

# Environment Management Group

Performance Report year ended 30 June 2015





# 1 TE UPOKO TAIAO NATURAL RESOURCE MANAGEMENT COMMITTEE

## 1.1 Environmental Policy



### Overview

Te Upoko Taiao recommended to Council that the Proposed Natural Resources Plan for the Wellington Region be approved. Council approved the recommendation and the proposed Plan will be publicly notified on 31 July 2015

The Ruamāhanga Whaitua Committee's work programme is continuing, with two workshops and two community engagement events held this quarter

Te Awarua-o-Porirua Whaitua Committee's work programme is continuing, with two meetings and two fieldtrips as part of the information gathering phase

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

The Regional Hazard Management Strategy Review continues

### Key results for the quarter

- ▶ Te Upoko Taiao – Natural Resource Management Committee recommended to Council that the Proposed Natural Resources Plan for the Wellington Region proceed to be publicly notified on 31 July 2015 having had particular regard to section 32 of the Resource Management Act 1991.
- ▶ Council approved the recommendation of Te Upoko Taiao, that the Proposed Natural Resources Plan for the Wellington Region be publicly notified on 31 July 2015.
- ▶ Council approved the revised Implementation Programme for the National Policy Statement for Freshwater Management
- ▶ Work is progressing on the implementation of the National Policy Statement for Freshwater Management with,
  - » the Ruamāhanga Whaitua Committee's programme of work underway
  - » Te Awarua-o-Porirua Whaitua Committee's programme of work underway

## Looking ahead

- ▶ The Proposed Natural Resources Plan will be publicly notified on 31 July 2015 with submissions open until 25 September 2015
- ▶ The Ruamāhanga Whaitua Committee will continue to progress its work
- ▶ Te Awarua-o-Porirua Whaitua Committee will continue to progress its work
- ▶ The Regional Hazard Management Strategy stocktake and gap analysis is nearing completion and the next step will be development of the strategy to fill the gaps and public engagement

## Departmental activity

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

- ▶ Preparation for public notification of the Proposed Natural Resources Plan
- ▶ Supporting the Ruamāhanga Whaitua Committee
- ▶ Supporting Te Awarua o 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/Whaitua Programme

### Revised implementation programme

On 30 June 2015 Council adopted a revised staged implementation programme for the National Policy Statement for Freshwater Management 2014 (NPS-FM), to specifically incorporate the role of the whaitua committees into the programme.

### Ruamāhanga Whaitua Committee

The Ruamāhanga Whaitua Committee is continuing its work programme, meeting approximately every six weeks at different locations around the whaitua (catchment). The committee is also holding a number of community engagement events in different locations.

#### 28 April 2015

The Ruamāhanga Whaitua Committee held a community engagement event at Pirinoa on Tuesday 28 April 2015. 70 members of the local community worked in groups to discuss and feedback to the meeting on three key questions:

1. What were the waterways like in the past and how were they used?
2. What are important issues currently facing your area's waterways?
3. What would you like your waterways to be like in the future?

The Ruamāhanga Whaitua Committee used the values gathered at this, and other community engagement events to develop seven values groups in subsequent workshops.

#### **4 May 2015**

The Ruamāhanga Whaitua Committee held a workshop at the Featherston Community Centre on Monday 4 May 2015. The workshop began with an evaluation of the Pirinoa community engagement event on 28 April and identified improvements for future community engagement events.

A presentation was given by Michael Bassett-Foss on the Wairarapa Water Use Project (WWUP) and the committee had a refresher on the Wheel of Water process for identifying values and how and where steps completed by the committee to date fit with this.

The majority of the workshop focused on the values work to date detailing and confirming the values (their titles and descriptions); reviewing the Values paper, reviewing values groupings, and framing values titles and descriptors).

#### **8 June 2015**

The Ruamāhanga Whaitua Committee held a community engagement event at Gladstone on Monday 8 June 2015. The format of this event was the same as the one held in Pirinoa on 28 April 2015.

#### **15 June 2015**

The Ruamāhanga Whaitua Committee held a workshop and meeting at the Carterton Events Centre on 15 June 2015. At the workshop the committee had a debrief on the Gladstone community engagement event. The project team also provided a presentation defining 'Attributes and Thresholds', and putting these in context with the Wheel of Water process and the Whaitua Implementation Plan that the RWC must eventually deliver.

The meeting section of the event involved three presentations. The first presentation was given by the committee where they explained the seven interim value groups they had come up with.

The second presentation was given by Michael Bassett-Foss on the Wairarapa Water Use Project (WWUP) and the third by Ton Snelder about data and uncertainty and how the modellers would deal with this when modelling future scenarios for the committee in the coming months.

### **Te Awarua-o-Porirua Whaitua Committee**

Te Awarua-o-Porirua Whaitua Committee has begun its work programme, meeting approximately every six weeks at different locations around the whaitua (catchment). The committee has had two committee meetings and have attended a fieldtrip in the catchment.

#### **6 May 2015**

Te Awarua-o-Porirua Whaitua Committee attended a fieldtrip in the Pauatahanui catchment where they visited a committee member's farm and Battle Hill Regional Park.

#### **28 May 2015**

A committee meeting was held at Porirua City Council where papers were presented on the geography, recreation uses and demographics of the whaitua.

### **Operative Regional Policy Statement**

Ongoing – work continues to ensure the policies are given effect to in district and regional plans through cross-council submissions on all stages of plan changes and district or city council resource consents. Some method development is ongoing.

## Regional Plan review

### Te Upoko Taiao – Natural Resource Management Committee

#### **23 April 2015**

Te Upoko Taiao held a workshop at Greater Wellington Regional Council on 23 April 2015. Te Upoko Taiao considered further recommended revisions to the direction of the Proposed Natural Resources Plan arising from feedback on the draft Plan. A paper was presented to the committee highlighting key policy areas (those high risk or areas where the policy direction requires reassessment) and the recommended changes. The key areas discussed were reclamation in freshwater and wastewater discharges to water. Updates were presented on progress with identification of sites of significance to mana whenua, and results of the independent planning review of the draft Proposed Natural Resources Plan.

Section 32 reports were presented on historic heritage and natural hazards.

#### **7 May 2015**

On 7 May 2015 Te Upoko Taiao held a meeting where they considered the quarterly report from the first quarter of 2015.

In the workshop following, Te Upoko Taiao considered all recommended revisions to the specific provisions of the proposed Plan. The Section 32 report on activities in the coastal marine area was also presented.

#### **18 June 2015**

On 18 June 2015 Te Upoko Taiao held a workshop at the Greater Wellington Regional Council offices to consider all of the remaining section 32 reports: Section 32 report: Air quality management, Section 32 report: Soil conservation, Section 32 report: Contaminated land and hazardous substances, Section 32 report: Water quality, Section 32 report: Māori values, Section 32 report: Discharges to land, Section 32 report: Management of the coastal marine area, Section 32 report: Wetlands, Section 32 report: Beneficial use and development, Section 32 report: Aquatic ecosystems, Section 32 report: Beds of lakes and rivers, Section 32 report: Ki uta ki tai-mountains to the sea, Section 32 report: Discharges to water, Section 32 report: Livestock access, break-feeding and cultivation, Section 32 report: Recreation, public access and open space, Section 32 report: Natural heritage and Section 32 report: Water quantity.

#### **25 June 2015**

On 25 June 2015 Te Upoko Taiao meet to formally recommend to Council that the Proposed Natural Resources Plan for the Wellington Region proceed to be publicly notified on 31 July 2015, having had particular regard to section 32 of the Resource Management Act 1991.

### Proposed Natural Resources Plan for the Wellington Region

On 30 June Council approved the recommendation from Te Upoko Taiao that the Proposed Natural Resources Plan for the Wellington Region proceed to be publicly notified on 31 July 2015.

### Stakeholder and public engagement

Information and activity sheets have been updated to support the release of the Proposed Natural Resources Plan. Information sheets are for people interested in topics such as swimming and agriculture, but that will not need a consent to undertake their activities. Activity sheets are for

people proposing to undertake an activity that may require a consent to provide them with background on the provisions that might affect them.

Two newsletters have been sent out to stakeholders updating them about progress on the Proposed Natural Resources Plan, and the whitua. These newsletters have been reproduced in industry publications such as with NZ Beef and Lamb.

## Regional Council input into Statutory Planning

### District Plan Changes

#### Hutt City Council

- ▶ Plan Change 35 – Boulcott Summerset retirement village

GWRC made a submission in opposition to this plan change mainly due to concerns around flood protection operations, specifically effects on the adjacent stopbank from the construction of the retirement village.

- ▶ Plan Change 37 – Hugh Sinclair Park, Wainuiomata – Rezoning of Part of the Site as General Residential Activity Area with Provision for a Retirement Village

GWRC made a supportive submission for this retirement village with some comments around floor levels for buildings from a flooding perspective and how biodiversity can be accommodated and provided for and suggestions for water sensitive urban design.

#### Porirua City Council

Notified resource consent – Aged care facility, Whitby

GWRC has been notified of a resource consent application for an aged care facility in Whitby. Council officers are currently assessing the application to determine whether a submission is necessary.

## Natural hazards

### Research Projects

#### Wellington Harbour Tsunami Modelling Project

GWRC and WREMO are working together with GNS to extend our understanding of the tsunami risk of the region by undertaking more detailed tsunami modelling in Wellington Harbour. It has always been understood that Wellington Harbour has complex interactions with tsunami waves, with the potential to attenuate tsunami wave height in the Harbour. But until recently, there has been insufficient data and knowledge of local conditions to model these interactions. Recent LiDAR and bathymetric mapping in the Harbour, along with research on the Hikurangi Subduction margin, co-funded by GWRC, has extended our understanding to the point where we can now model tsunami flows in Wellington Harbour. This work will be used to assess the tsunami risk in the Harbour and to redefine the worst case scenario for the evacuation map yellow zone and the blue line project.

#### East Coast LAB (Life at the Boundary)

The Environment Policy Senior Policy Advisor (hazards) is a member of a steering committee for an inter-regional hazards research project called East Coast LAB (Life at the Boundary) being led by Hawkes Bay Regional Council and also involving Gisborne District Council and Horizons Regional Council. The 'Boundary' refers to the Hikurangi subduction zone.

The US National Science Foundation has selected the Hikurangi Margin as one of the three places in the world where a large amount of research effort and money (near \$14m) will be spent on understanding subduction plate boundary phenomena over the next decade.

The project aims to study what causes variations in seismicity along subduction margins, slow slip earthquakes, earthquake geology to obtain the timing and locations of past Hikurangi subduction earthquakes and tsunami and earthquake rupture and tsunami scenario modelling to better understand the risks this geological feature poses to the region.

East Coast LAB will be a brand around which to:

- ▶ Leverage international research opportunities relating to the Hikurangi tectonic boundary lying off the coast of Gisborne/Hawke's Bay /Wairarapa and the natural hazards associated with this boundary (earthquakes, liquefaction, fault rupture, tsunami)
- ▶ Promote public awareness of the natural hazards, including a dedicated website, marketing and dedicated focal points/local venues (eg, the museum and the National Aquarium in Napier or Te Papa) to share such information

The first action has been to find a space to host the project and to start developing a brand to promote the project. Currently an education outreach programme is being developed for schools.

