

# **1. Environment Management**

## **1.1 Environmental Policy**

### **1.1.1 Overview**

- Continuation of the development of the second generation regional plan
- Environment Court mediation on proposed Regional Policy Statement appeals

### **1.1.2 Key results for the year**

- The resolution of appeals to the proposed RPS continues with consent orders signed by the Environment Court for Contaminated Land, Regional form (Kiwi Properties) and Minerals
- Draft consent orders with the Court for final sign off covering: Air quality, Coastal environment, Freshwater, Regional form (Horticulture NZ), Soils, and Tangata whenua
- Outstanding matters: Indigenous ecosystems, Energy and Infrastructure, Landscape and Natural Hazards
- Two meetings/workshops of Te Upoko Taiao held – Approved issues and objectives and commenced policy development in area of heritage and sites of significance to Tangata Whenua, and the presentation of our state of the environment reports

### **1.1.3 Looking ahead**

- Policy development options prepared in relation to air issues and in June the implementation of a catchment approach to land and water management
- Finalisation of RPS appeals, with appeals on the Landscape most likely to be resolved in the coming month
- Starting work to make the proposed Regional Policy Statement operative, excluding any remaining matters under appeal

### **1.1.4 Departmental activity**

#### **Proposed Regional Policy Statement**

The second round of Environment Court mediation was held during 8 March and 12 March 2012. Final consent orders have been signed off by the Environment Court for contaminated land, regionally significant centres and minerals. Draft consent orders are with the Environment Court for final sign off for air quality, coastal environment, fresh water, regional form, tangata whenua and soils. The remaining appeal points are on energy and infrastructure, landscape, indigenous ecosystems and natural hazards. Officers are currently working on the resolution of these matters.

Officers are also now working on the steps that need to be undertaken to make the proposed Regional Policy Statement operative. This process will involve a final edit, checking the match between consent orders and the RPS text, printing and design options.

## Regional Plan review

### **General**

Te Upoko Taiao – Natural Resource Management Committee met on 7 February and 20 March 2012. The meetings/workshops were held in the Council Chamber, Regional Council Centre, Wellington.

A workshop was held on 7 February where the committee were given a verbal update on the results of stakeholder engagement from the later part of 2011. The substantive part of the workshop provided for discussion on provisions for the management of the coastal marine area, and options for structuring the regional plan in the context of the management of freshwater resources. Considerable direction was provided to officers in terms of further developing the coastal provisions of the plan. With respect to the development of provisions for the management of freshwater, the committee was very much in favour of an approach which provides for collaborative policy development and implementation. The details of this approach are now being investigated by officers with a view to reporting back to the committee in June 2012.

Te Upoko Taiao met on 20 March and was presented with the December Quarterly Report from the Environmental Management Group. A workshop followed the meeting where the committee was presented with the findings by Caleb Royal of the Cultural Values for Wairarapa Waterways Project. The focus of the project was to identify sites of significance to Iwi within 14 waterways in the Wairarapa, and to determine specific values connected to each site. The project relates to instream flow assessment work being undertaken to support the review of policies around water allocation and minimum flows.

The committee also discussed wider values associated with the management of freshwater, in line with the requirements of the National Policy Statement for Freshwater Management. The National Policy Statement for Freshwater Management requires every regional council to establish fresh water objectives and set water quality and quantity limits for all bodies of fresh water in their region. These objectives and limits must give effect to the objectives in the NPS.

At this stage we are developing generic region-wide objectives, as set out in the proposed Regional Policy Statement. The objectives will establish the environmental state required to achieve the values agreed upon by the community. Limits will then be developed to achieve the objectives.

### **Wetland hydrology and delineation**

A 3-stage project to identify and accurately map regionally significant wetlands is underway. A desktop review of wetland boundaries and a review of available information on the condition and significance of these wetlands has been completed. Field work has

been carried out for wetlands bordering Lake Wairarapa, and the final report is to be distributed to landowners before being made more widely available. A further 70 wetlands have been identified as priorities for field visits, and a consultant has been engaged to carry out this work. Contacting relevant landowners to gain access to these sites will begin shortly. The final product of these three projects will be a list of nationally and regionally significant wetlands that are candidates for scheduling in the new regional plan.

### **Coastal Biodiversity**

NIWA has been contracted to identify sites of significant indigenous biodiversity value in the coastal marine area using the policy 22 criteria in the proposed RPS. NIWA will use their own data and expert knowledge to identify these sites, and document the activities that may affect them. Environmental Policy worked closely with EMI and the Biodiversity department to ensure the outcomes and outputs of the project will be broadly beneficial to GW. A workshop of NIWA and GW staff was held on 3 April to review and discuss the work to date and provide direction to the researchers.

### **Consultation and Engagement Plan**

The engagement strategy for 2011 involved three different sets of activities:

- Public workshops (6) between 1 and 21 November
- Web survey from 1 November
- Iwi hui from 1 November

The public workshops functioned as “drop-in” centres operating over extended periods of time so that people could discuss the Council’s issues and objectives with the staff concerned. The numbers attending were less than 2010, but the feedback about the approach was very positive.

The web survey provided an additional opportunity for members of the public to respond to information and questions about the Council’s issues and objectives.

Hui (3) with tangata whenua were held as required.

The engagement report was published in March and is available on the Greater Wellington website at: [http://www.gw.govt.nz/assets/Plans Publications/Publicengagementreport2011.pdf](http://www.gw.govt.nz/assets/Plans%20Publications/Publicengagementreport2011.pdf)

The third newsletter has been sent out to all parties on our database who wished to be kept informed of progress.

## Regional Council input into Statutory Planning

### **District Plan Changes**

#### *Hutt City Council*

- Plan Change 24: 1-13 Ludlam Crescent, Woburn. Rezoning from Suburban Commercial to General Residential zone.

