NOTICE IS GIVEN that the next meeting of the Operations, Monitoring and Regulation Committee will be held in Council Meeting Room One, Bay of Plenty Regional Council, 5 Quay Street, Whakatane on:

EMBARGOED
Until 2 working days before meeting on:

Thursday, 20 June 2013

commencing at 9.30 a.m.

Mary-Anne Macleod
Chief Executive

13 June 2013
Operations, Monitoring and Regulation Committee – Terms of Reference

The Operations, Monitoring and Regulation Committee has core functions of implementation and monitoring of Regional Council Strategy and Policy.

1  Delegated Function

To set the operational direction for approved Regional Council policy and strategy and monitor how it is implemented. This will be achieved through the development of specific operational decisions which translate policy and strategy into action.

2  Membership

All Councillors including the Chairman as Ex-Officio.

3  Term of the Committee

For the period of the 2010/2013 Triennium unless discharged earlier by the Regional Council.

4  Specific Responsibilities and Delegated Authority

The Operations, Monitoring and Regulation Committee is delegated the power of authority to:

1. Approve operational plans (as identified in council’s Ten Year Plan and Annual Plan) that implement approved Regional Council Strategy and policy. Including:
   - Regional park management plans.
   - Asset management plans.
   - The Tier II Response Plan for oil pollution incidents and submit for approval to the Maritime Safety Authority.

2. Monitor the implementation and progress of approved Regional Council policy, strategy, operational plans and programmes. Examples include:
   - The Regional Pest Management Strategy.
   - Asset Management Plans.
   - The Environmental Enhancement Fund.
   - Rivers and Drainage schemes.
   - Small scale sewage reticulation subsidy scheme.
   - Council’s Tier II Response Plan for oil pollution incidents.
   - Biodiversity and environmental programmes with private owners.
   - Environmental response functions.
   - Transport related plans.
   - Contaminated sites programme.
   - Bylaws.
   - Civil defence emergency management responsibilities as a member of the Bay of Plenty Civil Defence Emergency Management Group.
   - Monitoring, compliance and investigation programmes.
3. Make decisions about compliance and enforcement functions and action relating to any statute Council operates under such as:
   - Warranting officers.
   - Taking enforcement and court action.
   - Issuing fines and infringement notices.

4. Approve the allocation of funds (as identified in the Ten Year Plan and Annual Plan) to the Environmental Enhancement Fund.

5. Exercise all Council’s duties, functions and powers for determining resource consent applications.

6. Approve submissions on behalf of the Council in relation to consent applications.

7. Approve environmental agreements with private landowners, in accordance with the Policy on Partnerships with the Private Sector.

8. Establish subcommittees and hearing panels and delegate to them any authorities that have been delegated by Council to the Operations, Monitoring and Regulation Committee and to appoint members (not limited to members of the Operations Monitoring and Regulation Committee).

9. Approve its Subcommittee’s recommendations for matters outside the Subcommittee delegated authority.

10. Carry out hearings under any statute, for areas within its terms of reference.

11. Enter into contracts on matters within its terms of reference to a maximum value of $700,000 (excluding GST) for any one contract, subject to and within the allocation of funds set aside for that purpose in the Ten Year Plan or Annual Plan or as otherwise specifically approved by Council.

12. Approve, within its terms of reference, the transfer of budget levels between activities or to exceed the budget level for an activity with no commensurate savings elsewhere, up to $100,000 and to recommend to Council amounts exceeding $100,000.

**Note:**

The Operations, Monitoring and Regulation Committee reports directly to Regional Council

The Operations, Monitoring and Regulation Committee is not delegated the power of authority to:

- Develop, adopt or review strategic policy and strategy.
- Approve Council submissions on legislation, policy, regulations, standards, plans and other instruments prepared by Central Government, Local Government and other organisations.
- Identify, monitor and evaluate necessary actions by the organisation and other relevant organisations on the Rotorua Te Arawa Lakes programme.
Public Forum

1. A period of up to 15 minutes shall be set aside near the beginning of the meeting to enable members of the public to make statements about any matter on the agenda of that meeting which is open to the public, but excluding any matter on which comment could prejudice any specified statutory process the council is required to follow.

2. The time allowed for each speaker will normally be up to 5 minutes but will be up to the discretion of the chair. A maximum of 3 public participants will be allowed per meeting.

3. No statements by public participants to the Council shall be allowed unless a written, electronic or oral application has been received by the Chief Executive (Governance Team) by 12.00 noon of the working day prior to the meeting and the Chair’s approval has subsequently been obtained. The application shall include the following:
   - name of participant;
   - organisation represented (if any);
   - meeting at which they wish to participate; and matter on the agenda to be addressed.