## Regional Natural Hazards Management Strategy

The Environment Policy Senior Policy Advisor (hazards) is project managing the development of a regional natural hazards management strategy. The project aims to coordinate hazards management for better consistency and alignment between resource management plans and hazards research across the region. The project has been agreed to by six local authorities, Kāpiti, Porirua, Wellington, Hutt, Upper Hutt and GWRC. The Wairarapa councils are keeping a watching brief and may join the project at a later point in time. The project advisory team consists of regional planning managers, the manager of WREMO and a flood protection representative. The project team reports to the Coordinating Executive Group of WREMO and the Chief Executives Forum.

A stocktake of what science councils have commissioned and what is currently being done to manage the risks we face from natural hazards is nearing completion. This will be the basis for a gap analysis and set the framework for the strategy. Next steps involve developing a series of objectives and starting a programme of public engagement on the strategy.

## Civil Defence and Emergency Management

### Wellington tsunami evacuation zone mapping

The department continues to work with civil defence emergency management. The latest work has involved updating the understanding of tsunami risk in Wellington Harbour.

### Lifeline mapping study

A new project is being discussed between WREMO, lifelines and Environment Policy Senior Policy Advisor (hazards) to undertake a stocktake of hazard map layers available in order to identify gaps and identify research needs. Currently there are no landslide risk maps for the region and GNS Science is looking to start a programme of research into landslide potential in urban areas around the Wellington Region. This may provide useful opportunities to form a partnership and guide the research to produce a product that is useable in civil defence, lifelines and hazards planning applications.



## Presentations/Publications/Media

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

The Environment Policy Senior Policy Advisor (hazards) has been interviewed by The Dominion Post on a mega-thrust earthquake study, which made the front page, by The Wairarapa Times Age on climate change and by The Listener on tsunami and the blue line project.

## Financial reports

Policy	30 June 2015			30 June 2014
	Actual	Budget	Variance	FY Actual
<b>Income Statement</b>	<b>\$000</b>	<b>\$000</b>	<b>\$000</b>	<b>\$000</b>
<b>Period ending 30 June 2015</b>				
Rates & Levies	2,768	2,767	1	2,717
Government Grants & Subsidies	-	-	-	-
External Revenue	6	-	6	26
Investment Revenue	-	-	-	-
Internal Revenue	25	25	-	25
<b>TOTAL INCOME</b>	<b>2,799</b>	<b>2,792</b>	<b>7</b>	<b>2,768</b>
less:				
Personnel Costs	1,616	1,631	15	1,527
Materials,Supplies & Services	178	52	(126)	77
Travel & Transport Costs	19	7	(12)	25
Contractor & Consultants	486	429	(57)	289
Grants and Subsidies Expenditure	-	-	-	-
Internal Charges	241	215	(26)	235
<b>Total Direct Expenditure</b>	<b>2,540</b>	<b>2,334</b>	<b>(206)</b>	<b>2,153</b>
Financial Costs	-	-	-	-
Bad Debts	-	-	-	-
Corporate & Department Overheads	459	459	-	415
Depreciation	6	6	-	7
Loss(Gain) on Sale of Assets / Investments	-	-	-	-
<b>TOTAL EXPENDITURE</b>	<b>3,005</b>	<b>2,799</b>	<b>(206)</b>	<b>2,575</b>
<b>OPERATING SURPLUS/(DEFICIT)</b>	<b>(206)</b>	<b>(7)</b>	<b>(199)</b>	<b>193</b>
Add Back Depreciation	6	6	-	7
Other Non Cash	-	-	-	-
Net Asset Acquisitions	-	-	-	-
Net External Investment Movements	-	-	-	-
<b>NET FUNDING BEFORE DEBT AND RESE</b>	<b>(200)</b>	<b>(1)</b>	<b>(199)</b>	<b>200</b>
Debt Additions / (decrease)	-	-	-	-
Debt Repaid	-	-	-	-
Net Reserves (Increase) / decrease	-	-	-	-
<b>NET FUNDING SURPLUS (DEFICIT)</b>	<b>(200)</b>	<b>(1)</b>	<b>(199)</b>	<b>200</b>
<b>Policy</b>	<b>30 June 2015</b>			<b>30 June 2014</b>
<b>Capital Expenditure Statement</b>	<b>Actual</b>	<b>Budget</b>	<b>Variance</b>	<b>FY Actual</b>
<b>Period ending 30 June 2015</b>	<b>\$000</b>	<b>\$000</b>	<b>\$000</b>	<b>\$000</b>
Total Asset Acquisitions	-	-	-	-
Capital Project Expenditure	-	-	-	-
Asset Disposal Cash Proceeds	-	-	-	-
<b>Net Capital Expenditure</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## Financial variance analysis

- ▶ Policy net deficit is \$205k, mainly due to unbudgeted Whaitua committee costs
- ▶ Personnel costs are close to budget
- ▶ External spend on materials includes committee member fees which are more than planned in the budget
- ▶ Travel costs are close to budget
- ▶ Consultants costs are over budget due to costs of second Whaitua Committee
- ▶ Internal charges are more than budget due to additional ICT costs for PCs
- ▶ There is no capital budget or spend

Performance Measure	Performance Target		Comment
	Baseline	2014/15	
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	Work is underway to implement the RPS and progress the methods in the RPS, including monitoring of the RPS implementation.
That regional plans are reviewed and adopted	Review of regional plans has been underway since 2009	Review of regional plans continues	The Proposed Natural Resources Plan for the Wellington Region was approved by Council on 30 June 2015 to be publicly notified on 31 July 2015.

## Risk analysis

A potential risk to the time line of the Regional Plan review related to potential reforms of the Resource Management Act have diminished as a result of the Northland by-election result.

## 1.2 Environmental Regulation



### Overview

Notified and 'national' consenting workload remained steady in the last quarter. This quarter's major consenting work was dominated by pre-application and assessment and hearing work on a number of major notified applications

Non-notified consent workload rose in the last quarter dominated by water take, dairy discharge and land use consent applications

Compliance activity focussed on completing annual compliance work programmes around major consented activities including TA infrastructure, monitoring of winter earthworks, and significant ongoing work in RoNS project compliance for construction and pre-construction work

A moderate to high investigations and enforcement load includes one new prosecution case

Annual overview:

- Resource consents processed: Considerably down on 2013-14 at 507
- Consent inspections: Up from 2013-14 at 2,384
- Enforcement: Number of Prosecutions initiated up this year; Infringement Notices issued down and Abatement Notices issued well down on 2013-14
- Appeals, declarations and objections: Number of actions down on 2013-14
- Incidents well up on 2013-14 at 1,149

### Key results for the quarter

- Consenting – Ongoing replacement consenting across the region for municipal waste water treatment plants at South Wairarapa; and pre-application work and processing of significant applications including Wellington Waterfront (Site 10 Kumutoto) redevelopment, GW Flood Protection Western Rivers global consents, and CentrePort Harbour deepening, and Wellington Housing Accord applications

- ▶ Roads of National Significance – Substantial ongoing compliance implementation and consenting work associated with the Transmission Gully construction and enabling works programmes; MacKays to Peka Peka construction work and Peka Peka to Otaki pre-tender phase
- ▶ Appeals – A moderate case load in appeals proceedings in the Environment Court
- ▶ Compliance – Development of a Strategic Compliance Programme across all RMA consented activities. Ongoing proactive compliance projects in Spicers Landfill, the 3-waters for major sites in Porirua, Wellington city, Kapiti Coast and Wairarapa
- ▶ Enforcement investigations – Enforcement cases: Stephens & Phillips prosecution and other significant investigations in progress
- ▶ Incidents – Ongoing roll-out of the Ozone Call Centre database and new Incidents module
- ▶ Ongoing Take Charge Porirua Area Assessment
- ▶ Regional Plan review input – final input to Draft Plan provisions post submissions
- ▶ Ongoing work to implement the Resource Management Amendment Act (RMAA) 2013 consenting provisions
- ▶ Ongoing work on major revisions of procedures manuals for Environmental Regulation statutory process work
- ▶ Further development of Strategic Compliance Programmes for 2014-15, and connected to this the completed review of the Resource Management Charging Policy

## Looking ahead

- ▶ Ongoing management of core statutory work with major enforcement investigations, a range of notified consenting projects, and RoNS projects implementation work
- ▶ Rolling out a comprehensive ‘strategic compliance’ framework for our consented monitoring programme
- ▶ Rolling out reviewed GWRC Erosion & Sediment Control Guidelines
- ▶ Implementation of the Proposed Natural Resources Plan provisions post submissions through consenting, advice and guidance
- ▶ Continuing Take Charge Porirua Area Assessment
- ▶ Ongoing work in Regional Sector groups to develop a national Strategic Compliance Framework approach and process
- ▶ Review, update and deliver Health and Safety in the field training for staff

## Resource consents

### Non-notified consents

In the past quarter we received fewer applications than the March quarter, but processed considerably more to completion – with an ongoing high number of replacement applications for existing water take consents that expire this financial year (also carried over from the March quarter), dairy discharge applications, bore permits, streamworks (including structures) and RoNS project consents.

Overall, well down on the number of consents processed compared to 2014-15.

Consents summary \* Figures exclude applications to the EPA

Item	June Quarter 2015	March Quarter 2014	June Quarter 2014
Consents received	120	141	126
Consents issued	130	76	164

Item	2014-15 year to date	2013-14 year
Consents received	549	591
Consents issued	507	635

Item	June Quarter 2015	June Quarter 2014
Median processing time frame	17	14

Item	2014-15 year to date	2013-14 year
Median processing time frame	16	18

## Notified and limited notified consents

A moderate load in assessments completed in the last quarter:

