-	2,462
Government Grants & Subsidies	-	-	-	-
External Revenue	2,720	1,871	849	1,524
Investment Revenue	-	-	-	-
Internal Revenue	203	125	78	86
TOTAL INCOME	5,188	4,261	927	4,072
less:				
Personnel Costs	2,647	2,440	(207)	2,571
Materials, Supplies & Services	78	108	30	72
Travel & Transport Costs	42	45	3	46
Contractor & Consultants	1,529	391	(1,138)	505
Grants and Subsidies Expenditure	-	-	-	-
Internal Charges	544	562	18	524
Total Direct Expenditure	4,840	3,546	(1,294)	3,718
Financial Costs	-	-	-	-
Bad Debts	196	-	(196)	2
Corporate & Department Overheads	678	678	-	614
Depreciation	30	37	7	35
Loss(Gain) on Sale of Assets / Investments	-	(20)	(20)	(17)
Total Indirect Expenditure	904	695	(209)	634
TOTAL EXPENDITURE	5,744	4,241	(1,503)	4,352
OPERATING SURPLUS/(DEFICIT)	(556)	20	(576)	(280)
Add Back Depreciation	30	37	(7)	35
Other Non Cash	-	17	13	(17)
Net Asset Acquisitions	-	(38)	38	(3)
Net External Investment Movements	-	-	-	-
NET FUNDING BEFORE DEBT & RESERVE MOVEM	(525)	-	(525)	(265)
Debt Additions / (decrease)	-	-	-	-
Debt Repaid	-	-	-	-
Net Reserves (Increase) / decrease	-	-	-	-
NET FUNDING SURPLUS (DEFICIT)	(525)	-	(525)	(265)
Regulation Capital Expenditure Statement Period ending 30 June 2014	Actual \$000	41,820 Budget \$000	Variance \$000	41,455 FY Actual \$000
Total Asset Acquisitions	-	58	58	3
Capital Project Expenditure	-	-	-	-
Asset Disposal Cash Proceeds	-	(20)	(20)	(23)
Net Capital Expenditure	-	38	38	(20)

Financial variance analysis

- ▶ Regulation has a net deficit of \$556k which is \$576k worse than budget. \$399k of this deficit is due to unrecovered costs of the RONS projects
- ▶ External income is \$2,720k which is \$849k more than the full year budget. \$367k of this additional invoicing is on charging of consultants costs for RONS project work. The other additional income is on charging of consultants & commissioners costs of notified consents
- ▶ Regulation consultants & contractors spend of \$1,529k is \$1,138k more than budget and includes Hearing commissioners costs, contracts for earthworks monitoring, contract staff for consent processing, enforcement legal costs and technical advice for RONS projects. In total the RONS projects have cost \$766k of which \$607k is for legal & other consultants costs
- ▶ Personnel costs are \$207k more than budget of which \$107k is resource costing from staff in Science & Support departments which is unbudgeted but nets off across the Group
- ▶ Travel costs and materials are all close to budget
- ▶ The provision for bad debts (on debtors balances over 90 days old) has increased by \$196k to \$281k of which \$171k relates to just 2 outstanding debtors where we are negotiating payment terms
- ▶ There was no capital spend in 2014

Performance Measure	Performance Target		Comment
	Baseline	2013/14	
Percentage of resource consents ¹ processed within 20 working days ²	98% (2010/11)	98.5%	98.7% Eight consents as part of one suite processed beyond statutory timeframes in the December quarter. 635 consents processed.
Percentage of monitoring inspections completed for resource consents with individual monitoring programmes	98% (2010/11)	100%	100% 2257 consents were inspected.
Percentage of environmental incidents reported to the 24-hour incident response service investigated in accordance with legal timeframes ³ for enforcement	68% (2010/11)	100%	99.5% Four exceedances. 939 environmental incidents investigated.

Risk analysis

None identified in this department.