Greater Wellington submitted that it held concerns with the location of the site to be rezoned for residential purposes; in particular, that it is an area at risk from flooding from the Hutt River. While improvements are being made to flood protection in the area, some sections of stopbank upstream of this location have not been completed, and the site is only just above a 100 year return period flood. However, when the stopbank work is completed, a residual risk will still remain. It was sought that the residual risk posed to the site is recognised and that Hutt City Council consider the potential requirements to reduce and/or mitigate future development on the site to reduce the risk from flooding.

### **Other documents**

#### *Hutt City Council*

- Pencarrow Coast Road Vehicle Use Policy Review

Greater Wellington made a submission opposing the proposed amendments to the Pencarrow Coast Road vehicle use policy. Although the Pencarrow Coast Road does not go through East Harbour Regional Park, it immediately adjoins it. Due to this proximity, it is important that changes in activities on Pencarrow Coast Road, do not adversely impact on the enjoyment and experience of East Harbour Regional Park.

While Greater Wellington supports recreational opportunities provided along the Pencarrow Coast Road, an increase in vehicle use along this road would detract from these unique recreational experiences. Policy direction in the proposed Regional Policy Statement and the Greater Wellington Parks Network Plan was outlined. The important biodiversity values in this general area, including Lakes Kohangapiripiri and Kohangatera were also highlighted. Greater Wellington officers are speaking to their submission on Thursday 26 April at 5.30pm at Hutt City Council chambers. Environmental Policy and the Park Departments have worked together in preparing the submission and will be speaking to the submission.

#### *Porirua City Council*

- Draft Recreation and Open Space Strategy

Porirua City Council has produced a draft strategy for their reserve and open spaces to compliment the Reserves Management Plans and a number of other plans and policy documents for their area. We have provided a submission in support of the Strategy and emphasising our interest and role in the area through both the regional parks and the Porirua Harbour Strategy and Action Plan. The Regional Parks are a substantial contributor to open space and the submission highlights opportunities for increasing cooperation/joint undertakings with the Council and community groups.

*Kapiti Coast District Council*

- Revised Subdivision and Development Principles and Requirements, 2011 (SDPR); the Kapiti Coast Rainwater and Greywater Code of Practice (GCP); and the Low Impact Urban Design and Development Stormwater Guidelines (LIUDD)

Greater Wellington made a submission on these three documents. For the revised Subdivision and Development Principles and Requirements (SDPR), Greater Wellington requested that a separate section be included on planning mentioning the importance of the proposed RPS, as this can provide a potential developer with a clear understanding of the approach that Greater Wellington has to natural resource management in the Wellington region. Avoiding development in areas at high risk from flooding was also highlighted and some changes to transportation requirements and stormwater management were suggested.

For the LIUDD, some clarification was sought around rain water tanks and in the GCP, it was submitted that no mention is made of compliance with the Regional Discharge to Land Plan for greywater disposal.

- Draft Management Plan for Wellington Harbour islands

Environmental Policy has provided comments to Strategic Planning Department on the direction for integrated management as outlined in the proposed Regional Policy Statement for indigenous ecosystems, freshwater, sewage and stormwater, heritage and natural hazards.

**Natural hazards**

**Research Projects**

*Regional storm tide modelling project*

This is a two and a half year study into the effects of storm surge, coastal inundation and sea level rise around the Wellington region coastline. The first stage to produce a digital terrain and bathymetry model of the region has been completed and work is progressing on modelling extreme water levels for Wellington City. An interim report (August 2011) has been released showing the heights and probability curves for a range of extreme water level events for the region.

*Sea level rise investigation*

Funding to assist the regional storm tide modelling project of \$30,000 from WCC and \$20,000 from KCDC has allowed a related project to go ahead looking at sea level rise in the region. Tide gauge records up to 2011 are being analysed to show the eustatic local sea level rise. This is being put into a regional context with an analysis of interdecadal water level variations produced by climatic phenomena such as El Nino/La Nina and the Southern Oscillation. These medium term numbers will be supported by research into the longer term geologic sea level changes of the region that will take into account local tectonics to produce a relative sea level change curve for the region. The fieldwork component of this part of the project is nearing completion and preliminary results from the project will be

ready by early May. The findings will be used to forecast future rates of regional sea level rise out to 2100.

## Civil Defence and Emergency Management

### *Wellington region tsunami evacuation plans*

The department continues to work with local civil defence groups on the regional tsunami evacuation plans. Most recently we have been working with Wellington City Council on identifying suitable areas for the 'blue lines' project and on developing an information brochure for public release ahead of the rollout of the blue lines project around the rest of Wellington City.

## Presentations/Publications/Media

Environment Policy Senior Policy Advisor (hazards) continues to be approached to speak to community and council groups on natural hazards. Education is a big part of the role and recent talks have been given to Victoria University, Architecture and Design School, Scott's College and Wellington Collegiate on subjects including coastal hazards, sea level rise and hazards management.

## **1.2 Environmental Regulation**

### 1.2.1 Overview

- Ongoing steady workload. Dominated by a number of large projects such as Transmission Gully consenting, wind farm hearings, municipal waste water treatment renewals, and ongoing enforcement proceedings
- Non notified consent workload down slightly, but still comparable with 2010/11 financial year workload

### 1.2.2 Key results for the year

- Roads of National Significant – large workload in Transmission Gully and McKays to Peka Peka national consenting processes, as well planning work for RoNS projects to follow
- Municipal waste water – replacement consenting for main plant and infrastructure overflows for Carterton, South Wairarapa and Hutt Councils
- Successful defence of our largest ever sequence of prosecutions
- Earthworks site scoring system being rolled out to consent holders with a good response to date
- Roll out of dairy effluent pond storage calculator and workshops on water metering for industry

### 1.2.3 Looking ahead

- Ongoing management of notified consenting and key enforcement actions, a heavy Board of Inquiry load, a significant earthworks compliance workload

### 1.2.4 Departmental activity

#### Resource consents

##### Non-notified consents

Non-notified consent processing work has remained stable in the March quarter, and dominated by the ongoing processing of replacement consent applications for boatsheds, and land use consents (culverts, bridges, bores etc).