- ▶ **South Wairarapa District Council – Martinborough wastewater treatment plants re-consenting:** A Hearing was held on the 3 June 2015 and adjourned to allow for further information to be provided mainly in relation to the experts providing a joint statement in relation to instream monitoring requirements. Following Directions set by the panel, there was a series of pre-circulated evidence and statements (including joint statements by experts for both GWRC and the Applicant) – this resulted in the Hearing concentrating on those main areas of disagreement, namely around duration of consent and potential monitoring requirements/conditions. As previously reported, the proposal is essentially looking at a staged approach to upgrading waste water treatment infrastructure and reducing overall discharges into the river by utilising adjacent land disposal options. Stage 1A involves a series of minor upgrades to optimise its existing performance; Stage 1B involves the discharge of 24% of treated wastewater to 5.3ha of vacant land adjacent the site; Stage 2A involves irrigation of 42% of annual wastewater to Pain Farm; and Stage 2B involves the construction of additional storage at the Plant or Pain Farm to contain all treated wastewater. Stage 1 is programmed to 2022 and Stage 2 from 2022 to 2048.
- ▶ **South Wairarapa District Council – Greytown wastewater treatment plants re-consenting:** Again the proposal remains as previously reported – for a staged upgrade: Stage 1A (2014-2018) will involve some minor upgrades to the existing pond system to ensure it is performing to its optimal level; Stage 1B (from 2020) will see approximately 20% of the annual treated wastewater going to 16ha of adjacent land during low flow conditions; Stage 2A (from no later than 2035) – 62% of typical flow irrigated on land at Papawai Farm; and Stage 2B (from no later than 2040) – full discharge to land. The application was notified in December 2014, with 16 submissions being received – 11 opposed, 1 support, 3 neutral and 1 unclear. A provisional hearing date has now been set for 17 and 18 November 2015.
- ▶ **Wellington City Council – Southern Landfill extension (Stage 4):** – This project remains ‘parked’ in a regulatory sense with no change in this quarter. WCC has been busy completing engineering assessments of the existing pipework and infrastructure onsite to confirm that the site can be filled from the bottom up vs the top down. At present, WCC has advised they will withdraw the current application and lodge a ‘fresh’ one, possibly by the close of 2015 calendar year.
- ▶ **CentrePort Limited – Stage 1 Harbour Dredging:** As previously reported, CentrePort has applied to renew their existing consent to deepen the Wellington Harbour navigational channel and specified berths (existing consent expires in 2015); and seeks to obtain new resource consents for the same and additional proposed dredging and disposal activities. CentrePort is currently in consultation with GWRC regarding methodologies and collection of marine data and other technical information as part of the pre application phase. CentrePort released a public statement on the Stage 2 dredging proposal in February 2015; and is continuing with public consultation.
- ▶ **GWRC (Flood Protection) – Western Region global rivers consents:** These are applications to continue existing flood protection and erosion control operations and maintenance activities on the Hutt, Waikanae, Otaki and Waikanae Rivers. Public notification of the four applications will likely occur in Sept/Oct 2015. In the meantime, we are continuing to work with GWRC Flood Protection around possible options for running combined hearings for these applications.

### **Site 10 Redevelopment Limited Partnership & Wellington City Council - North Kumutoto**

**Project:** In October 2014 Site 10 Redevelopment Limited Partnership & Wellington City Council simultaneously lodged two resource consent applications relating to a proposed five-level

commercial building on Site 10 at North Kumutoto (Wellington waterfront), and the construction, maintenance and use of new and modified landscaped public open spaces and associated structures at North Kumutoto. GWRC and WCC jointly publically notified the applications in November 2014 – with 45 submissions received, 38 in opposition, 6 in support and 1 not stated.

In a first for this Council, on 19 December 2014, GWRC and WCC received formal requests from the applicant for direct referral of both applications to the Environment Court which were approved on 29 January 2015. Officers' reports and recommendations to the applicant were submitted on 31 March 2015, and have subsequently been lodged with the Court. Environment Court mediation was held on 24 June 2015; there were no agreed outcomes from this forum. The Environment Court hearing is expected in late August 2015.

### Non-notified consent of interest

- ▶ **Porirua City Council, municipal wastewater treatment plant – Short term maintenance consent:** – Wellington Water applied in late January 2015 on behalf of PCC for consents required to carry out a refurbishment to the plant's clarifiers, as well as the replace pumps that feed wastewater the clarifiers. This consent was granted in early July. Consent conditions include the requirement to only have one of the three clarifiers off-line at any time, and communicating the potential health effects to recreational users of Titahi Bay via a risk communication strategy, to be prepared in consultation with Regional Public Health. Work under these consents is expected to commence in August.
- ▶ **HASHA Application** – Hunters Hill Ltd lodged our first HASHA application to undertake earthworks and reclaim an ephemeral stream at 172 Mark Avenue, Lincolnshire Farm. The proposal for earthworks and subdivision is a joint application with GWR and WCC as it falls within the approved WCC Special Housing Area (SHA). The application is on hold, at the applicant's requests, for further information.

### Major pre-application discussions continue for:

- ▶ **Woodridge Block:** Cardno is currently preparing to lodge a consent application for the remainder of the Woodridge development in relation to land use consents and discharge permits for bulk earthworks. Lodgement of this application is expected by mid-late 2015. As the site has been identified as a Wellington Housing Accord area, the developer has indicated that they intend to lodge a resource consent application under the HASHA Act. This will be our first application under the HASHA legislation. The implementation of the Wellington Housing Accord is discussed further in the *Project Work Programme* section of this report.
- ▶ **Wellington International Airport Limited (WIAL):** WIAL met with GWRC recently to discuss the proposed airport runway extension. After receiving confirmation in January 2015 that the extension was viable, Wellington Airport has engaged a number of technical experts and consultants to put together the relevant consent reports which will form a large part of their resource consent application. Their plan is to lodge with the EPA around October 2015. They also indicated that informal public consultation was scheduled to take place over a 6-week period sometime during April, May and June. Due to delays, this timeframe will need to be rescheduled. We believe the timeframes are considerably tight and we are currently working with WIAL and the EPA to ensure the process is efficient and streamlined.

### Board of Inquiry – national consenting projects including implementation

- ▶ **NZTA – Transmission Gully RoNS:** Recent work has occurred at a high level to begin to strengthen relationships and develop a more collaborative working relationship between GWRC,



the Territorial Authorities NZTA, Wellington Gateway Partnership and Leighton Heb Joint Venture (LHJV). Key outcomes to date from these workshops have been the establishment of a *Steering Group* (effectively an oversight and 'governance' group containing representatives from the participating organisations) and *Consenting and Compliance Strategy Group* (made up of key operational staff from the organisations).

The *Steering Group* is charged with ensuring the regulatory work of the project remains on track, ways to work more collaboratively and effectively are built in, and project communication is clear and effective across all organisations. The *Consenting and Compliance Strategy Group* is working to form consistent and agreed interpretation of consent conditions, and look at how process can be streamlined through modifications to conditions or other agreed enhancements. The Group will also develop a clear line of sight across the LHJV work programme which will allow for an appropriate allocation of regulatory and technical resource to be placed in the right areas at the right time.

In addition, 'collaboration workshops' will be held involving key staff and consultants from all participating organisations which will look at how we best work together and how joint aspirations, processes and outcomes are met.

The Steering Group has also engaged leading RMA practitioners, David McMahon (who was also a Commissioner on the Board of Inquiry) and Christine Foster to support both the steering and strategy group's wider work.

On site, works are continuing at Lanes Flat with the establishment of the site compound and office and establishment of sediment retention devices at Wainui saddle. Review and workshopping work is occurring on the Construction Environmental Management Plan (CEMP) and associated sub-plans to enable certification by the Councils. In addition, there are some key Enabling Works Management Plans being prepared by LHJV.

LHJV are in the process of preparing a revised works programme for the period up to February 2016, which will influence management plan production and consenting. We are expecting that a significant volume of review work will be required over the next few months, as participating organisations work towards commencement of bulk earthworks anticipated for this coming summer.

- ▶ **NZTA/MacKays to Peka Peka Alliance – MacKays to Peka Peka RoNS:** Construction of the M2PP expressway is ongoing. GWRC site audits are occurring weekly. The consenting load on M2PP has reduced over the past three months reflecting the progression of the project towards planned completion in late 2016. Compliance on site has generally been good, with the recent flooding events on the Kapiti Coast providing the Alliance with some challenges. The number of Construction Erosion and Sediment Control Plans has reduced over time, again reflecting the progress made in construction. Fortnightly consenting meetings between the RoNS Project Leader and M2PP planners and compliance managers, also continues, as does a monthly compliance meeting.
- ▶ **NZTA – Peka Peka to Otaki RoNS:** Opus has been contracted by NZTA to prepare the 'specimen design' for the Peka Peka to Otaki RoNS project. The RoNS team has been working closely with the NZTA PP20 team in reviewing design refinements and mitigation proposals. An Advisory Group with representatives from GWRC, KCDC and NZTA continues to meet quarterly to discuss upcoming work and resolve any higher level matters. We understand that the project will go out to tender in September this year, with likely start of construction in 2016. In the lead up to this we expect an increased workload coming from review of draft management plans, design refinements and potentially condition interpretation work. It is also likely that the RoNS team will need to engage with tendering parties.

- ▶ **NZTA – Mt Victoria Tunnel duplication:** Following the Basins decision, there has been no further discussion with NZTA on the Mt Victoria Tunnel duplication project.

## Appeals, objections, and declarations

Ongoing work on a several existing appeals and objections:

- ▶ **A J Barton – GWRC consent application objection:** As previously reported, 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. We have now received an amended application from Mr Barton's technical expert which included much of the additional information originally requested. We are currently assessing this 'revised' application.
- ▶ **AJ & RM Teasdale – Te Marua Golf Club – erosion protection works:** This was an appeal to the Environment Court of a decision (July 2014) to grant consent to undertake erosion control works on the Hutt River along the north-western edge of the golf course. Mediation was held on 11 November 2014, where the appellant sought to determine a preferred alignment for the river, as well as a commitment from GWRC to assist with funding for works beyond the isolated works fund. A court hearing was held on 30 April 2015; the decision was released on 5 May 2015 in favour of the Te Marua Golf Club and to uphold the original decision which was issued in July 2014.

## Consented compliance monitoring

- ▶ **Kapiti Coast District Council – public water supply project (River recharge with groundwater):** This quarter saw a milestone in the River recharge with bore water scheme. A powhiri was held for the refurbished Waikanae Water treatment plant, attended by the GWRC compliance officer, KCDC council staff, mayor, and chair of the Te Atiawa Water Working Group – amongst others. The opening also saw the first flows through a specially constructed channel that will 'naturalise' and oxygenate the water from the bores, that will be used to 'top up' the Waikanae River. During this quarter no triggers levels were reached, with KCDC in full compliance with their consent conditions.



The discharge structure to the Waikanae River – discharging groundwater which has been 'naturalised' through the swale ('tuna') during the Waikanae WTP Opening/powhiri.