1.3 Environmental Science

Overview

Completion of ESci's departmental science strategy, and development of a GWRC research strategy in conjunction with SCEG

Ongoing collection and data management for SoE programmes, including work on reviewing SoE monitoring programmes

Work around provision of basic science and environmental information for Ruamāhanga Whaitua now well underway

Work has commenced in preparing for the Porirua Harbour and Wellington Hutt Valley Whaitua

Continuing to provide scientific information for major projects around Wairarapa Moana, Mangatarere, WWUP and Wellington and Porirua Harbours

Provision of a range of advice and information to internal departments

Key results for the year

- ▶ Completion of departmental science strategy and implementation plan
- ▶ Completion of the first phase of the Lake Wairarapa water balance project and report
- ▶ Completion of the suite of 2012/13 State of the Environment Annual Data Reports
- ▶ Completion of the "new look" 2012/13 Annual Summary Report
- ▶ Completion of information provision to Wheel of Water project
- ▶ Completion and release of the final report for the second Wellington Harbour sediment survey
- ▶ Completion of a three year banded dotterel investigation which demonstrated that management actions undertaken have resulted in improved nesting success
- ▶ Successful modelling 'moshpit' with expert modellers nationwide to explore development of a modelling framework for modelling land use/water interactions for the whaitua
- ▶ Successful completion of a multi-council tendering process and contract for the provision of analytical laboratory services for water quality testing
- ▶ Launch of LAWA at GWRC head office which created media opportunities to promote the site
- ▶ Completion of Asset Management Plan for the department
- ▶ Completion of a Health and Safety Strategy for the department

- ▶ Development of a Monitoring Plan to guide reviews of SOE monitoring programmes
- ▶ Preparation for the LTP, which included a review of costs to run existing programmes and projects as well as defining costs for future requirements
- ▶ Lodgement of an application to MfE to reduce the boundaries of the Wairarapa airshed to a smaller Masterton airshed

Looking ahead

- ▶ A focus for the coming year will be a comprehensive review of all SOE monitoring programmes which will take into consideration future information requirements (particularly for the whitua) as well as central government directives such as NOF
- ▶ Consideration of monitoring requirements for the Kapiti Airshed
- ▶ Implementation of a monitoring programme for terrestrial biodiversity
- ▶ Development of MoA's (Memorandums of Agreement) with various internal departments to define services provided by the science department
- ▶ Consideration of Mātauranga Māori and development of cultural health monitoring and indicators
- ▶ Working in partnership with iwi, NGO's and TA's to provide an increasingly integrated monitoring network
- ▶ The second modelling 'mōshpit' in August to progress the development of a modelling framework for modelling land use/water interactions, including modelling the Managatarere catchment as Stage 1 of the Ruamāhanga Whitua
- ▶ Ongoing input to the Ruamāhanga Whitua and gearing up for the Porirua Harbour whitua
- ▶ Preparation of information and involvement in the development of new modules proposed for LAWA around lakes and air quality
- ▶ Development of a Communications Plan for the department
- ▶ Third presentation to TA's and the Hutt River Catchment Group in August on water quality issues
- ▶ Completion of technical supporting documents for the Draft Regional Plan

Departmental activity

General

The more significant areas of work for the department during the quarter were:

- ▶ Completion of a second workshop with internal working group which formed the basis of the organisational research strategy (now being written in conjunction with SCEG)
- ▶ Continuation of a new 12-18 month trial with three community groups monitoring water quality and ecological health in parallel with ESci's river monitoring programme
- ▶ Completion of the air and climate science needs analysis and commencement of the recruitment process for an Environmental Scientist for the Air and Climate team
- ▶ Ongoing collaborations with Victoria University and DoC around biodiversity monitoring

- ▶ Provision of a range of technical support to Environmental Regulation, Environmental Policy, Biodiversity, Biosecurity, Parks, Water Supply and Flood Protection departments
- ▶ Ongoing work around reviewing provisions for Schedules C and H of the Draft Regional Plan and developing the appropriate supporting technical documentation
- ▶ Provision of preliminary information to the newly formed Ruamāhanga Whaitua Committee
- ▶ Work on the long term planning process

A summary of work carried out in the various teams within the departments is as follows:

Air quality and climate

PM10 national environmental standard exceedances

For the period April-June 2014 there were 10 days in Masterton where daily PM10 levels were above the national standard of 50 µg/m³. These exceedances were publicly notified in the Wairarapa Times Age on 14 June and 5 July as required by the regulations. The same period last year (April-June 2013) recorded six exceedance days.



Figure 1: Calendar showing PM10 air quality categories as recorded at Chanel College, Masterton

Redefining Wairarapa airshed boundaries

An application to MfE to reduce the boundary of the Wairarapa airshed to a smaller Masterton airshed was lodged on 30 June following full council approval on 26 June.

This required formal sign-off from the Minister for the Environment. We are working with the DHB and Masterton District Council to form an Action Plan to manage air quality in the Wairarapa/Masterton airshed.

Aquatic ecosystems and quality

Rivers and streams

Annual assessments of ecological condition (macroinvertebrates, periphyton and biofilms) at our 55 Rivers State of the Environment (RSoE) monitoring sites were completed early in the quarter. While the majority of these assessments were completed in the previous quarter, rainfall and subsequent high river flows delayed sampling at a small number of sites.