Overall, we are slightly up on numbers of all consents processed year-to-date compared to the previous year.

##### Consents summary

Item	Mar Quarter 2012	Dec Quarter 2011	Mar Quarter 2011
Consents received	100	113	160
Consents issued	114	121	101

Item	2011-12 year to date	2010-11 year to date	2010-11 year
Consents received	350	473	699
Consents issued	408	384	698

Item	Mar Quarter 2012	Dec Quarter 2011
Median processing time frame	15	19

Item	2011-12 year to date	2010-11 year to date	2010-11 year
Median processing time frame	17	15	16

##### Notified and limited notified consents

Substantial work in assessments, and pre-hearings or hearings have been completed and/or decisions released on:

- **NZTA – Transmission Gully Project (TGP) RoNS:** The Transmission Gully hearing wound up on 14 March – over a week ahead of schedule. Murray Kennedy, Alastair

McCarthy, Natasha Hayes and Tracey Grant presented evidence to the Board on behalf of Greater Wellington relating to a range of our functional responsibilities. Evidence covered forestry access, bulk water supply, transport planning, planning and condition setting. GW was extensively involved in caucusing throughout the hearing to establish appropriate and enforceable 'draft' consent conditions. We will have an opportunity to comment on the draft decision (minor errors, wording of conditions) – which the Board has indicated is due for release in late April. A final consent decision is required by July to meet the nine month notification-to-decision timeframe.

- **Genesis Energy – Castle Hill Wind Farm:** The hearing of applications on the wind farm recommenced on 24 January. An interim decision was released on 14 April 2012, following further directions from the Commissioners on conditions caucusing, further information regarding community compensation and mitigating visual effects. The interim decision indicates that the consents would be granted providing further work on visual effects and amenity values is completed by Genesis Energy (and draft conditions substantially altered). From a Regional perspective extensive caucusing of conditions has occurred with the applicant with agreement reached on the majority of the substantive issues.
- **Carterton District Council – Carterton Wastewater Treatment Plant reconsenting:** The hearing panel extended the time period for submitting an additional effects assessment on Mangatarere Stream and planning analysis, following the 16 December 2011 hearing adjournment. This information has been supplied and GW is reviewing it before providing its comments to the panel. The panel intend to issue an update to all parties by the end of April.
- **Hutt City Council – waste water treatment plant pipeline maintenance:** Application for temporary discharges of treated wastewater to Wellington Harbour and the Waiwhetu Stream, from maintenance and repair works to the treatment plant's main outfall pipeline (MOP). Submissions closed in mid February with 3 received in support or conditional support, 1 neutral and 6 in opposition to the application. A pre hearing was held at the end of March, which was very productive in clarifying the issues. Given the progress to date, the group has agreed that a second pre hearing meeting would be useful. This has been pencilled in for mid May.
- **Meridian Energy Ltd – Mount Munro Wind Farm:** Applications for a proposed 20-turbine wind farm to the south east of Eketahuna (Seven within Wellington Region). A hearing date was scheduled for the end of May; however, it appears the applicant now wishes this date to be extended out to later on in the year, due to availability of their technical advisers.
- **SWDC – Martinborough Wastewater Treatment Plant reconsenting:** A replacement consent to discharge treated wastewater to the Ruamahanga River from the Martinborough Waste Water Treatment Plant – lodged in April 2012. The proposal seeks a 5 year term while a series of staged improvements are undertaken to improve the efficiency and effectiveness of the current system; and to investigate and plan, in



consultation with stakeholders, partial or full land based discharge of treated wastewater. The application is currently being assessed for completeness.

**Other notified consents in summary include:**

- **AJC Bidwill – diversion and water take from Lake Wairarapa:** Agreement reached between the parties on the proposed conditions thus avoiding a formal hearing. Consent granted on 8 March 2012.
- **Wairarapa Funeral Services – crematorium discharge to air reconsenting:** Applicant has provided information around better managing effects, including increased stack height and altering crematorium times. Provisional hearing date has been set for 7 and 8 May 2012 in Masterton.
- **Hutt City Council – Wainuiomata water overflows:** Pre-hearing held on 8 February 2012, focussing on appropriate consent conditions particularly around cultural health monitoring. We are still working through these negotiations with the submitters and applicant.
- **SWDC – Martinborough Wastewater Treatment Plant reconsenting:** A replacement consent to discharge treated wastewater to the Ruamahanga River from the Martinborough Waste Water Treatment Plant – lodged in April 2012. The proposal seeks a 5 year term while a series of staged improvements are undertaken to improve the efficiency and effectiveness of the current system and to investigate and plan, in consultation with stakeholders, partial or full land based discharge of treated wastewater. The application is currently being assessed for completeness.
- **GW Flood Protection – Hutt River mouth dredging and disposal reconsenting:** Pre hearing meeting was held at the end of February. Agreement reached between the parties (including seven submitters) on the proposed conditions thus avoiding a formal hearing. Officer's report is being compiled.
- **Carterton District Council – Taratahi and Carterton Water Races reconsenting:** Replacement applications for CDC's existing water take applications for both the Taratahi and Carrington Water Race schemes (east and north of Carterton) operated for stock drinking purposes. Applicant now providing further information, and a hearing date will be set later in the year.
- **Unilever – detergent manufacturing plant discharge to air:** Peer review completed indicating that adverse effects will be adequately managed. Draft conditions currently with the application for consideration, while officer's report is being compiled.
- **Lynchgate Funeral Homes – crematorium discharge to air reconsenting:** Pre hearing meeting was held at the end of February. Agreement reached between the parties (only one submitter opposed) on the proposed conditions thus avoiding a formal hearing. Officer's report is being compiled.