The swale or 'tuna' during the Waikanae WTP opening/powhiri – groundwater being 'naturalised' before discharge into the Waikanae River (via the discharge structure). The groundwater enters the swale at the far end of the channel and flows down the swale to the intake we can see in this photo (where it is then piped a short distance to the discharge structure)

- ▶ **PCC Porirua wastewater treatment plant – discharge to Coastal waters at Rukatane Point:** In this quarter there were many rainfall events that saw the plant bypass, with partially treated effluent discharging to the sea at Rukatane Point. Given this, the plant continues to be rated as significantly non-compliant with their consent conditions. We are now receiving better information from Wellington Water on bypasses from the plant, and their effects, which is increasing our understanding of the significance of the issue. We have also continued discussions with WWL and Regional Public Health on improving the communications to the public to mitigate the potential health effects on the users of Titahi Bay and nearby coastal areas for recreation or the collection of mahinga kai caused by bypasses. We are also considering whether to instigate a formal review of this consent. While this regulatory pathway is not often used, we believe that there is potentially a strong case given the number of bypass overflows from the plant in the last five years, and the potential ecological, health and tangata whenua effects.
- ▶ **Wellington City Public Council – Global stormwater discharges to coastal waters:** The roll out of the actions from the approved Stage 1 Integrated Catchment Management Plan (ICMP) continued in what was a 'business as usual' quarter. Further work was also included developing a Stage 2 ICMP for the Lambton Harbour catchment, which is scheduled to be completed in March 2016. WCC is also seeking to improve the effectiveness of the consents *Stormwater Consultative Committee* through a refocussing of the group's terms of reference, and having the group headed by an independent chair. To date these changes seemed to have been effective.
- ▶ **Porirua City Council – Spicer Landfill operations:** The instances of odour from PCC's Spicer Landfill affecting Tawa residents have continued, and increased over the last quarter – with 129 notifications received. This has, understandably, been a significant frustration to those residents affected in the community. The compliance efforts in this quarter have focussed on three key areas. One, increasing communication – principally via information on the dedicated website set up for our Spicers regulatory work; and updating each notifier on odour investigation outcomes; as well as participation in a second public meeting held in late June. Two, the collection and assessment of information about the operation and performance of the landfill's gas collections system; and three, 'regulatory pressure' through the issuing to PCC and Envirowaste (the landfill operators) abatement notices relating to the landfill gas collection system. With drivers for odour discharges from this landfill being complex and interlinked, we continue to rely on the expert support provided by our consultants from Cardno. Work in the next quarter includes the review of an updated Landfill Management Plan – a critical document for the operation of the site. This site remains a priority site for the work of the department, and is currently our number 1 strategic compliance issue for the region.
- ▶ **Masterton District Council – Wastewater Treatment Plant (Homebush):** The Homebush plant is still in the early phases of implementing a new summer discharge to land regime following re-consenting in 2007-09. As previously reported, the plant faced a number of teething issues regarding the automated operation of border strip irrigation technology, particularly around the over-application of wastewater. We are currently actively monitoring the site and we are due to receive written reports on the issue from MDC, as required by conditions of consent, in August.
- ▶ **Regional Earthworks Sites:** The 2014/15 earthworks season came to a close on 31 May 2015, and we are now in the winter-works phase of operations. Three winter-works applications were received (and approved) in the lead up to the earthworks season ending. The assessment of applications is based on site resilience and compliance performance throughout the earthworks season. High rainfall in June has prevented many consent holders from completing their works in the specified time allowed; therefore, we expect to receive requests timeframe extensions in the coming weeks.

## Environmental incidents

278 incidents were notified and responded to in the quarter, down from 341 in the previous quarter and 288 in the December 2014 quarter. A summary breakdown of incidents is reported 6-weekly through the Councillor's Bulletin.

## Enforcement

### Abatement and infringement notices

Item	June Quarter 2015	March Quarter 2015	June Quarter 2014
Abatement notices	5	5	6
Infringement notices	10	3	0

Item	2014-15 year	2013-14 year
Abatement notices	29	81
Infringement notices	30	36

### Prosecutions and enforcement orders

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

- ▶ **Selwyn Stephens and Warren Phillips:** Three charges were laid on 17 March 2015 against each party as a result of stream works resulting in reclamation, disturbance and diversion of a stream within the Pauatahanui catchment. Both parties have pleaded 'not guilty' and this will progress to a defended hearing around November this year.

### Take Charge Programme

As previously reported, the Take Charge programme has started working in the Porirua area at the beginning of the financial year. We are currently focusing on businesses in the Wall Place area. A walk-over of the area was undertaken in late September and early October to identify businesses that may benefit from participating in the pollution prevention programme.

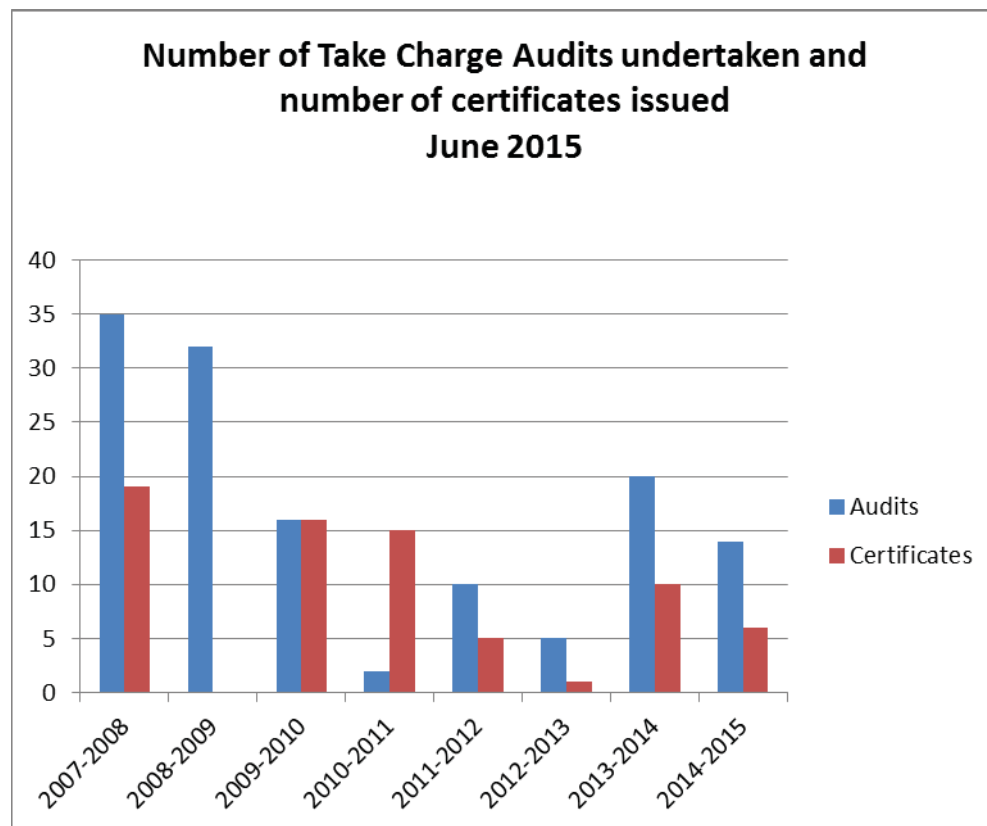
During the April to June quarter a further four businesses received a Take Charge audit bringing the total number of businesses audited in the Wall Place area to 14. Four businesses have now

completed the programme requirements and been issued with a programme completion certificate. The remaining businesses are working towards completing the programme requirements.

Requirements vary between businesses, but the common areas are preventing vehicle or equipment wash water entering the Stormwater network, ensuring hazardous substances have some degree of secondary containment and improving spill kits and spill procedures.

A short article appeared in the April edition of Our Region showcasing two of the businesses who completed the programme, All Traffic Management Systems and Berry and Mexted Auto Electricians.

The number of audits has decreased this year as the work in the first half of the year was identifying and prioritising the catchment areas and identifying the businesses within each catchment requiring audit.



## Projects work programme

Progress on recent significant projects includes:

### Strategic Compliance Project

During this quarter the Strategic Compliance Project (SCP) focussed on refining monitoring programmes that were designed by Environmental Regulation staff in December and developing and improving supporting database and reporting systems. One outcome of this is that more focus will be placed on programming and completing compliance at key milestone points during any given year. The new monitoring programmes have resulted in a number of changes to compliance charging schedules in the Resource Management Charging Policy (see below).

## Review of Resource Management Charging Policy

This quarter the review of our Resource Management Charging Policy was completed. Submissions were received on proposed amendment to our Resource Management Charging Policy in April. Key changes proposed are:

- ▶ An increase to our charge out rate of \$5/hour and changes to our initial fixed application fees
- ▶ Updated compliance monitoring charge schedules based on outcomes from the Strategic Compliance Project (see above)

There are a number of other minor changes to the Policy. A hearing was held at the same time as the Long Term Plan hearing to consider submissions and decide on the proposed amendments. No changes to the proposed amendments were made by the Hearings Committee. The Council adopted the updated Policy in late June.

## National water use data requests

The collation of the water use dataset for 2013/14 was completed during the quarter. The Ministry for the Environment requires all water use data submitted by water take consent holders. The data request this year was more detailed and complex and is taking time to work through. In addition, all water use data has been uploaded onto a Water Quantity module on the LAWA website.

## Revoking of Dam Safety Regulations

On 25 June, Cabinet announced the revoking of the Building Act (Dam Safety) Regulations would be revoked.

This has brought to a close a period on multiple deferments of the Regulation's implementation over a number of years.

Instead, the Government is intending to bring the ultimate intent of the Regulations (the protection of communities, infrastructure and environments from potential dam failure), under the umbrella of the RMA Phase 3 reforms. Their intention is to tie this element of dam management into the permitting system which already applies to dams under this Act, and believe that dam safety is more in line with the purpose and principles of the RMA. The regulatory framework outlined in the Building Act was also seen by the Government as being too onerous for the level of risk, and would impose excessive compliance costs on some dam owners.

The Regional Sector will continue to work through these and subsequent matters around potential RMA reform, in the wake of the revocation, with a view to developing nationally consistent approaches, practice and positioning ahead of reform announcements.

Currently we are considering a number of basic follow up actions to communicate the changes to dam owners in the first instance.

## GIS layer for incidents

In coordination with ICT a GIS layer has been set up which identifies on a map the location of all historical environmental (pollution) incidents held in our EDocs filing system. There has been a lot of activity in this quarter with ICT to identify a system and method for creating a GIS layer for all future environmental incident locations. This will improve the organisational knowledge of environmental incidents within catchments and recurring issues and incident history for officers.

## Sampling training

Environmental Regulation staff participated in competence based investigation and compliance sampling training during last December quarter. The training module was developed by our own staff to ensure maximum relevance – involving resources to support it as well as classroom and field

based training and assessments. The aim of the training is to ensure that our sampling decision making, process and methods are absolutely robust. This training was rolled out to the RONS team during the last quarter. During this quarter sampling bags for transporting sampling equipment in the field have been sourced and rolled out complementing the training.

### Manuals

Three manuals are currently being drafted:

1. **Investigation Manual** – outlines the process and procedures to follow from non-compliance through to investigation and enforcement process.
2. **Incident Response Manual** – outlines the process and procedures to follow for responding to an incident notification through to the point where non-compliance is detected.
3. **Take Charge Manual** – how to identify areas for audit, carry out audits, liaising with businesses, requirements for certification etc. Includes practices and procedures that have been developed over the last year.

The three manuals will be a good resource for staff.

### Review of Erosion and Sediment Control Guidelines

Our review of the Erosion and Sediment Control Guidelines is approaching completion. We are still awaiting a technical peer review of the drafted Guidelines.