Monitoring staff continue to work with three community groups in the region on carrying out parallel water quality and ecological monitoring of the Mangatarere Stream in the Wairarapa, the Mawaihakona Stream in Upper Hutt and the Waikanae River in Kapiti. Led by NIWA, the principal goal of this national monitoring project is to advance the use of community monitoring in freshwater management in New Zealand, thereby increasing engagement and knowledge among community groups and iwi while extending the monitoring capacity of regional councils.

In June GWRC concluded its multi-council tender process for analytical laboratory services in relation to water quality testing with Tasman District Council, Hawke's Bay Regional Council and West Coast Regional Council. The joint tendering process proved to be very successful, with cost savings achieved across all four participating councils as well opportunities to maximise consistency across council monitoring programmes. GWRC's new contract with Hill Laboratories is valid for a term of three years with an option for a two-year extension subject to satisfactory performance.

Lakes

There is nothing of significance to report this quarter – monthly water quality monitoring continues at Lakes Wairarapa and Onoke.

Estuarine and marine waters

The reports for monitoring carried out at five estuaries and two sandy beaches in January have now been received. The results show that high rates of sedimentation continue to be a problem for Porirua Harbour, Waikanae and Whareama estuaries, while excessive macroalgae growth is a problem in the Hutt Estuary. Castlepoint Beach (revisited five years after the baseline ecological assessment) condition was found to be good. Detailed ecological monitoring of Peka Peka Beach was undertaken for the first time and results indicate that the beach supports a diverse range of invertebrates and is presently at very low risk from issues such as sedimentation, nutrient enrichment and toxic contamination. Another one or two annual monitoring surveys will be undertaken at Peka Peka Beach to establish a baseline ecological condition.

Scientific advice was provided to Ngati Toa and NIWA regarding the proposed shellfish survey of the Onepoto Arm of Porirua Harbour in late 2014. Ngati Toa wishes to conduct a baseline assessment of shellfish populations throughout the intertidal areas of the Onepoto Arm – funding will be sought from MPI in August for this. GWRC will continue to lend in-kind support should funding be secured.

Work continued during the quarter on documenting various investigations and research that have been undertaken over the last three or so years in relation to the Porirua Harbour and Catchment Strategy and Action Plan.

Recreational water quality

The key focus during this quarter was documenting the results of the 2013/14 summer recreational water quality monitoring programme. In late June a draft of the "On the Beaches" report was circulated to our partner organisations for comment. The final report, coupled with new summary report cards for four key sub-regions (Kapiti, Porirua, Wellington City/Hutt Valley and Wairarapa) are expected to be released in late July.

A meeting was also held with our partner organisations to discuss a review of winter beach monitoring as well as the results of faecal source tracking (FST) investigations carried out over the last two years. The FST results strongly indicate that faecal contamination in many urban streams and some coastal waters is linked with stormwater and/or sewer infrastructure (eg, cross connections, pipe leaks, overflows).

In late May staff presented information at a public meeting in Wainuiomata on the water quality issues and investigations undertaken at Wainuiomata River at Richard Prouse Park (there were frequent exceedances of the national recreational water quality guidelines at this site during March). Hutt City Council (HCC) also spoke at the meeting, outlining septic tank inspections being carried out in the area. Approximately 50 people attended the meeting and the discussion was wide-ranging covering all aspects of river and stream health in the Wainuiomata area. Campbell Barry, a HCC councillor who organised the meeting, is now working with a small group of attendees to establish a 'Wainuiomata Waterways Group' that can engage with GWRC and HCC on issues relating to river health.

Terrestrial ecosystems and quality

Contaminated land

Staff continue to improve and update the Selected Land Use Register (SLUR), including efforts to align terminology and classifications to that used by MfE. The draft strategy for managing contaminated site information has been received from Sephira Environmental Ltd, and a number of significant outcomes of the strategy have already been implemented. Several draft Standard Operating Procedures have also been received and reviewed, the intention being to have these formally adopted as standard procedure for the SLUR database.

Staff sent out 44 property enquiry letters and made several amendments to site records based on contamination status review reports. Golder Associates has now reviewed around a third of the potential new sites for inclusion on the database, and identified 33 that are to be listed. This leaves over 100 potential new sites that are awaiting review.

GWRC has been liaising closely with the MfE contaminated land remediation team, and prepared background media information on sites in the region identified in the Contaminated Sites Remediation Fund priority list. We have also been actively involved with the Regional Waste and Contaminated Land Forum (special interest group), hosting the last meeting on 20 May which was attended by approximately 30 regional council and central government representatives.