- **Burrell Demolition Limited re consenting and extension:** Adequate site management planning and mitigation package information now provided. We are currently in discussions with WCC regarding the joint notification of this application (possibly by mid May).
- **Pauatahanui Forestry harvesting:** Applications now back on hold while affected party approvals being sought from submitters including Department of Conservation. Issues in contention concern sedimentation and monitoring.

#### **Significant Non notified applications**

- **Exide Technologies Limited decommissioning:** In mid February, Exide announced that it will be closing its Petone recycling facility. We have been in discussions with Exide over the proposed decommissioning since the announcement. The decommissioning of the plant involves the cleaning and removal of machinery, the removal of the stacks and air treatment systems and the cleaning of the interior and exterior of the building. This will not involve the deconstruction of the buildings or the digging up of foundations. Given that there will be some discharge of fugitive emissions of dust, and discharges to air from the continued operation of the air treatment systems during this phase, we have determined that Exide will need a discharge to air consent. They have applied for this consent and we are currently processing it. We aim to issue the consent which will carry over the same Environment Court endorsed consent limits, in late April.

#### **Major pre-application discussions continue for:**

- **NZTA – Mackays to Peka Peka RoNS:** Pre-lodgement work is continuing with NZTA and the EPA, on this region's second RoNS project. The EPA's technical experts have reviewed some 70 plus technical reports and reported their findings back to the EPA review team. GW and KCDC have completed the very substantial task of the 'pre-lodgement completeness check' (preliminary assessment on whether the application is on track for lodgement as a 'full and complete' application). NZTA has worked through comments prior to lodgement on 20 April. We will then complete a 'post lodgement completeness check' and 'key issues report' for the Board.
- **WCC – Southern Landfill Stage 4:** WCC has now lodged the draft application for the Stage 4 landfill extension for comment. We have reviewed this and are awaiting some further information from WCC before we formally comment. The application will be notified as the proposal will involve hundreds of metres of stream reclamation, disposal of refuse and other contaminants to land, and the discharge of odour and landfill gas to atmosphere.
- **SWDC – Featherston Wastewater Treatment Plant re consenting:** Replacement consents to discharge treated sewage to Donalds Creek from Featherston WWTP expires on August 2012. Discussions have started with SWDC around information requirements and the process requirements for the renewal of this consent, to eliminate

the chance of the sorts of delays experienced with the processing of the Martinborough Greytown WWTPs; and to deal appropriately with potentially significant temporary discharges to Donalds Creek.

- **Carrus – Aotea Block Stage 11:** Discussions have commenced on the next stage of the Aotea Block development. This stage involves bulk earthworks and also likely to involve stream piping and reclamation. Owing to the size and nature of the works, this application is likely to be jointly notified with PCC. Lodgement is expected shortly.

#### Resource consent appeals and objections

Once again appeals work has been light in the last quarter, with no new appeals.

- **Meridian Energy Ltd – Project Mill Creek windfarm appeal: (appeal by five parties including applicant)** In February 2012, the Environment Court issued the final confirmation of consent conditions, following the September 2011 decision to grant consents. While matters relating to the GW suite of consents (including sediment monitoring requirements) were resolved in mediation, the decision saw the Court reduce the number of turbines from 31 to 29 due to perceived significant visual and amenity effects. This drew to a close this consent process which began almost 4 years earlier – including lengthy mediation and the October 2010 Environment Court hearing.
- **L V Petrie – water take appeal and cost objection:** An appeal by the applicant of the decision to decline consent to take groundwater from a fully allocated aquifer near Martinborough. During mediation, the appellant secured an allocation of groundwater from two existing consent holders, and we agreed to granting the consent at a reduced annual volume. The applicant also agreed to drop the objection on consent processing. A consent order has been submitted to the Environment Court for approval. The appellant also lodged an objection against consent processing costs, but has since agreed to pay processing costs.
- **Horokiwi Quarries – Fitzroy Bay sand and gravel extraction (jointly processed with applications to Hutt City Council):** Mediation finally commenced on the appeal (by the applicant) of HCC's decision and GW's Ministerial recommendation on a replacement-consent application to continue an existing sand extraction operation on the Fitzroy Bay foreshore (adjacent to East Harbour Regional Park). The appeal relates only to land-contouring requirements affecting the HCC land use suite of consents.
- **Wairarapa Aggregates – gravel aggregate quarry:** No update since last quarter. The appeal is progressing through the final stage of mediation, with final agreement expected soon.

#### Consented compliance monitoring

- **Earthworks site scoring system:** The compliance points scoring system for earthworks sites has now been in place for six months. The system is now being used

on all large earthworks sites in the region – mainly within the Porirua Harbour catchment, but also around the region from Waikanae in the north to the construction of the Masterton Wastewater Treatment Plant. Officers are finding it a useful tool for engaging with consent holders, consultants and contractors about compliance performance. Informal feedback from these stakeholders suggests they appreciate the instant feedback and the simplicity of the system. Later in the year we will review how the system is working, a process which will also look for industry input as well as providing education opportunities in order to further raise understanding in the region.

- **Mill Creek and Duck Creek management plan approvals process:** The two largest earthworks projects in the region – the Mill Creek wind farm and the Duck Creek subdivision – are both based around a management plan structure increasingly popular with large consented sites across New Zealand. This structure shifts the need to provide detailed methodologies till after the consent is granted, provided we are satisfied during the application process that key criteria can be met. The detailed and complex process of reviewing and approving plans is a challenging one requiring a high level of communication to make it work. Currently the Duck Creek works have had Ecological Monitoring and Adaptive Management, Construction, Earthworks and Flocculation Management Plans approved since consent was granted in December 2011, with a Landscape Management Plan currently under review. The Mill Creek consent, since confirmation of conditions in February 2012, has seen the approval of a monitoring and management plan for sedimentation in the Makara Estuary and regulatory and science staff are now working through the plan to management effects of sediment on water quality and stream health.