## Financial reports

Regulation Income Statement Period ending 30 June 2015	30 June 2015			30 June 2014
	Actual \$000	Budget \$000	Variance \$000	FY Actual \$000
Rates & Levies	2,365	2,365	-	2,265
Government Grants & Subsidies	-	-	-	-
External Revenue	2,910	2,400	510	2,720
Investment Revenue	-	-	-	-
Internal Revenue	63	125	(62)	203
<b>TOTAL INCOME</b>	<b>5,338</b>	<b>4,890</b>	<b>448</b>	<b>5,188</b>
less:				
Personnel Costs	2,785	2,736	(49)	2,647
Materials,Supplies & Services	85	105	20	78
Travel & Transport Costs	38	45	7	42
Contractor & Consultants	1,119	625	(494)	1,529
Grants and Subsidies Expenditure	-	-	-	-
Internal Charges	569	574	5	544
<b>Total Direct Expenditure</b>	<b>4,596</b>	<b>4,085</b>	<b>(511)</b>	<b>4,840</b>
Financial Costs	-	-	-	-
Bad Debts	(27)	-	27	196
Corporate & Department Overheads	750	750	-	678
Depreciation	21	41	20	30
Loss(Gain) on Sale of Assets / Investments	-	(16)	(16)	-
Total Indirect Expenditure	744	775	31	904
<b>TOTAL EXPENDITURE</b>	<b>5,340</b>	<b>4,860</b>	<b>(480)</b>	<b>5,744</b>
<b>OPERATING SURPLUS/(DEFICIT)</b>	<b>(2)</b>	<b>30</b>	<b>(32)</b>	<b>(556)</b>
Add Back Depreciation	21	41	(20)	30
Other Non Cash	-	17	(4)	-
Net Asset Acquisitions	-	(56)	38	-
Net External Investment Movements	-	-	-	-
<b>NET FUNDING BEFORE DEBT &amp; RESERVE</b>	<b>19</b>	<b>-</b>	<b>(18)</b>	<b>(526)</b>
Debt Additions / (decrease)	-	-	-	-
Debt Repaid	-	-	-	-
Net Reserves (Increase) / decrease	-	-	-	-
<b>NET FUNDING SURPLUS (DEFICIT)</b>	<b>19</b>	<b>-</b>	<b>(18)</b>	<b>(526)</b>
<b>Regulation Capital Expenditure Statement Period ending 30 June 2015</b>	<b>30 June 2015</b>			<b>30 June 2014</b>
	<b>Actual \$000</b>	<b>Budget \$000</b>	<b>Variance \$000</b>	<b>FY Actual \$000</b>
Total Asset Acquisitions	-	72	72	-
Capital Project Expenditure	-	-	-	-
Asset Disposal Cash Proceeds	-	(16)	(16)	-
<b>Net Capital Expenditure</b>	<b>-</b>	<b>56</b>	<b>56</b>	<b>-</b>



## Financial variance analysis

- ▶ Regulation has a net deficit of \$2k which is \$32k worse than budget. The RONS projects (Roads of National Significance) have contributed a \$165k surplus which offsets some of the costs of other EREG activities
- ▶ External income is \$2,910k which is \$510k more than budget. \$972k of this invoicing is staff time and on charging of costs for RONS project work
- ▶ Regulation consultants & contractors spend of \$1,119k is \$494k more than budget due to using consultants for consent processing and compliance monitoring work and includes \$536k for RONS projects.
- ▶ Personnel costs are \$49k over budget but around 50% of staff costs are on charged to consent holders
- ▶ Travel costs and materials are all close to budget
- ▶ There is no capital spend this year

Performance Measure	Performance Target		Comment
	Baseline	2014/15	
Percentage of resource consents <sup>1</sup> processed within 20 working days <sup>2</sup>	98% (2010/11)	99.6%	100%  Two consents as part of one suite processed beyond statutory timeframes in the June quarter.  507 consents processed.
Percentage of monitoring inspections completed for resource consents with individual monitoring programmes	98% (2010/11)	100%	100%  2,384 consents were inspected.
Percentage of environmental incidents reported to the 24-hour incident response service investigated in accordance with legal timeframes <sup>3</sup> for enforcement	68% (2010/11)	100%	99.74% (3 exceedances over year)  No exceedances this quarter.  1,149 environmental incidents investigated.

## Risk analysis

None identified in this department.

## 1.3 Environmental Science

### Overview

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

Work around provision of science and environmental information for Ruamāhanga and Te Awarua-o-Porirua Whaitua as well as ongoing coordination and management of the Collaborative Modelling Project

Continuing to support the regional plan process with additional investigations and research as required, and provision of scientific information to major projects including Wairarapa Moana, Mangatarere, WWUP and Wellington and Porirua harbours

Continuing to define working in partnership with iwi in science in association with Te Hunga Whiriwhiri (SCEG)

Investigating a multi-agency approach to delivering the monitoring and research required to support regional operational activities and community outcomes

Provision of a range of advice and information to internal departments and community

### Key results for the year to date

- ▶ Completion of an Implementation Plan for the department which outlines actions for 2014-2016 in order to realise our strategy goals and objectives
- ▶ Commencement of a comprehensive review of all SOE monitoring programmes
- ▶ Completion and submission of a first draft Asset Management Plan for the department
- ▶ Development and signing of a Memorandum of Agreement between the Environmental Science department (ESci) and Water Supply/Wellington Water for the provision of hydrological and terrestrial monitoring services by ESci
- ▶ Successful gazettal of a new Masterton airshed
- ▶ Successfully secured joint funding for two Victoria University summer scholarships
- ▶ Completion of the 2013/14 Annual Data Reports for our river, lake, coast, hydrology, groundwater quality and soil quality State of the Environment monitoring programmes

- ▶ Delivered three presentations at the International Harmful Algae Conference in October (Wellington) and six presentations at the Water Symposium in November (Blenheim)
- ▶ Rolled out a new communications plan and campaign (“Summer Check”) for recreational water quality in preparation for summer, including the development of a new interactive map on our website which displays current water quality and toxic algae warnings
- ▶ Delivered, on behalf of the regional sector, analysis of national water quality data for the launch of the new coastal and revised freshwater recreational modules on LAWA
- ▶ Production of a YouTube clip <https://www.youtube.com/watch?v=G9A0W1-lq9E> illustrating how kaka have spread out from Zealandia since their successful re-introduction in 2002
- ▶ Secured a partnership with MfE and MPI on the collaborative modelling project (development of a framework for scenario testing of land use impacts on water quality to inform the whitua), including a successful application to the Community Environment Fund (MfE) worth \$100k
- ▶ Completion of two major reports on Kapiti Coast groundwater resource investigations
- ▶ Delivered a science seminar and completed several technical reports that inform implementation of the Porirua Harbour and Catchment Strategy and Action Plan
- ▶ Development and signing of a Memorandum of Agreement between ESci and the Biodiversity department to define roles and responsibilities, interdepartmental processes and monitoring services provided by ESci
- ▶ Development of the inaugural regional climate summary (autumn edition)
- ▶ Completion of the final design for the new air quality monitoring station to be installed on Willis Street
- ▶ Publication of the 2014 Air Quality Annual Data Report
- ▶ Completion of a threat ranking process for freshwater fish in the region and a discussion document on regional fish monitoring needs in conjunction with DOC and Fish and Game
- ▶ Presentation to the Upper Hutt City Council (UHCC) mayor and councillors on benthic cyanobacteria (toxic algae) in the Hutt River which included the latest findings from investigations undertaken over summer
- ▶ Completion of a year-long water quality monitoring programme at Lake Waitawa
- ▶ Provision of advice on the development of a recreational water quality monitoring programme for the Apia waterfront (Samoa), through the Pacific Technical Advice programme run by Local Government New Zealand and Ministry of Foreign Affairs and Trade
- ▶ Publication of 2014/15 Recreational Water Quality report cards
- ▶ Publication of the Our Environment at a Glance – Environmental Science Annual Summary Report 2013/14
- ▶ Completion of the first phase of the Friend Street project to remediate contamination on two residential properties
- ▶ Presentation to the farmer field day in Mangatarere and development of a brochure titled “Reducing impacts of winter grazing on soil and water quality”
- ▶ Completion of a draft memo looking at contamination in the Waingawa Wetland (and surrounding industrial area) and the Waingawa/Parkvale aquifer
- ▶ Completion of a draft document titled “Terrestrial Ecosystems of the Wellington region”
- ▶ Development of a draft MOA between ESci and the Parks department
- ▶ Revitalisation of the Environmental Science department strategy, including a new strategy document and posters

- ▶ Planning and coordination of a two day wānanga with local Wairarapa Kaitiaki re the Collaborative Modelling Project

## Looking ahead

- ▶ An ongoing focus for the year is the review of SoE monitoring programmes which will take into consideration future information requirements (particularly for the whitua) as well as central government directives such as the National Policy Statement for Fresh Water (NPS-FM) and NOF
- ▶ The development of a permanent air quality monitoring station in conjunction with WelTec for our Wellington City monitoring site
- ▶ Increased science requirements for the management of contaminated sites, in particular Te Mome Stream, Miramar Gasworks and a residential site in Wellington City
- ▶ Ongoing development of MoA's (Memorandums of Agreement) with various internal departments to define services provided by the science department
- ▶ Development of cultural health monitoring indicators and investigation of a joint approach to environmental monitoring and reporting
- ▶ Establishing a multi-agency approach to fish monitoring and research with our iwi partners
- ▶ Working in partnership with iwi, NGO's and TA's to provide an increasingly integrated monitoring network
- ▶ A modelling framework for scenario testing has been developed and future work will be focussed on refining the architecture required to run scenarios for the Ruamāhanga Whitua
- ▶ Ongoing input to the Ruamāhanga and Te Awarua-o-Porirua Whitua
- ▶ Ongoing input to LAWA, the next phase being a new module for lakes
- ▶ Implementation of the department's Communications Plan
- ▶ A complete revamp of the Environmental Science webpages including making monitoring data more readily available and accessible
- ▶ Development of a business plan (and associated business processes) to inform the departmental progress in accordance with the LTP and assist in future LTP development

## Departmental activity

### General

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

- ▶ Provision of a range of technical advice to Environmental Regulation, Environmental Policy, Biodiversity, Biosecurity, Parks, Flood Protection and Water Supply departments
- ▶ Ongoing input and technical support for the Proposed Natural Resources Plan
- ▶ Input to the Environmental Monitoring and Reporting (EMaR) initiative including providing technical support to various project teams
- ▶ Ongoing input to LAWA including provision of technical and site information for a new hydrological module

- ▶ Ongoing support and provision of science information to the Ruamāhanga and Te Awarua-o-Porirua Harbour Whaitua Committees, particularly the development and coordination of the Collaborative Modelling Project
- ▶ Ongoing involvement in major projects such as the Wairarapa Moana project (and FreshStart for Freshwater Programme, (WWUP) and Porirua Harbour
- ▶ Engagement with mana whenua through the Te Hunga Whiriwhiri team on developing a partnership in science
- ▶ Science presentations to local and national conferences/audiences
- ▶ Involvement in interagency expert working groups and workshops on science issues of regional and national importance
- ▶ Development of the first regional climate summary (autumn edition)
- ▶ Review of the “Summer Check” campaign and ongoing improvements to public communication of recreational water quality information
- ▶ Publication of:
  - › 2014/15 Recreational Water Quality report cards
  - › Air Quality Annual Data Report 2014
  - › Our Environment at a Glance – Environmental Science Annual Summary Report 2013/14

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

## Air quality and climate

The first regional climate summary (autumn edition) has been developed in collaboration with the Hydrology team. This builds on the current hydrology seasonal summaries by including the impacts of global climate drivers on the region’s climate and the environmental impacts of climatic conditions in each whaitua. This report is currently being circulated for feedback.

Our climate scientist has presented seminars at NIWA and Victoria University of Wellington and is establishing collaborative relationships with both organisations.