Other activities included; involvement in the MfE reference group for reviewing the "Contaminated Land Management Guideline No. 5 (Site Investigation and Analysis of Soils)", taking part in the MfE technical working group on developing national consistency in managing contaminated sites in New Zealand, and attending the New Zealand Trace Elements Group Conference 2014.

Soil quality

Monitoring for the Soil Quality SoE programme was undertaken at market garden and cropping sites during late April/early May 2014. The Soil Quality SOE programme also contributed samples to an Envirolink Tool project evaluating bacterial community DNA related to the nitrogen cycle. Several other regional councils are also contributing to this project.

As part of keeping landowners informed the 2012/13 Soil Quality SoE Annual Data Report and relevant pages from 'Our Environment at a Glance' were sent to the landowners (farmers) of properties sampled in 2013.

Our soil scientist has organised a contract with Landcare Research for the completion of S-map soil mapping and modelling in the Otaki region. This project will have benefits for land management and provide information to inform the Kapiti whitua process. Once completed, the new mapping will be uploaded into the national database.

Staff organised a presentation from Sharn Hainsworth (soil scientist at Landcare Research) on digital soil mapping techniques used in the national S-map programme, and more recently in Hawkes Bay, which Land Management staff attended. Sharn covered a variety of topics including use of high resolution data and landscape modelling. Our soil scientist attended a workshop on DCD (a fertiliser additive used to reduce nitrate leaching) and presentations on water quality interactions organised by MPI.

Groundwater quality

Quarterly Groundwater Quality State of the Environment (GQSoE) sampling runs were completed in June. Preliminary work investigating the cause of elevated concentrations of nitrate-nitrogen in the Parkvale Stream at Lowes Bush (which is thought to be derived from groundwater) has begun. The focus will be on gathering and summarising existing data and information collected when the Waingawa Freezing Works was operating during the 1980s. The next stage will identify where monitoring could be used to help provide answers for any knowledge gaps.

GWRC has engaged NIWA to write a document on the fundamentals of groundwater ecosystems, and why it is important to protect groundwater quality and ecosystem health. This report will provide key underpinning information for the regional plan process, the subsequent whitua and will also inform future reviews of our GQSoE monitoring programme.

Terrestrial biodiversity

The terrestrial ecosystem classification system continues to be progressed – a paper describing the application of this classification system has been published and experts are providing feedback about the proposed maps for our region.

GWRC has been working with the Department of Conservation (DoC) to develop criteria for determining regional threat status using a nationally consistent approach. Following the development of criteria at a national workshop in March, the completion of a Wellington regional threat list for birds was used to trial the criteria. This exercise identified that the system worked well, but there is a need to make some adjustments to the criteria for more common species. DoC will now undertake a trial regional threat listing for plants in the Waikato region. Staff also attended a workshop aimed at initiating interoperability between databases containing biological information held by regional councils. Two of the target datasets were those containing information on pest plants and bird species.

Staff continued to assist Wellington City Council (WCC) in designing their urban rodent monitoring project. Selected households within the 'halo' (a 1km area surrounding Zealandia) will be asked to put chew cards in their backyards over a night in August to assess rodent numbers in the area. We also completed some bat monitoring for WCC near Makara, but no bats were located.

A Project Kaka rodent monitor was completed in June in the Hutt catchment. The rat tracking rate has increased from 15% in February to 34%, with the highest rates observed in the eastern Hutt. A 1080 operation planned for August to reduce possum numbers will help to lower the high rodent numbers that have resulted from this year's prolific beech masting (increased seed production).

A number of presentations on terrestrial biodiversity have been given during the quarter including:

- ▶ A talk to a local school about some of our terrestrial science studies
- ▶ A presentation to the Wellington branch of OSNZ on the Wainuiomata Mainland Island robin translocation
- ▶ A presentation to a branch of the Biosecurity Institute on the banded dotterel investigation

- ▶ A joint presentation at MPI's Primary Industry Summit on behalf of the Biosecurity Institute (the biosecurity issues raised during the presentation were discussed in a columnist article in a national newspaper)

Hydrology

The entire region recorded average to above average rainfall over autumn. Areas that were particularly wetter than normal were the Tararua Ranges and north-eastern Wairarapa. As a consequence river flows were also above average on the whole, but we did see a number of sites drop briefly below the mean annual low flow towards the end of March. The Waikanae River was one of these and as a result the public water supply abstraction from the river was restricted for parts of March and April. This led to increased groundwater abstraction in Waikanae and the shallow semi-confined aquifer reached almost record low levels at this time, although it has now recovered to normal levels.