#### Environmental incidents

237 incidents were notified and responded to in the quarter, down from 260 in the previous quarter. A summary breakdown of incidents is reported 6-weekly through the Councillors bulletin.

#### Enforcement

##### Abatement and infringement notices

Item	Mar Quarter 2012	Dec Quarter 2011	Mar Quarter 2011
Abatement notices	4	2	13
Infringement notices	2	8	18

##### Prosecutions, enforcement orders and abatement notice appeals

Significant prosecutions work in the last quarter includes:

- **Alan Jefferies:** The prosecution of Mr Jefferies and related abatement notice appeals regarding the diversion of Mangaroa River, associated river works and deposition of fill material continues. A three day hearing on the appeal of the abatement notices concluded on 1 March 2012 following failed Court mediation. The appeal was

dismissed and the abatement notices were confirmed by the Environment Court on 6 March. The decision was then appealed to the High Court by Mr Jefferies. Earlier Mr Jefferies pleaded not guilty to all five charges laid and the prosecution case was adjourned to allow the abatement notice appeal to be dealt with. On 27 March, in the District Court, Mr Jefferies confirmed he intends to defend the criminal charges and elected trial by Jury. Evidence will need to be exchanged by early May, and the matter will next be called on 17 May 2012 for a plea evaluation conference.

- **Davis Sawmilling Company Ltd:** This is a new prosecution against the owners of the Featherston timber treatment plant and sawmill. Nine charges were laid against this company in December 2011 for the discharges of contaminants beyond the boundary of their site. During rainfall, stormwater from the site collects copper chromium arsenate residue from the ground and becomes contaminated, before being collected and discharged offsite. The first call of this matter was 11 April 2012 which was adjourned and a new date is now awaited from the Court.
- **Alex Burrell and Burrell Demolition Ltd:** The District Court decision and Enforcement Order were appealed and heard in the High Court on 8 and 9 December 2011. A stay of the enforcement order has been granted until a final decision on the case is made. Earlier, the prosecution related to a breach of resource consent in 2009 at C&D Landfill in Happy Valley Road.
- **Burrell Demolition Ltd, Alex Burrell and John Morgan:** Charges were laid on 28 June 2011 for allegedly discharging non-cleanfill material into C&D Landfill (a construction and demolition fill) in breach of their resource consent. A Sentence Indication Hearing is scheduled for 7 May 2012
- **Lifestyle Capital Limited:** Environment Court mediation on the appealed abatement notice is continuing, with the next round scheduled for 6 June 2012. This case relates to an abatement notice served to deal with stream bed erosion in Kelly's Creek (south of Martinborough) partly attributable to consented diversion works. GW has previously proposed a whole-of-catchment solution to the current erosion problems which was rejected by the landowners.

### Take Charge programme

The Take Charge programme is continuing work with IAG Panel and Paint Industry members. All premises which have completed self assessment forms have been audited against the Take Charge certification criteria. Reports have been sent to each indicating what they need to do to reach the standards required for certification, as well as recommendations of best practice.

### Projects

#### **Supreme Court challenge to validity of convictions through RMA prosecution**

This is the case challenging the validity of RMA initiated prosecutions under the Summary Proceedings Act. I last reported on this case in March 2011 following successful defences

by Waikato Regional and Auckland Councils in the Court of Appeal, prior to the 'Auckland' decision being appealed to the Supreme Court. The Supreme Court has unanimously dismissed the appeal.

The challenges related to the procedural steps taken by all councils in initiating prosecutions under the RMA (whether permission from 'the Court' was required), thus potentially impacting on all prosecutions over the last decade (rendering them unlawful under the RMA).

The judgement was released on 3 April 2012 and concluded permission from the Court was not required to 'lay charges', and that existing convictions were lawful. As a result of this judgement, all convictions and penalties imposed by the Court in relation to RMA cases stand.

### **Roll out of (dairy effluent) pond storage calculator for Wellington Region**

Last quarter I reported that GW received the *first* version of the dairy effluent pond storage calculator for Wellington region – which will enable farmers to build correctly size effluent ponds. We will be meeting shortly with key partners (Fonterra, Dairy NZ, and Federated Farmers) to determine how we collectively roll out this tool.

### **Water metering initiatives**

Since a workshop on water metering for installers and verifiers in December, we have initiated purchasing of water meter labels, verification tags, and tamper seals. This has been completed in consultation with key installers and verifiers and will enable easy and consistent management of water meters in the region. Our new Water Use Data Management System that will enable the transfer of water meter data is still being installed.

### **Customer satisfaction survey**

We are currently conducting our four yearly survey of our consent applicants and holders and submitters. We have moved away from the phone survey method, to an on-line survey approach. The results will be reported in my next quarterly review report.

## **1.3 Environmental Monitoring and Investigations**

### **1.3.1 Overview**

- Ongoing development of science options to inform the Plan review process
- Continuation of the substantial work around finalising the SOE reports
- Development of the Mangatarere Project – joint Environment Group and Catchment Management Group project
- New manager appointed
- Biodiversity needs assessment project – associated secondments to EMI to progress this work

### 1.3.2 Key results for the year

- Year long water quality programme commenced in the Pahaoa River
- Selected Land Use Register (SLUR) now available on GIS viewer on the GW website
- Sediment quality survey undertaken in Wellington harbour – joint process as finalised by a MOU with the Wellington City Council
- Ongoing sediment sampling in Porirua Harbour, in part to support the outcomes of the Porirua Harbour and Catchment Strategy

### 1.3.3 Looking ahead

- ‘Staggered’ release of SOE reports and media communication around them
- Continued development, and release of reports around minimum flow investigations in a variety of rivers across the region, and including lake Wairarapa
- Wairarapa Moana ‘cleanup’ program on science information needs and ongoing performance monitoring

### 1.3.4 Departmental activity

#### General

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

- Progressing the eight technical reports summarising current state and trends in the region’s air, land and fresh and coastal water resources. These detailed reports are only compiled every five-six years and involve a considerable amount of staff time. Most of the reports have now been externally peer reviewed and work has started on preparing sub-region leaflets that summarise the key findings from the reports for the public
- Completion of a draft report documenting revised Suitability for Recreation Grades for the region’s fresh and coastal recreational waters, as well as completion of the annual air quality and soil quality monitoring reports
- Commencement of extension work to re-define groundwater zone boundaries on the Kapiti Coast, taking into account areas of surface and groundwater interaction
- Provision of a range of technical support to Environmental Regulation, Environmental Policy, Water Supply, Land Management and Flood Protection departments

A summary of work carried out in all subject areas follows.