There were three exceedances of the air quality standard for PM10 in Masterton, compared to 10 exceedances for the same period last year. The fewer number of ‘pollution days’ this year is likely to be due to differences in weather patterns. Last June the area of anti-cyclonic activity to the east of New Zealand was more intense than normal, blocking westerly winds and resulting in Masterton experiencing lower than average wind speeds. This June the opposite was observed, with the high pressure area located west of New Zealand leading to Masterton experiencing higher than average wind speeds. These higher wind speeds means air pollution is more readily dispersed.

There were 19 exceedances of the WHO guideline for PM2.5 in Masterton, and three in Wainuiomata. New Zealand does not currently have a national air quality standard for PM2.5.

We contributed to the development of an air quality improvement strategy for Masterton which is being led by Masterton District Council.

The final design for the new air quality monitoring station to be installed on Willis Street has been completed, and the new station will be installed by the end of the calendar year.

A draft discussion document outlining proposed projects for investigating traffic-related air pollution has been prepared and will be circulated for comment.

The 2014 air quality annual data report has now been completed.

## Aquatic ecosystems and quality

Staff have been scoping a project to improve the management of aquatic biological data collected by the department. One of our scientists attended a workshop with Hawke's Bay and Horizons regional councils and Cawthron to discuss improvements to CADDIS, the database GWRC currently uses. Also discussed was GWRC's involvement in the BioServices Stack project, a joint regional council and NIWA project that aims to get regional councils storing biological data in a standardised form.

Representatives from DOC, GWRC and Fish and Game worked through a threat ranking process for freshwater fish in the Wellington Region. This is a DOC initiative and is the first time this process has been undertaken with fish at a regional level across New Zealand. This will feed into national threat listing processes and also aid regional councils to identify significant and/or priority sites for management.

## Rivers and streams

Work continues on the review of the Rivers State of the Environment monitoring programme, with a draft internal report completed in late April that sets out a case for a revised site network design and a stronger focus on ecological health.

A discussion document on regional fish monitoring needs has been drafted. As part of this, discussions were held with other GWRC departments, Fish and Game and the Department of Conservation to better understand their fish monitoring and information needs.

Scoping was undertaken for a periphyton (algae that grows on the river bed) monitoring trial which will help GWRC meet its monitoring obligations under the Proposed Natural Resources Plan and the National Policy Statement for Freshwater Management (NPSFM). The trial will assess whether periphyton cover can be used as a surrogate measure for periphyton biomass. Periphyton biomass is the measure stipulated in the NPSFM but is resource intensive to monitor, whereas periphyton cover is cheap and easy to monitor.

Three science staff gave a presentation to the Upper Hutt City Council (UHCC) mayor and councillors on benthic cyanobacteria (toxic algae) in the Hutt River. The presentation included the latest findings from investigations taken over summer. Research highlights include:

- ▶ Identifying a 2.8km stretch of the Pakuratahi River where plant available nitrogen increases over eight-fold. Groundwater inputs have been linked with this increase
- ▶ Identifying a 6.8km reach of the Mangaroa River where plant available nitrogen increases over 14-fold. Nitrification of organic matter from the Mangaroa Peatland has been identified as one of the contributing factors
- ▶ Identifying a 950m reach of the Hutt River opposite Trentham Memorial Park and Heretaunga Golf Club, where plant available nitrogen increases two-fold. Over 85% of this increase can be attributed to groundwater inputs

Findings from these investigations have been summarised in a memo, and all our knowledge of benthic cyanobacteria to date is being documented in a full technical report which is due to be completed in December.

During the quarter two Victoria University students that received summer scholarships to investigate nutrient sources entering the Hutt River presented their final reports:

- ▶ The first student undertook an investigation of nutrient concentrations in Upper Hutt city's stormwater network discharges. Overall sampling demonstrated that nutrient inputs to the Hutt

River from stormwater outfalls are low; however, further investigation is needed to assess nutrient inputs from stormwater and sewer infrastructure to groundwater

- ▶ The second student undertook a project consisting of literature review, GIS mapping and calculations to build a model of nitrogen inputs to the Upper Hutt aquifer. Trentham Race Course, golf courses and parks were identified as responsible for a disproportional loss of nitrogen to groundwater when compared to other land uses in Upper Hutt

Work continued on the Environmental Monitoring and Reporting (EMaR) project and Land, Air, Water Aotearoa (LAWA) website during the quarter. Several science staff participated in or led working group meetings relating to water quality, periphyton and/or macroinvertebrates.

A staff member also attended a workshop hosted by Auckland Council, who are exploring developing copper and zinc attributes for urban streams in their Regional Plan. If successful these attributes could potentially be applied across New Zealand via the National Objectives Framework (NOF).

## Lakes

A year-long water quality monitoring programme at Lake Waitawa was completed in June. Water quality in this lake was last monitored in 2009/10. Preliminary analysis of results indicates that water quality is similar to what it was five years ago; the lake remains in a very poor state with high nutrient concentrations and high algal biomass. Furthermore, counts of cyanobacteria indicate that the lake is rarely suitable for contact recreation. A formal report on the investigation will be prepared later this year.

## Estuarine and marine waters

Reports on the annual estuarine and beach monitoring were completed in June. Monitoring of Te Awarua-o-Porirua Harbour indicates that both estuaries are in good condition with low to moderate concentrations of sediment, nutrients and heavy metals.

Habitat mapping of Waikanae Estuary confirms that historical modification has had the greatest impact on the health of this estuary. Sedimentation is currently the major issue, and although sedimentation rates might be expected to be naturally high in a small tidal estuary such as this one, the fine muds being deposited are posing a risk to shellfish and other invertebrate communities living there.

Following the report on faecal plume modelling in Porirua Harbour prepared by DHI earlier in the year, further work was commissioned to assess the distribution and concentrations of faecal contaminants during dry weather and in the outer part of the harbour (towards Plimmerton). This followed a presentation to the Te Awarua-o-Porirua Harbour Joint Committee in late May, in which considerable interest was expressed in the modelling work and its potential application by harbour recreational users.

A citizen science project monitoring the success of seagrass transplanted in the Pauatahanui Arm of Porirua Harbour commenced in April. The project will test the idea that recolonisation of seagrass is prevented by a lack of seeds or fragments. The seagrass transplants and water quality will be monitored at monthly intervals by members of the Guardians of Pauatahanui Inlet and GWRC staff.

Our coastal scientist attended two workshops during June; an MfE workshop in Auckland which discussed establishing guidelines for sedimentation in coastal environments, and a Sustainable Seas National Science Challenge workshop in Wellington to identify research priorities, opportunities for collaboration and synergies with current work programmes.

## Recreational water quality

Report cards (for the region and each whaitua) for the 2014/15 summer have been completed and are available at <http://www.gw.govt.nz/annual-monitoring-reports/>. The full report will be available shortly.

In May over 420 people responded to an online survey of river and coastal users and provided information on their favourite swimming spots, as well as what they'd like to know more about and how they'd like to be informed about recreational water quality in the region. The survey responses will inform our review of the recreational water quality monitoring programme.

In May one of our senior scientists provided advice on the development of a recreational water quality monitoring programme for the Apia waterfront (Samoa), through the Pacific Technical Advice programme run by Local Government New Zealand and Ministry of Foreign Affairs and Trade. This involved travel to Samoa to meet with technical and local government staff, carry out an initial sanitary survey and water sampling round, and completion of a report outlining a recommended approach.

## Terrestrial ecosystems and quality

### Contaminated land

The Selected Land Use Register (SLUR) has been updated, with the previous ANZECC terminology being replaced by the current HAIL terminology. This was a large undertaking and ICT was very supportive during this time. Updates have also been made to the search function, allowing sites to be filtered by HAIL categories and activity types, making the database easier to use for reporting purposes.

Golder Associates has approved 78 new sites for inclusion on SLUR and the SLUR team responded to 72 SLUR enquiries during the quarter. The team has also been reviewing older sites as part of a plan to improve consistency and accuracy. Twenty-eight sites are currently being reviewed.

The first phase of the Friend Street project has been completed. The area of contamination on two residential properties has been delineated and a project plan prepared for remediation. Consent has been received from Wellington City Council and a contractor appointed to complete the work. MfE, Wellington City Council and GWRC will work together to complete the remediation.

### Soil quality

In association with two other regional councils and MfE, our senior land scientist contributed to the development of the proposed EMaR land-based indicators for national reporting. The project team is also investigating possible indicators for use on LAWA.

Our senior land scientist presented at the farmer field day (organised by Land Management) in Mangatarere. He presented information on the environmental impacts of winter forage crop grazing including nitrate leaching, sediment and phosphorus runoff, and greenhouse gas emissions. The presentation included the latest on-farm research which provided farmers with strategic grazing management techniques to help reduce sediment and nutrient losses. A corresponding brochure titled "Reducing impacts of winter grazing on soil and water quality" was prepared in conjunction with Land Management.

Soil quality monitoring was undertaken at drystock sites during late April/early May. Results from the soil quality programme also contributed to a national project evaluating bacterial community



DNA related to the nitrogen cycle in soil. This research is being completed in association with the Land Monitoring Forum.

Our senior land scientist also contributed to an MPI workshop on how regional councils use Overseer for policy, regulation and land management and attended the national MPI-chaired Cadmium Management Group meeting.

## Groundwater quality

Quarterly groundwater quality sampling runs were undertaken in June. Field staff again used the electronic fieldsheets via an iPhone app. The electronic fieldsheets appear to be working well and are good tools for minimising paper waste.

A memo looking at contamination in the Waingawa Wetland (and surrounding industrial area) and the Waingawa/Parkvale aquifer has been drafted and is ready for review. The memo summarises the findings of historic information and assesses the need for further environmental testing to determine the extent and cause of contamination.

NIWA has been working on a document of the fundamentals of groundwater ecosystems and the importance of protecting groundwater quality and ecosystems. This document provides a rationale for the inclusion of groundwater attributes in the Proposed Natural Resources Plan and is likely to become an important national reference document.

Our groundwater quality scientist attended a workshop on nitrogen in the environment. Often only the hydro-chemical processes are considered when making predictions about nitrogen movement in the environment, but this workshop focused on the importance microbial processes in the nitrogen cycle as well as assessing current tools (such as constructed wetlands, organic farming) as nitrogen mitigation measures.

## Terrestrial biodiversity

Positive responses have been received from landowners who were provided with information about terrestrial State of the Environment plots that were measured on their land over summer. They were provided details about the plant and bird species found, as well as the abundance of any pest species. We continue to collaborate and share the data with MFE and DoC as all three agencies are using the same monitoring system but at different points within the region (DoC monitors Crown land and MFE monitors woody sites for carbon monitoring purposes).

No bats were recorded in a number of potential habitat sites in Wellington City, despite 165 nights of recording. This work was undertaken for Wellington City Council.