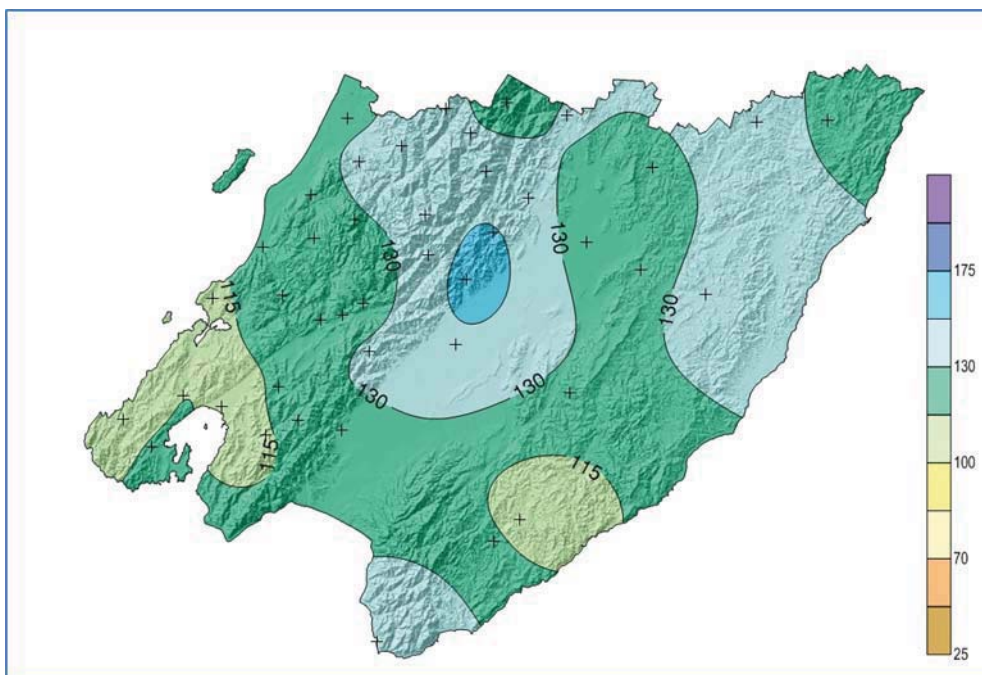


Figure 2: Autumn 2014 rainfall as a percentage of long term average (crosses show the locations of monitoring stations)

Monitoring

Monitoring staff are in the process of developing the methodology for reviewing the Hydrology SoE monitoring network. This review will take into account the data needs of our various clients including Flood Protection, Water Supply (soon to be Wellington Water) and the TA's, and will provide the basis for refinement of the network, sampling schedules and data QA. This project will continue to be a priority for these staff over the coming quarter.

Replacement of the catwalk access to the Hutt River at Taita Gorge flow site has been completed and the site is now in a fully serviceable condition.

Investigations

Fieldwork for the Lake Wairarapa Water Balance Model has been completed and final updates to the model are underway. There are several unresolved aspects of the lake water balance that may need

further attention as part of future investigations; these include more detailed assessment of groundwater fluxes and the influence of pumped drainage.

A project was initiated in March to try to establish a visual record of flow at various sites on rivers with significant abstraction and instream values. A pilot study is underway with camera installations at two sites on the Waipoua River. The first site was vandalised and has not yet been re-established. The second site is proving more successful although there are not yet sufficient data to determine long-term viability of the project (the aim is to eventually use the time-lapse footage to help communicate some of the hydrology science and flow management policies during Regional Plan and whaitua discussions). Work on the project will continue for the next two years.

A suite of water resource investigations have been scoped for progression over the next two years in partnership with the Wairarapa Water Use Project (WWUP). It is recognised that a number of the questions that are likely to be raised by the Ruamāhanga Whaitua Committee are also relevant to the WWUP and that it makes sense to align this work where possible for the mutual benefit of both entities. The work ranges in scale from catchment-based testing of water use modelling packages to general questions about the approach to water allocation with regard to ground and surface water interactions. One project, relating to firming up our understanding of low flow regimes in the Ruamahanga got underway in the last quarter with the focus on collation of existing data. Another project relating to allocation scenario modelling has been scoped to the point where a contract is close to being let. Two desktop projects – (1) an assessment of permitted surface water takes (being managed by Environmental Policy team) and (2) an assessment of water availability in the Wairarapa Valley under allocation regimes geared towards either surface or groundwater sources – are close to completion.