## Air quality and meteorology

The annual air quality monitoring report for 2010 was completed and processing of data for the 2011 report is underway.

Following a recent review of air quality monitoring requirements, we are acquiring two new instruments to measure PM<sub>2.5</sub>, one of which is to be installed at Wainuiomata (the housing at this site has also been upgraded to improve data quality). We are also now in the process of setting up a temporary monitoring station in Masterton about 1.2km southwest of the current monitoring site at Wairarapa College. This follows a study carried out by GNS Science (with support from Greater Wellington) during winter 2010 that found PM<sub>10</sub> concentrations measured at the current monitoring site were lower than those recorded at another location to the southwest. It is thought that night time air pollution from domestic fires is transported across the urban area by cold air draining from the Tararua Range. The National Environmental Standard for air quality stipulates that monitoring stations need to be located in the area that has the worst air quality. The Ministry for the Environment has directed councils to document the reasons for their choice of monitoring station location.

In collaboration with GNS Science and a Victoria University post-graduate student, we are monitoring arsenic levels in air at Wainuiomata using a standard method that can be compared with the national guideline for arsenic. A previous study to determine the sources of particulate matter in Wainuiomata showed that there are some winter-time days with elevated levels of arsenic which has been attributed to the burning of treated timber in domestic fires. The national guideline is an annual average which means at least one year's worth of monitoring results are needed.

## Contaminated land

Since late last year some of the information held on the Selected Land Use Register (SLUR) – a register of information on sites that have had or do have an activity that has the potential to contaminate soil – has been available via a GIS viewer on Greater Wellington's website. This initiative appears to have considerably reduced (by over 50%) the number of queries from property valuers, developers and land agents seeking information on potential land contamination (many enquiries relate to sites that are not on the register and can be easily eliminated by people using the web interface).

There is currently a backlog of sites to update and new sites to enter onto SLUR that is being addressed.

The National Environmental Standard for Assessing and Managing Contaminants in Soil came into force on 1 January. This standard applies directly to territorial authorities and not to regional councils. However, there are implications for Greater Wellington in that we hold the contaminated sites register (ie, SLUR) on behalf of the territorial authorities and this will be used to identify land to which the standard applies.



## Soil quality

The annual soil quality monitoring report for 2010/11 was completed. This report evaluates soil quality sampling results from exotic forest and horticulture land uses and compares results in the region to soil quality guidelines from the Land Monitoring Forum and other relevant guidelines.

Preparation and planning has taken place for the 2012 soil sampling round which will focus on native forest land use. Sampling is planned for late April.

## Water quality and ecology

### (i) Rivers and streams

Work this quarter has focussed on writing the five-yearly technical report that documents the state and trends in river water health across the region. In January, we also began our annual assessments of ecological condition (macroinvertebrates and periphyton) at our 55 Rivers State of the Environment (RSoE) monitoring sites. While the majority of these assessments have been completed, sampling at some sites is still to be undertaken and has been hampered by the wet summer and the unstable river and stream flows experienced across much of the region. Work completing ecological habitat assessments at our 55 RSoE sites has also continued.

During the summer period, meters that continuously measure water temperature and dissolved oxygen were deployed at several sites to provide additional information to the 'spot' measurements that are collected during routine monthly water sampling.

A year-long water quality programme continues in the Pahaoa River catchment in the eastern Wairarapa; water samples are being collected from six sites at two-monthly intervals and tested for a range of physical, chemical and microbiological water quality variables, including nutrients, sediment and faecal indicator bacteria. One-off samples of macroinvertebrates and periphyton were also collected at all six sites in February.

Fish surveys have been undertaken at a number of sites across the region. The purpose of these surveys has been varied and includes the fishing of sites where there are no or few existing records, re-fishing sites where there are historical records for threatened fish species and the establishment of sites to enable the potential monitoring of fish communities overtime.

### (ii) Lakes

Work this quarter focussed on finalising the five-yearly technical report documenting state and trends in lake water quality and ecology across the region. Information from a draft version of the report was fed into Greater Wellington's successful application to the Ministry for the Environment's Fresh Start for Fresh Water Clean-up Fund in relation to Wairarapa Moana.

Proposed water quality sampling in tributaries of Lake Wairarapa over the summer did not eventuate. The proposed sampling was linked with the development of a water balance for the lake (see *hydrology* section) and weather and hydrological conditions were unfavourable for the proposed hydrological fieldwork to proceed during the quarter.

(iii) Estuarine and marine waters

Wriggle Coastal Management Ltd undertook ecological assessments of intertidal estuary health in the Waikanae, Hutt and Whareama estuaries, as well as Porirua Harbour in February 2012. Draft reports on the assessments are currently being prepared.

Monthly water sampling continued at six sites in Porirua Harbour. The monitoring data, which include nutrients and turbidity measurements, provide an important water quality baseline for the harbour. The data, combined with data sourced from light loggers deployed in selected locations within the harbour, are also be used to help assess the potential for seagrass restoration in the harbour, a priority action identified in the recently finalised Porirua Harbour and Catchment Strategy.