4. Members of the meeting may put questions to any public participants, relevant to the matter being raised through the chair. Any questions must be asked and answered within the time period given to a public participant. The chair shall determine the number of questions.
Membership

Chairman: M Whitaker
Deputy Chairman: P Sherry
Councillors: R Bennett, T Eru, J Mansell, T Marr, J Nees, I Noble, N Oppatt, D Owens, P Thompson, L Thurston
Ex Officio: Chairman J Cronin
Secretary: S Cubbon

Recommendations in reports are not to be construed as Council policy until adopted by Council.

Agenda

1 Apologies

2 General Business and Tabled Items

Items not on the agenda for the meeting require a resolution under section 46A of the Local Government Official Information and Meetings Act 1987 stating the reasons why the time was not on the agenda and why is cannot be delayed until a subsequent meeting.

3 Reports

3.1 2013 Ballance Farm Environment Award programme annual report

PRESENTATION - 2013 Ballance Farm Environment Award programme presentation

3.2 Kiwifruit Vine Health - National Pest Management Plan for Psa-V

3.3 Hydro-Electric Schemes Compliance Report June 2010 - June 2013

APPENDIX 1 - Hydro-electric consents - Site descriptions and compliance June 2010 – June 2013

3.4 Tauranga Eastern Link Project Progress and Compliance Report

3.5 Trends and State of Nutrients in Lake Rotorua Streams, 2013

SUPPORTING DOCUMENT - Trends and State of Nutrients in Lake Rotorua, 2013

3.6 Rotorua Te Arawa Lakes Programme Plan 2013/2014
3.7 Water Allocation Status Report
APPENDIX 1 - Surface water allocation maps
APPENDIX 2 - Groundwater allocation map - catchments
APPENDIX 3 - Groundwater allocation map - zones
APPENDIX 4 - Lower Kaituna map - permitted takes survey area

3.8 An overview of faecal contamination in rivers and streams

3.9 Quarterly Consents Update Report
APPENDIX 1 - 130620 RMI decisions granted 20.01.2013 to 25.05.2013 pdf
APPENDIX 2 - 130620 Graph of incoming and outgoing monthly application numbers
APPENDIX 3 - Council Hearing Process Report
APPENDIX 4 - Resource Consent Application Hearings

3.10 General Manager’s Report

4 Consideration of General Business
Executive Summary

This report is a summary of the Ballance Farm Environment Award programme for 2013, run by the Farm Environment Award Trust (Bay of Plenty Region). The Ballance Farm Environment Awards Management Committee will present their annual report.

1 Recommendations

That the Operations, Monitoring and Regulation Committee under its delegated authority:

1 Receives the report, 2013 Ballance Farm Environment Award programme annual report.


2 Background

The Farm Environment Awards have existed nationally since 1993. In 2004, The New Zealand Farm Environment Award Trust was established. The Trust's core business is promoting sustainable environmental management of land. One of the ways it does this is to run the National Ballance Farm Environment Awards event. It also ensures that any other events or awards run under the New Zealand Farm Environment Award banner stay true to the original idea.

The Ballance Farm Environment awards in the Bay of Plenty are directed by the Farm Environment Award Trust (Bay of Plenty Region). The annual event is run by the Ballance Farm Environment Awards Management Committee. It is this committee which is presenting to you today.

3 About the awards
The Ballance Farm Environment Awards aim to identify and reward farming operations that are achieving a high standard across three key factors essential to a successful farming operation:

- Sustainable Profitability
- Environmental awareness
- Social and community responsibility

While the Awards are about celebrating winning practices, they are first and foremost focused on learning and knowledge sharing. For those farmers who do not yet feel they are ready to enter, the Awards are an opportunity to benchmark themselves against their peers and receive confidential constructive feedback from a team of three independent assessors. Many people enter the Awards to share ideas and expertise with the wider farming community. A key characteristic of many entrants is a desire to seek innovative and sustainable ways to address limitations encountered in their farming businesses. Each year one farming operation is judged as the supreme winner for the region, and seven additional awards are made across a range of farm types and businesses.

3.1 How the awards benefit the future

The awards help many farming businesses to enhance their assets in a variety of ways. Many past participants have entered to learn new ways of doing things. Farmers have said that the benefits to be gained from entering include:

- Linking sustainable farming practices to long-term profitability
- The opportunity to discuss practical farm information and business with assessors from arrange of fields
- Gathering new ideas and different methods from other entrants
- Confirmation that current farm management practices are sustainable

4 Our Role

We have been working with and supporting the farm environment awards for a long time. In December 2008 the Council updated its relationship with the Farm Environment Award Trust and signed a contract agreement with them that changed the way we engage with the Ballance Farm Environment Award programme. Instead of the organisation of the Awards being undertaken by one of our communications advisers or directly paying some of the programme costs we now fund the Farm Environment Award Trust (Bay of Plenty Region) with a total annual grant of $30,000.