Science strategy and information

Following the completion of our departmental science strategy, an implementation plan (which outlines the actions and projects required to realise the strategy objectives) was developed during the quarter. A monitoring plan has also been developed which will be instrumental in guiding the review of our monitoring programmes. The strategy and ESci's vision for monitoring was discussed with GWRC's Kaitiaki Group at a meeting in June. This is the start of an ongoing dialogue with mana whenua the aims of which are to:

- ▶ See how we can produce information that engages with and is meaningful to Maori
- ▶ Explore how we can promote and support cultural monitoring for the benefit of the region

A further workshop was held in June on the development of an organisational research strategy. A draft strategy based on the outcomes of the two workshops held is now being written.

An external Science Advisory Group has recently been established and the second meeting will be held at the start of the next quarter. This group will provide input to the review of our monitoring programmes, provide advice on our modelling projects and assist engagement with external research parties.

There continues to be a strong focus on science communications, with recent emphasis being on promoting the role of the science department internally. During the quarter we:

- ▶ Started work on developing a department communications plan
- ▶ Started work on revising ESci's Gwennie pages
- ▶ Contributed to a new look "On the Beaches" report for the 2013/14 year, including the development of accompanying report cards
- ▶ Contributed to the development of posters for several of our SoE monitoring programmes

In line with this, work has also commenced on the development of MOA's with several of the key departments that ESci works with internally. These MOA's will facilitate an improved working relationship, including promoting a pro-active rather than reactive approach to dealing with issues and providing certainty around the level of service we can provide.

We have almost completed an asset management plan for the department, the most notable point being that we now have a comprehensive and up-to-date inventory of all our assets and when they need to be replaced.

There has been a significant amount of work in coordinating the necessary science input to the Regional Plan and Ruamāhanga Whaitua process – please see below for further detail. Our Senior Science Coordinator has also been involved with coordinating science presentations to the “Hutt River Group”. This group, convened by Fran Wilde, aims to establish relationships with key stakeholders/interest groups and bridge the gap until the establishment of the Wellington and Hutt Valley whaitua.

Significant projects

Wairarapa Moana

ESci continues to play a key role in the Wairarapa Moana project and is heavily involved in the FreshStart for Freshwater Programme. Members of the Terrestrial and Aquatic Ecology and Quality teams are part of the Technical Advisory Group and involved in all three arms of the project; lake-edge wetland restoration, Land Environment Plans and monitoring.

Following an initial survey of fish in farm drains earlier this year, a further survey was completed on three dairy farms around the lake in April/May. A NIWA scientist who had studied the effects of drain management on fish took part in a field day with farmers in June and ESci staff organised a demonstration of the types of fish living in the drains.

A number of constructed wetlands are being created on farms as part of the FreshStart for Freshwater project. ESci has organised monthly water quality sampling at these sites, so that the effectiveness of the wetlands in improving water quality may be determined. A sampling regime has also been established for a trial where the water quality of tile drains is being tested both in paddocks receiving irrigation and where effluent is applied.

The May shorebird count was completed by a mixed team of DoC, GWRC and OSNZ staff and volunteers. A highlight of the day was the sighting of a flock of 122 red-billed gulls, who rarely visit Lake Wairarapa. This is the third winter survey completed since the counts began in 2011 and comparisons can now be made with the surveys completed between 1985 and 1994. Numbers of New Zealand dabchick, three shag species, black-fronted dotterel and black billed gull appear to have increased, while those of South Island pied oystercatcher, pied stilt and black billed gull have decreased. This information has been made a feature in a local Wairarapa newspaper.

Three intensive fishing episodes have now been completed for the exotic fish removal trial in Barton's Lagoon. The April catch netted 47 rudd, 40 perch and 6 trout. After the three rounds of intensive fishing, a total of 172 rudd, 100 perch and 57 trout have been removed from the wetland.

A class of students from Massey University, assisted by ESci staff, completed a fish survey of the wetland next to Barton's Lagoon as part of an assessment of the site where wetland remediation is being planned.

Ruamāhanga Whaitua

Now that the Ruamāhanga Whaitua Committee has formally commenced its work, a number of projects have been kicked off to gather the information the committee is likely to require over the next 12 months. These projects are being coordinated by the SSI team, and are largely around providing information on the current state of our environment, trends, key issues and drivers of those.

To date summary papers have been provided to the committee on water resources, biodiversity, river water quality and lake water quality.