EMI science staff continue to work with Porirua City Council (PCC) and the other agencies involved in the development of the Porirua Harbour and Catchment Strategy. In late March Greater Wellington hosted a one-day science workshop with PCC staff and external consultants. This workshop focussed solely on sediment inputs to the harbour and progress with the development of “source to sink” models for the harbour and catchment, a priority action identified at the April 2011 Porirua Harbour and catchment science workshop. Knowledge gaps and next steps to refine the model to assist with developing objectives and rules for the next Regional Plan were identified. The workshop was followed by a public meeting in Porirua where the results of the modelling to date were presented by Dr Mal Green (NIWA).

Our coastal scientist attended the first meeting of Wellington City Council’s Stormwater Consultative Committee (SCC) in March. The SCC was established as a requirement of the city council’s global consent to discharge stormwater into Wellington Harbour and south coast.

(iv) Recreational waters

Under the summer recreational water quality monitoring programme – jointly carried out with four of the region’s territorial authorities – microbiological water quality at 61 marine and 20 freshwater sites was assessed weekly until the end of March. There have been no major problems with regard to faecal indicator bacteria counts at the majority of sites (most exceedances of the national recreational water quality guidelines have been associated with heavy rainfall in the 48 hours preceding sampling). However, health warning signs were erected at Owhiro Bay and Porirua Harbour at Rowing Club on 13 and 23 March, respectively, when two consecutive exceedances of the action guideline were recorded. In both of these instances warning signs were taken down the following day as faecal bacteria counts had returned to acceptable levels. Although warning signs were required on only one occasion at Owhiro Bay there has been poor compliance with national guidelines at this

site. Of the 13 routine sampling occasions between 1 January and 31 March the action guideline was exceeded four times and the alert guideline three times. Capacity (on behalf of Wellington City Council) has been investigating the source of contamination at this site and identified problems with sewer/stormwater infrastructure in the Severn Street area of Owhiro Bay as a potential source.

Toxic cyanobacteria (blue-green algae) was a problem in the Hutt River during the quarter, with widespread growth (up to 80% cover of the river bed) recorded from late January until late February during an extended period of low flow. Although warning signs were put in place along the river and numerous press releases issued two dogs died after coming into contact with the algae in the river near Heretaunga Park and Melling Bridge. At a subsequent meeting between Greater Wellington, territorial authority and Regional Public Health staff it was agreed that a more detailed cyanobacteria risk communication strategy than currently exists is needed. Greater Wellington's Communications department will lead the development of the strategy which will set out the responsibilities of each organisation and explore options such as text/email alerts for licensed dog owners and targeting specific groups for general education regarding the risks associated with cyanobacteria (e.g. schools, dog owners clubs, vets).

Draft reports documenting state and trends in recreational water quality across the region and updated Suitability for Recreation Grades for recreational water quality monitoring sites have now been completed and are being reviewed by territorial authority and Regional Public Health staff. These reports are due to be completed by the end of May. Compilation of the annual *On the Beaches* report for the 2011/12 summer bathing season has also begun; this report will be completed before the end of June.

#### (v) Groundwater

Work for much of this quarter focussed on finalising the five-yearly technical report documenting state and trends in groundwater quality across the region. We have also been assisting GNS Science with research to extend the knowledge of surface water-groundwater interactions as well as investigating sources and fate of contaminants using the Mangatarere catchment in Carterton as a model. Greater Wellington's contribution to the study has involved the facilitation of field sampling and the collection of water samples from six groundwater bores in areas previously sampled during the comprehensive Mangatarere Stream catchment investigation (completed in 2010). GNS is in the process of analysing these samples to determine the ratios of H and O stable isotopes in water, and N and O isotopes in nitrate.

#### Hydrology

There was nothing of significance to note during the quarter in terms of hydrological conditions – it was a relatively mild summer with no regionally significant wet or dry spells or extreme climatic events. Soil moisture and groundwater levels were generally higher than normal across most of the Wairarapa and pressure on water resources from irrigation was therefore relatively low for the time of year.

Work is nearly complete on the rebuild of the Waikanae flow station which was damaged by fire last January. Although there are some minor tasks remaining, the site is now fully operational.

A key science focus was completion of a technical report documenting the current state of and trends in surface and groundwater allocation and availability across the region. The draft report is currently being peer reviewed.

(i) Water allocation investigations

Work is currently underway to further review the hydrogeology of the Kapiti Coast and conceptualise an integrated surface water-groundwater allocation framework that is similar in principle to the proposed conjunctive management framework for water resources in the Wairarapa Valley. Two external consultants have been engaged to assist with this work and it is envisaged that a dynamic 3-D numerical groundwater model will be constructed.

A discussion document on the merits of a new minimum flow assessment for the Waikanae River was completed. The findings from this report are being fed into a summary report on recommended minimum flows for the region that can be used to help develop policy options for the next Regional Plan. The summary report will provide recommendations on both revised minimum flow values for selected rivers and streams as well as further analyses needed to identify core allocation options.

(ii) Hydrology investigations

Plans to investigate the water balance of Lake Wairarapa this summer, to inform the review of water allocation policies needed for the next the Regional Plan, were upset by unsuitable weather and hydrological conditions. However, two of three proposed new meteorological stations have been installed, one on each of the western and eastern shores of the lake. A central lake station will be installed next. Station sensors include automatic tipping bucket and storage rain gauges, wind speed and direction, solar radiation and air temperature. The primary aim of the stations is to improve the resolution of data from which evaporation estimates from the lake can be made. A sideways-looking acoustic doppler unit is also being installed at the lake outlet channel to provide a continuous measure of flow. It is intended that all instrumentation is installed and calibrated prior to the 2012/13 summer when an integrated programme of tributary flow gauging and water quality sampling is planned. In terms of the groundwater component of the investigation, water level is being continuously logged in 11 spearpoint shallow monitoring bores installed at several locations around the lake shore in November. Seven of these spearpoints will also serve as water quality sampling points to investigate groundwater nutrient inputs to the lake.

A flow gauging programme established in the Booths Creek catchment in October continued through the summer. The aim of the programme is to better understand the flow interactions between the natural creek and the Taratahi Water Race and refine the flow statistics so that sustainable abstraction policies can be developed.