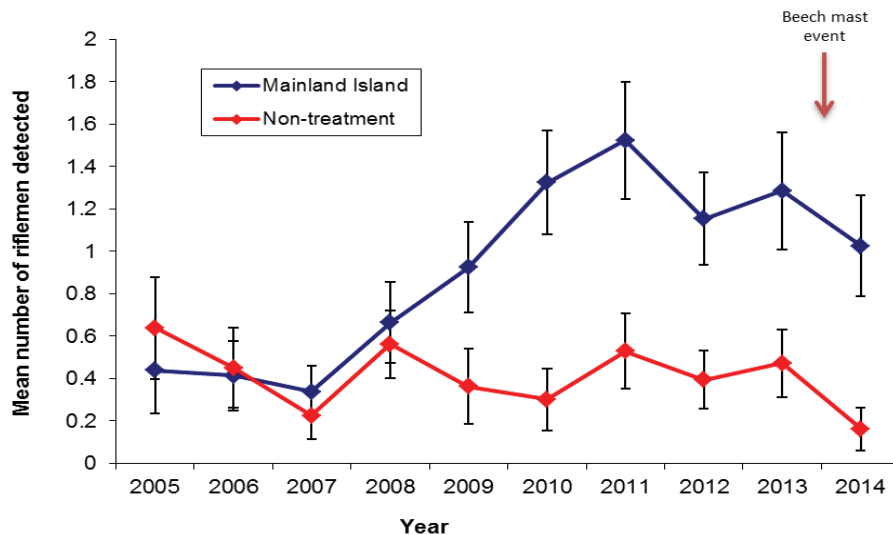
A draft document “Terrestrial Ecosystems of the Wellington region” has been written. Photos of the different ecosystem types are currently being sourced to provide illustrations for the document.

One of our senior monitoring officers recently ran a workshop at Restoration Day on “Innovations for monitoring pest animals”. As well as providing information about our work, it included presentations from a Victoria University student who has been using cameras to detect pest animals and GIS in Conservation who assist care groups with accessing spatial displays of electronic data.

Landcare Research has been working with our Terrestrial Ecologist on an analysis of citizen science bird data. Comparisons between the New Zealand Bird Atlas data collected every five years by the Ornithological Society of NZ and data collected through eBird <http://ebird.org/content/newzealand/> will be made for the Wellington region. GWRC has stored a large amount of data in eBird and has used the database for regional planning. Cornell University (who look after this international database) have

shown an interest in our work and asked permission to include our recent use of eBird citizen science data to identify bird sites of significance for the Natural Resources Plan as a case study in a publication.

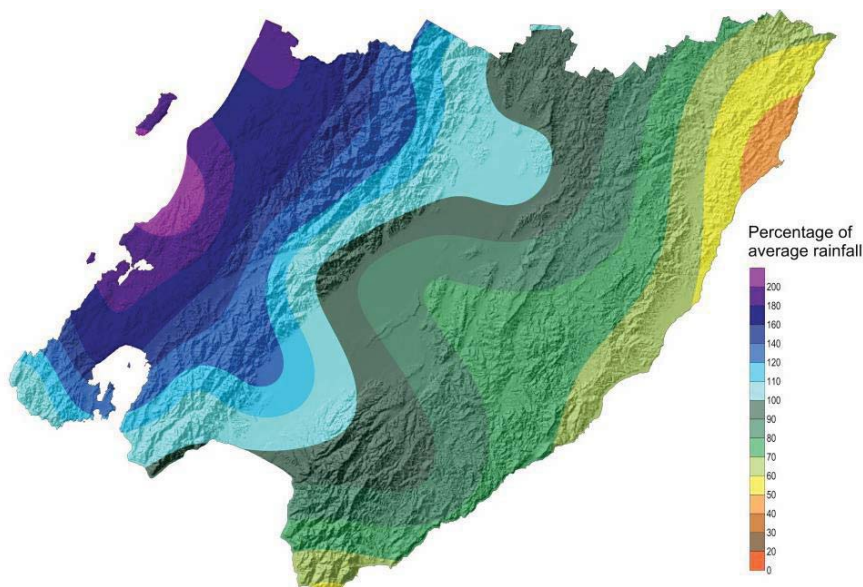
An analysis of the bird monitoring results from Wainuiomata Mainland Island is highlighting the benefits of long-term monitoring data. Annual bird counts have been undertaken in both the mainland island and a nearby non-treatment area for the past 10 years. There was no significant difference in the number of birds detected between 2005 and 2008, but since that time significantly more birds have been detected in the mainland island. Rifleman numbers have shown a particularly strong response to the pest control undertaken in the mainland island, with the mean number of birds now being 4-5 times higher than in the adjacent non-treatment area.



## Hydrology

Autumn (March to May) was a wetter than average season for western parts of the region, while north-eastern areas continued to receive lower than average rainfall after a very dry summer.

The map below shows rainfall that occurred during the 2015 autumn season as a percentage of the long term average, and demonstrates the obvious contrast between the west (above average rainfall) and the east (below average rainfall).



An obvious west to east gradient prevailed with parts of the Kapiti Coast receiving greater than 200 percent of normal rainfall, while the north-eastern Wairarapa Coast rainfall dipped below 50 percent of normal. A number of north-westerly weather events during April and May delivered higher rainfall to areas west of the Tararua Range divide, resulting in the pattern shown.

The table below shows how many Rain Days (more than 1mm of rain is recorded) occurred during autumn in different parts of the region. The number of Rain Days was slightly higher than normal on the Kapiti Coast and slightly below normal elsewhere. However, Heavy Rain Days (more than 25mm of rain) were much more frequent than normal. Most sites in the Kapiti, Porirua and Hutt areas had up to twice the normal number.

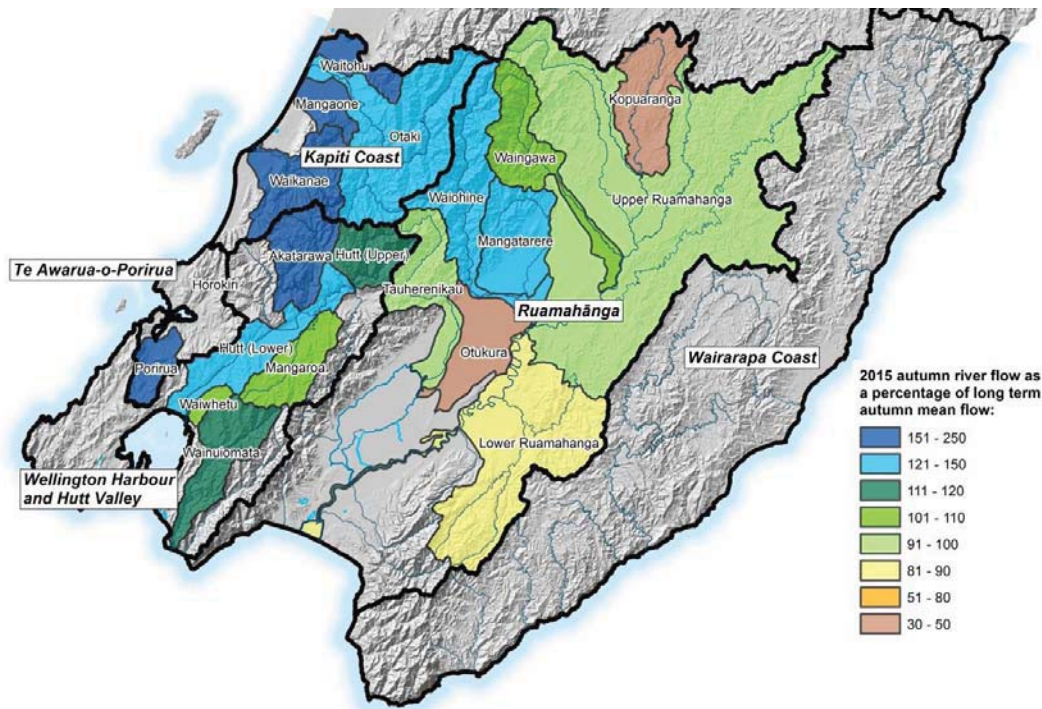
**Table 1: Number of Rain Days and Heavy Rain Days in each whaitua (averages for autumn are shown in the brackets)**

	Kapiti		Porirua	Hutt Valley and Wellington		Ruamahanga		Eastern Wairarapa
	Lowland	Hills	Lowland	Lowland	Hills	Lowland	Hills	Hills
<b>Rain Days (&gt;1mm)</b>	28 (25)	49 (42)	27 (27)	26 (29)	39 (32)	28	50 (55)	26-30 (25-35)
<b>Heavy Rain Days (&gt;25mm)</b>	6 (1)	21 (16)	4 (2)	6 (3)	10 (5)	2	25 (18)	1-2 (1-2)

The Ruamahanga River and those tributaries that do not originate from the Tararua Range had below average to average flows in autumn. The Kopuaranga River and Otukura Stream recorded less than 50 percent of their normal average autumn flows.

The western side of the region shows the highest autumn flows with over 200 percent of normal recorded in the Mangaone Stream and Waikanae River.

The map below shows river and stream flows during autumn 2015 as a percentage of the long-term average.



## 14th May Floods

Record amounts of rainfall were recorded in parts of the Kapiti Coast, Porirua and Lower Hutt areas on the 14th of May which resulted in significant flooding issues for many areas.

On the Kapiti Coast, the Wharemauku Stream reached a peak level estimated to be a 1-in-40 year event. Large areas of surface flooding occurred damaging homes and properties. The Waikanae River reached a 1-in-13-year level but was largely contained by flood defences.

As the rain event hit areas around Porirua more surface flooding occurred. The Porirua Stream peaked at a 1-in-20 year level. Torrential rain on the Belmont hills between Tawa and Maungaraki was estimated to be a 1-in-50 year event and resulted in a flood torrent in the Korokoro Stream which exceeded the capacity of the culverts under SH2. Flood water flowed over the highway and inundated a number of businesses in Cornish Street.

## Science strategy and information

There has been a significant amount of work involved in coordinating the necessary science input to the Natural Resources Plan and the Ruamahanga and Te Awarua-o-Porirua Whaitua Committees (refer next section).

Particular emphasis has been on the ongoing management and coordination of the Collaborative Modelling Project. The modelling architecture for the Ruamahanga has now been finalised. This is the result of many months of collaborative effort between staff and a number of expert modellers.

Staff were involved in planning and contributing to a two day wānanga to look at how Wairarapa mana whenua values will be reflected in the Collaborative Modelling Project, and what Kaitiaki see as the best way of bringing matauranga maori into the project. The wānanga focused on local Kaitiaki involvement and started with sessions explaining the modelling project and how it relates to the whaitua process, then went on to discuss the local perspective and the place of Kaitiaki in the project.

Day two of the wānanga took the discussion outdoors with a fieldtrip to look at the cultural history of the area as well as discussing the values of the sites. Modellers and iwi were able to discuss the physical and metaphysical characteristics and take away a greater understanding of the collaborative modelling process and how mana whenua values can feed into it.



### **Mana whenua and modellers at Kourarau Dam**

Our Senior Science Coordinator has drafted an MOA between ESci and the Parks department. This will be finalised early in the next quarter. Work will commence on developing MOA with Flood Protection and Environmental Regulation very soon.

The 2013/14 Environmental Science Annual Summary Report “Our Environment at a Glance” has been published. It will be launched internally with a mini-presentation on 3 August.