Preparing land-based information has been a high priority and a number of projects associated with this are continuing. A workshop with modellers from around New Zealand is planned for 5 August and staff have been involved in preparing for the workshop and providing information for modelling of the Mangatarere catchment (Stage 1 of the modelling for the Ruamāhanga Whaitua), including undertaking a data inventory. The agricultural land use GIS layer is still in preparation, while the estimation of nutrient loads from the five municipal wastewater treatment plants is being finalised. A consented effluent discharge GIS layer has been sourced and other relevant information from consents data is being gathered. GIS staff are also investigating a methodology for determining the length of riparian vegetation in the catchment using LIDAR information.

Technical support for other departments

Considerable technical support was provided to other GWRC departments/groups during the quarter:

Environmental Regulation

- ▶ Technical advice continues to be provided for both the Transmission Gully Motorway (TGM) and the MacKays to Peka Peka Motorway projects in relation to impacts on birds, lizards, bats, vegetation and contaminated land. Technical input was also provided on reviewing the effects of the proposed changes to the construction of TGM on the ecology of Porirua Harbour
- ▶ Planting plans for riparian areas and wetlands at Manchester Street, Newtown, the Duck Creek development and Nikau cleanfill have been reviewed

Environmental Policy

- ▶ ESci staff continue work closely with EPol to refine the attributes for rivers, lakes, wetlands, groundwater and coastal waters relating to Schedule H of the Draft Regional Plan.
- ▶ Hydrology scientists continue to work closely with EPol to refine Regional Plan provisions for minimum flows and water allocation regimes
- ▶ Hydrology staff have also been assisting GNS with work on defining capture zones for drinking water supplies from groundwater. GNS are making use of groundwater models that were developed in-house by GWRC for this work
- ▶ Input is ongoing in relation to identifying rivers and lakes in the region that have significant or outstanding ecological values (as required by the NPS-Freshwater Management), with a desktop assessment of aquatic plant values across the region's lakes completed by NIWA in June. This assessment ranks aquatic plant values in Lakes Kohangatera and Kohangapiripiri as outstanding

Flood Protection

- ▶ Hydrology staff are continuing to work closely with Flood Protection in scoping options for the enhancement of flood models for short-term event scale prediction of flood flows
- ▶ Our terrestrial ecology scientist has provided information to Flood Protection about the impacts of their work on shorebirds. Surveys were carried out on the Hutt, Waikanae and Otaki Rivers between November 2013 and January 2014, and the Otaki River was found to support regionally-significant breeding populations of the nationally-vulnerable banded dotterel and black-fronted dotterel, as well as a large breeding population of pied stilts

Biodiversity

- ▶ Ecologists continue to provide feedback on the KNE plans currently being produced by the Biodiversity department
- ▶ Six KNE sites were monitored for rodents and small mammals in May. A rat plague was detected in all of the sites monitored. Rat tracking in Wainuiomata Mainland Island increased from 4% in February to 63%, while in the East Harbour Mainland Island the tracking rate has increased to 26%. These high rat levels are a concern for the viability of robin populations in these areas, while other bird species will also be impacted if the levels are not reduced. High rat tracking rates were also recorded in Korokoro Valley (20%), Battle Hill bush remnant (55%) and Queen Elizabeth Park (35%). This increase in rat numbers was predicted as part of a nationwide irruption in rodent numbers driven by a heavy mast seeding of beech, podocarp and many broadleaf species in the past few months

Parks

- ▶ Staff completed assessments of the ecological impacts of widening Tane's Track in Pakuaratahi Forest and the Belmont Trig to Baked Beans Bend track realignment in Belmont Regional Park
- ▶ Five permits for the collection of natural materials or research in GWRC's parks and forests have been issued in the last three months. One was for seed collection for national seed banking purposes and another for collecting molluscan fauna. The three research projects included investigations of lycophytes by Te Papa, Victoria University PH.D study of pest detection and lures and a lizard survey of Whiteria Park
- ▶ An audit of the re-measurement of the vegetation plots in Belmont Regional Park and Battle Hill bush reserve was completed in April. The auditor expressed the view that "for the most part the field data collection has continued the high standards set by Regional Council staff in recent years."
- ▶ Staff from both the Terrestrial and Aquatic Ecosystem and Quality teams provided technical responses to submissions received on the Draft Parangarahu Lakes Management Plan. This input was required to assist Parks staff with their hearing on the draft plan in June