In late January we received a revised draft of a consultant's report documenting assessments made during 2010 of the condition of 10 wetlands in the region thought to be vulnerable to water abstraction. The assessments looked at wetland hydrology, vegetation condition and water quality, with the report noting both threats to these and recommendations for management and monitoring. This information will be useful for developing a planning framework for wetlands.

### **Mangatarere Stream catchment pilot project**

The Mangatarere Steering group met at least three times during January, February and March to continue developing the preferred way of working in the Mangatarere catchment. As part of this process the responses from the December community meeting were analysed and used to guide the proposal developed by the steering committee. The analysis and the suggested way to proceed was presented to a second community meeting held in early March. Approximately 50 members of the community attended this meeting. At the conclusion of the meeting there was agreement for those interested to meet again on 22 March to form an Incorporated Society. On 22 March an incorporated society was formed. The Management committee of the Incorporated Society consists of five members of the community, and a representative from each of Greater Wellington, CDC, Rangitane o Wairarapa, Kahungunu ki Wairarapa, and Federated farmers. This group is tasked with developing an action programme for the catchment. Dave Cameron is Greater Wellington's representative on the management committee. The steering committee has now disbanded.

### **Cultural values of Wairarapa waterways**

The "Cultural Values for Wairarapa Waterways Report" compiled by Ohau Plants Ltd has been completed and the author, Caleb Royale, delivered a presentation to the Te Upoko Taiao-Natural Resource Management Committee in March. The report, which will shortly be made publicly available, was commissioned to assist in the identification of in-stream values which forms an important part of our work on setting minimum flows and allocation levels in rivers and streams. As well as serving this purpose, the report is also a valuable resource for others who have an interest in Wairarapa rivers and streams, particularly those who work in and around these waterways.

### **Biodiversity monitoring needs assessment**

An analysis of the resource requirements for State of the Environment (SoE) reporting and regional outcome monitoring has been completed. The scoping study has recommended that further scientific information be obtained before defining resource needs in detail, as there are currently a number of unknowns related to the SoE reporting requirements. A framework that incorporates SoE and regional monitoring has been established.

### **Technical support for other departments**

A lot of technical support was provided to other Greater Wellington departments/groups during the quarter:

- Environmental Regulation – technical advice was given on a range of resource consent applications, including several water takes and discharges to air, and Hutt City Council’s application to discharge treated wastewater to the Waiwhetu Stream and Wellington Harbour. Input was also provided on several consent monitoring plans and reports, including an environmental monitoring and adaptive management plan for a major residential development in Duck Creek.
- Environmental Policy – assistance continued in relation to work for the next Regional Plan, with the emphasis around limit setting for fresh waters (quantity and quality). Assistance was also provided in preparing for a workshop with the Te Upoko Taiao–Natural Resource Management Committee air quality sub-group in March on options to address poor air quality in the Wairarapa.
- Water Supply – Environmental monitoring staff deployed additional monitoring sensors (mainly for dissolved oxygen and water temperature measurements) on the Hutt River and its tributaries as part of Water Supply’s consent monitoring requirements while the Te Marua water storage lakes are upgraded. Additional groundwater monitoring sites (both temporary and permanent) have also been installed in and around the Hutt Valley as part of Water Supply’s Lower Hutt Aquifer Model Development (HAM3) project.
- Catchment Management – Staff have been involved in initial discussions about the direction we will take in the ‘clean up’ of Wairarapa Moana, including scoping a two-day workshop in April that will bring together a broad range of parties to review and discuss the current understanding of the lake edge wetlands, the science requirements, restoration needs and their management. Monitoring staff have worked with Department of Conservation officers to re-measure vegetation plots installed in 2008 as part of a pest plant aerial spray trial. The trial involved controlling alder at three sites on the eastern side of the lake, using two different chemicals applied by air. At each site, 10 hectares (5ha with Garlon and 5ha with Glyphosate) were sprayed, while plots were also located in non-treatment areas. Greater Wellington officers and volunteers complete bird counts on the edge of Lake Wairarapa three times a year. In February, the team completed a count along 18km of shoreline from Abbott’s Creek in the north to Allsop’s Bay in the south. A total of 24 species of shore and wetland bird species and 6,929 individual birds were counted. The highlight of the day was finding five gull-billed terns. Gull-billed terns are usually an extremely rare vagrant to New Zealand (the nearest breeding population is in Australia), and this was the first confirmed record for this species from Lake Wairarapa. Other highlights included seeing two sharp-tailed and two pectoral sandpipers (relatively rare Arctic-breeding waders), one black-fronted tern and ninety royal spoonbills (the largest number of spoonbills that have been recorded at Lake Wairarapa so far). The bird recorder that was placed in Pounui Lagoon has been removed, as the duck shooting season is about to begin. The remotely-monitored bird recording device has provided the first official records of bittern presence at the lagoon and has been useful in gathering information about the timing of their calls. Staff also provided some brief initial technical advice to

assist with Greater Wellington's development of Land Environment Plans for intensive land use areas in the Wairarapa.

- Flood Protection – we continued to provide input and advice in relation to the potential effects on aquatic ecosystems from a variety of routine flood protection and land management activities. While this work is on-going across a range of activities, particular focus in the last couple of months has been around assessing the effects of willow removal from stream banks. To date this has mostly involved discussion around the potential effects of this activity and also ways of modifying how this activity is undertaken to help minimise any potential negative impacts. Reaches of the Waitohu and Hikunui streams, with the aid of Massey University, have also been fished before and after willow clearance to enable a better assessment of the potential effects this activity can have on fish communities. In late March we collected some additional sediment samples from the lower reaches of the Waiwhetu Stream for heavy metal analysis. These samples were collected in response to a post-remediation ecological assessment carried out by Wriggle Coastal Management Ltd in late February that identified elevated contaminant concentrations in several stream sediment samples.