We have also revitalised the Environmental Science department strategy. New strategy documents are now available and we have also put up some posters outside our pod which displays our goals.

The fourth meeting of the external Science Leaders Group was held on 27 May and we discussed the potential science needs for each whaitua. The outcomes of the meeting will be used to help develop a science strategy and gaps analysis for each 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. Several staff are part of the Technical Advisory Group and we are involved in all three arms of the project; lake-edge wetland restoration, Land Environment Plans and monitoring.

A significant finding of some recent bird monitoring was that sixteen percent of the world’s population of dabchicks were counted on the eastern side of Lake Wairarapa. These birds flock to large waterbodies at this time of year, but the numbers noted this time far exceed previous records that date back to 1986. We do not know why this increase in dabchick numbers has occurred, but it highlights the importance of the Lake Wairarapa and the adjacent wetland habitats for many native species.



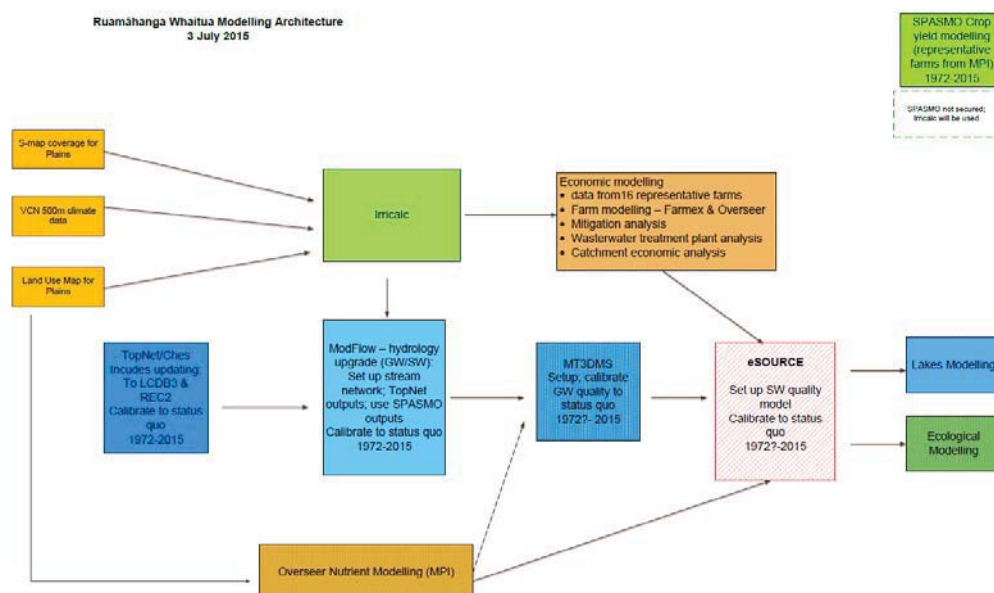
## Ruamāhanga Whaitua

To date a number of presentations and papers have been provided to the committee on the state of our environment, current trends and contaminant inputs to the catchment.

The committee is now working on attributes. So far they discussed potential attributes for two values; Mauri, Biodiversity and Habitat value, and Economic Use, Resilience and Prosperity.

Particular emphasis has been on the ongoing management and coordination of the Collaborative Modelling Project. This project aims to develop a knowledge framework which will ensure that we can answer the various questions that the whaitua are likely to have about land use and impacts on water quality. In particular, it will explore how to utilise existing models for scenario testing of various land uses and their impact on water quality.

The modelling architecture for the Ruamahanga has now been finalised (see figure below). There was one component of the modelling architecture that the modellers could not agree on so a panel of peers was set up to evaluate two proposed approaches and make a decision.



We are also organising a stakeholder engagement event in Carterton to inform stakeholders about the project.

## Te Awarua-o-Porirua Harbour Whaitua

The Te Awarua-o-Porirua Whaitua Committee was appointed in December 2014 but only had its first committee meeting in March of this year. To date the committee has been presented with background information on the catchment area, such as its history and geography and the National Policy Statement for Freshwater Management (NPS-FM).

They have had two field trips during the quarter; both providing an understanding of land and water management issues in the whaitua.

## Technical support for other departments and Wellington Water

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

## Environmental Regulation

- ▶ Technical advice was provided on a number of small consent applications during the quarter
- ▶ Ongoing technical advice has been provided for NZTA's MacKays to Peka Peka and Transmission Gully roading projects, including assessment of remediation plans for contaminated sites and marine monitoring
- ▶ Pre-application discussions continue with regard to marine sampling methods proposed by CentrePort for their harbour dredging project
- ▶ Advice has been given on the planting plan for the Stroma Way development in Te Marua

## Environmental Policy

- ▶ Work continued on the provision of technical information in support of the Proposed Natural Resources Plan (PNRP) which included:
  - » Completion of a report called "Aquatic ecosystem health and contact recreation outcomes in the Proposed Natural Resources Plan – Technical Guidance Document" which provides detail on how to assess whether plan objectives for aquatic ecosystem health and contact recreation are being met
  - » Completion of a report called "Aquatic ecosystem health and contact recreation outcomes in the Proposed Natural Resources Plan – Benchmarking Report" which highlights how our region's waterways stack up in terms of plan objectives for ecosystem health and recreational activities
  - » Provision of advice on waterbodies to be targeted for water quality improvement

## Flood Protection

- ▶ Aquatic staff have been working with Flood Protection investigating the effects of instream works on water quality and ecosystem health to support Flood Protection's forthcoming consent application hearings. An investigation of sediment plumes from instream works in the Hutt River was undertaken and one of our monitoring officers assisted with fish surveys
- ▶ Hydrology staff continue to work closely with Flood Protection in scoping options for the enhancement of flood models for short-term event predictions
- ▶ A draft report on the baseline monitoring of river birds on the Otaki, Waikanae and Hutt rivers 2012-2015 has been completed

## Biodiversity

- ▶ Aquatic and terrestrial staff carried out environmental monitoring associated with control of exotic weeds in Gollans Wetland near Lake Kohangatera. The monitoring results will be reported later in the year and inform ESci and Biodiversity on the effects of the spraying
- ▶ A fish survey was carried out at the Wainuiomata wetlands
- ▶ Ecologists continue to provide feedback on Key Native Ecosystem (KNE) plans and advice as requested
- ▶ Feedback was provided for mitigation plantings in Belmont Regional Park and the Winstone quarry as part of the quarry extension development plan
- ▶ Six KNE sites were monitored for the presence of rodents and small mammals in May. Rat tracking in Wainuiomata Mainland Island has fallen from a 35% to 19%, but is still above the target level of 5%. Rat levels in East Harbour Mainland island at 14% tracking rate is also above

the 5% target, but Baring Head (5%), Korokoro Valley (10%), Battle Hill (0%) and Queen Elizabeth Park (5%) are tracking at or below target levels

## Parks

- ▶ Terrestrial ecology staff provided information about the potential ecological impacts of motorised recreational access in Akatarawa Forest
- ▶ Two high impact permits (both for seed collection of threatened species) and six low impact permits were processed during the last quarter
- ▶ Planning was carried out with Parks and Biodiversity staff for bird and fish science displays at the Queen Elizabeth Park planting day in July

## Biosecurity

- ▶ Possum monitoring reports continue to be produced for the Regional Possum and Predator Control Programme

## Wellington Water (previously Water Supply department)

- ▶ Data from ungulate browse plots that have been measured every two years in the Wainuiomata/Orongorongo water collection area has recently been analysed. The frequency of browsing has decreased on all plant species. The presence of seedlings of some species increased, but the report noted that in general palatable species have been depleted historically and a substantial improvement in presence has not yet been found



## Financial reports

Science Income Statement Period ending 30 June 2015	30 June 2015			30 June 2014
	Actual \$000	Budget \$000	Variance \$000	FY Actual \$000
Rates & Levies	5,374	5,373	1	5,045
Government Grants & Subsidies	-	-	-	-
External Revenue	188	10	178	39
Investment Revenue	4	-	4	4
Internal Revenue	230	245	(15)	320
<b>TOTAL INCOME</b>	<b>5,796</b>	<b>5,628</b>	<b>168</b>	<b>5,408</b>
less:				
Personnel Costs	3,195	2,720	(475)	2,804
Materials, Supplies & Services	337	205	(132)	308
Travel & Transport Costs	136	82	(54)	104
Contractor & Consultants	980	1,063	83	874
Grants and Subsidies Expenditure	-	-	-	-
Internal Charges	604	477	(127)	607
<b>Total Direct Expenditure</b>	<b>5,252</b>	<b>4,547</b>	<b>(705)</b>	<b>4,697</b>
Financial Costs	18	16	(2)	17
Bad Debts	1	-	(1)	(2)
Corporate & Department Overheads	853	853	-	770
Depreciation	251	261	10	267
Loss(Gain) on Sale of Assets / Investments	-	(5)	(5)	-
<b>TOTAL EXPENDITURE</b>	<b>6,375</b>	<b>5,672</b>	<b>(703)</b>	<b>5,749</b>
<b>OPERATING SURPLUS/(DEFICIT)</b>	<b>(579)</b>	<b>(44)</b>	<b>(535)</b>	<b>(341)</b>
Add Back Depreciation	251	261	(10)	267
Other Non Cash	-	(5)	5	-
Net Asset Acquisitions	(226)	(292)	66	(102)
Net External Investment Movements	-	-	-	-
<b>NET FUNDING BEFORE DEBT &amp; RESERVES</b>	<b>(554)</b>	<b>(80)</b>	<b>(474)</b>	<b>(176)</b>
Debt Additions / (decrease)	51	116	(65)	68
Debt Repaid	(47)	(36)	(11)	(64)
Net Reserves (Increase) / decrease	(4)	-	(4)	(4)
<b>NET FUNDING SURPLUS (DEFICIT)</b>	<b>(554)</b>	<b>-</b>	<b>(554)</b>	<b>(176)</b>
<b>Science Capital Expenditure Statement Period ending 30 June 2015</b>				
	<b>Actual \$000</b>	<b>Budget \$000</b>	<b>Variance \$000</b>	<b>30 June 2014 FY Actual \$000</b>
Total Asset Acquisitions	174	200	26	52
Capital Project Expenditure	52	116	64	48
Asset Disposal Cash Proceeds	-	(24)	(24)	-
<b>Net Capital Expenditure</b>	<b>226</b>	<b>292</b>	<b>66</b>	<b>100</b>

## Financial variance analysis

- ▶ E Science has a net deficit of \$579k which is \$535k worse than budget
- ▶ Staff costs are \$475k over budget mainly due to unbudgeted casual monitoring staff and early recruitment of staff to meet science requirements of the Whaitua Committees.
- ▶ ESci external costs are \$103k overbudget mainly due to spend on the Collaborative modelling project.
- ▶ Internal costs are overbudget by \$81k, most of which is ICT charges due to more computers and gadgets for more staff than budgeted
- ▶ The capital spend is on replacement data loggers and nitrogen analysers for monitoring sites.

Performance Measure	Performance Target		Comment
	Baseline	2014/15	
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

There have been no changes this quarter.





greater WELLINGTON

REGIONAL COUNCIL

Te Pane Matua Taiao