Biosecurity

- ▶ ESci is continuing to collate data from world-wide databases to provide to AgResearch for the development of a CLIMEX model for moth plant. These CLIMEX models predict the types of habitats in the region where the emerging weed species may be found, and will assist Biosecurity with surveillance efforts
- ▶ Staff are providing possum monitoring reports for Bioworks in the Wairarapa and assisting Biosecurity with annual reporting of rabbit and possum night counts

Water Supply

- ▶ Ungulate plot re-measurements in the Wainuiomata/Orongorongo water collection area have been completed. This monitoring is completed every two years and measures the impact of goat and deer hunting on the growth of forest seedlings

Staff changes

We have advertised the position of Environmental Scientist (Climate) and received a good response. We are currently compiling a shortlist for interviews. This role will be responsible for developing a climate science programme designed to inform council wide climate-sensitive decision making and to provide a forward looking focus for resource management planning.

In June, Mark Heath was appointed to the fixed-term position of Environmental Scientist (Freshwater) in the Aquatic Ecosystems and Quality Team. Mark will start in July.

Tessa Bunny has accepted a 1 year fixed-term role as Science Coordinator to cover for Elaine Asquith (Senior Science Coordinator) who is currently on maternity leave. We are also recruiting for another Senior Science Coordinator to be involved with the upcoming Porirua Harbour whitua.

We are continuing to look for candidates for a newly created internship with local iwi, and are working closely with the regional Kaitiaki Group to get the right person

Financial reports

Science Income Statement Period ending 30 June 2014	30 June 2014			30 June 2013
	Actual \$000	Budget \$000	Variance \$000	FY Actual \$000
Rates & Levies	5,045	5,045	-	4,793
Government Grants & Subsidies	-	-	-	-
External Revenue	39	10	29	71
Investment Revenue	4	-	4	4
Internal Revenue	320	245	75	312
TOTAL INCOME	5,408	5,300	108	5,180
less:				
Personnel Costs	2,804	2,538	(266)	2,313
Materials,Supplies & Services	308	277	(31)	376
Travel & Transport Costs	104	91	(13)	124
Contractor & Consultants	874	977	103	945
Grants and Subsidies Expenditure	-	-	-	-
Internal Charges	607	466	(141)	441
Total Direct Expenditure	4,697	4,349	(348)	4,199
Financial Costs	17	14	(3)	23
Bad Debts	(2)	-	2	-
Corporate & Department Overheads	770	770	-	677
Depreciation	267	321	54	281
Loss(Gain) on Sale of Assets / Investment	-	-	-	(15)
TOTAL EXPENDITURE	5,749	5,454	(295)	5,165
OPERATING SURPLUS/(DEFICIT)	(341)	(154)	(187)	15
Add Back Depreciation	267	321	(54)	281
Other Non Cash	-	-	-	(15)
Net Asset Acquisitions	(102)	(105)	3	(180)
Net External Investment Movements	-	-	-	-
NET FUNDING BEFORE DEBT & RE	(176)	62	(238)	101
Debt Additions / (decrease)	68	-	68	50
Debt Repaid	(64)	(63)	(1)	(96)
Net Reserves (Increase) / decrease	(4)	-	(4)	(4)
NET FUNDING SURPLUS (DEFICIT)	(176)	(1)	(175)	51
Science Capital Expenditure Statement Period ending 30 June 2014		41,820		41,455
	Actual \$000	Budget \$000	Variance \$000	FY Actual \$000
Total Asset Acquisitions	52	105	53	124
Capital Project Expenditure	48	-	(48)	49
Asset Disposal Cash Proceeds	-	-	-	(38)
Net Capital Expenditure	100	105	5	135

Financial variance analysis

- ▶ E Science has a net deficit of \$341k which is \$187k worse than budget as per forecast
- ▶ Direct costs are \$348k over budget of which staff costs are \$266k of this variance
- ▶ Staff costs are more than budget due to a combination of factors. Two key positions were recruited with higher salaries than budgeted, there is overlap in one position with replacement staff being recruited prior to the incumbent staff leaving and unbudgeted casual staff
- ▶ Internal costs are overbudget in two areas, \$54k of ICT charges due to more computers for extra staff and \$64k Biosecurity charges for work done internally but budgeted as external costs
- ▶ Capital spend is \$100k on monitoring equipment which is in line with budget of \$105k

Performance Measure	Performance Target		Comment
	Baseline	2013/14	
Number of state of the environment report cards downloaded on the Greater Wellington website	1929 (2010/11)	Increase on previous year	This information is not currently available.

Risk analysis

We have reviewed our risks and no changes are required to the risk register.



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REGIONAL COUNCIL

Te Pane Matua Taiao