This assists the Trust in achieving its principal objective which is;

“The advancement, education, assistance and promotion of sustainable environmental management of land and other natural resources on farms within the Bay of Plenty region”.
The Trust is required as a condition of its contract, to report to the Council before the end of the financial year after its awards ceremony and supreme winners field day.

Council’s commitment, on top of its financial obligation is to cover the print cost of meetings, have representation on the management committee and Trust (Simon Stokes – Land Resources Manager Eastern), personnel support for the annual awards and field day, and to provide meeting rooms. We also provide one assessment judge (Land Management Officer Roz Hensman), who also supports the field day arrangements, with other Land Management staff in support if necessary.

Both parties are prepared to sign a new contract for three years with the same level of commitment as within the current contract, following approval of this report.

2 Financial Implications

Current Budget

Funding is provided for in the current Annual Plan.

Future Implications

Future commitments are provided for in the Ten Year Plan budget.

Simon Stokes
Land Management Manager (Eastern)

for General Manager Natural Resource Operations

12 June 2013
Executive Summary

Neal Cameron, Operations Manager, and Andrew Harrison, Biosecurity Programmes Manager for Kiwifruit Vine Health Incorporated (KVH), will provide a presentation to the committee which will outline the finalised National Pest Management Plan for Pseudomonas syringae pv. Actinidiae (Psa-V). Mr Cameron and Mr Harrison will provide an overview of Kiwifruit Vine Health’s role in the management of Psa and other Biosecurity threats to the industry, and an update on the state of Psa-V in the Bay of Plenty Region, and nationally. They will explain the new National Psa-V Pest Management Plan and how it will be implemented. They will also outline how KVH and Council are proposing to work together to manage abandoned orchards and wild kiwifruit in the Bay of Plenty region to achieve management objectives for both the NPMP and our Regional Pest Management Plan.

1 Recommendations

That the Operations, Monitoring and Regulation Committee under its delegated authority:

1 Receives the report, Kiwifruit Vine Health - National Pest Management Plan for Psa-V.

2 Purpose

This paper introduces a presentation on Pseudomonas syringae pv. Actinidiae (Psa-V) and the new National Psa-V Pest Management Plan (NPMP) by Neal Cameron, Operations Manager, and Andrew Harrison, Biosecurity Programmes Manager for Kiwifruit Vine Health Inc. (KVH).

3 Introduction

KVH is a grower-driven, pan-industry organisation established in December 2010 to lead the New Zealand Kiwifruit industry response to the Psa-V incursion. In November 2012, KVH was tasked by the kiwifruit industry to manage the wider biosecurity readiness, response and operational role on behalf of the kiwifruit industry.
Psa-V is a pathogenic bacterium of Actinidia (kiwifruit) species that can result in the death of kiwifruit vines; it carries no risk to human or animal health and does not affect plants other than kiwifruit. It is believed to be spread by weather events, particularly wind and rain, and the movement of plant material. It is also believed to be spread by footwear, machinery, and orchard tools. In an orchard, it can exist as:

- An epiphyte, living on plant surfaces without causes high levels of infection; and/or
- As an endophyte living within the vine having entered through natural plant openings or man-made wounds, resulting in severe infection.

Below is a map that identifies where Psa-V has been confirmed, it also identifies the Controlled Areas and Recovery Regions identified in the NPMP.

As of 5 June 2013, 2102 orchards have been identified with Psa-V totalling 9745 hectares. This means 71% of New Zealand’s kiwifruit hectares are on an orchard identified as having Psa-V.

4 National Psa Pest Management Plan

To overcome the impact of Psa into the future, KVH developed a National Psa Pest Management Plan (NPMP) under the Biosecurity Act, which was approved by the Minister of Primary Industries on the 14th of May 2013. The primary objective of the NPMP is to “prevent the spread of Psa-V and minimise its impact on commercial kiwifruit”. To achieve this objective, emphasis has been placed on awareness, education and research, working actively with the industry and its stakeholders to achieve a common goal.
The plans objectives will be achieved by:

- Carrying out vine monitoring
- Reducing inoculum, by cleaning up diseased and abandoned orchards, and wild kiwifruit populations.
- Controlling the movement of risk items, including kiwifruit plant material, and orchard equipment to prevent the spread of Psa-V from orchard to orchard, and region to region.
- Applying best practice orchard management and carrying out further Psa-V research and development (also learning’s from on-orchard experience and grower innovation).
- Establishing preparedness and response systems to allow immediate action in new incursions are detected.

Achieving compliance through voluntary means will remain the primary focus when implementing the plan. However, the ability to enforce requirements in significant cases of non-compliance will ensure the most effective management of the disease. The plan outlines seven rules critical to ensuring the objectives are met, these rules are:

**Rule 1: Psa-V Orchard Management Plan** - Every landowner or occupier responsible for management of a kiwifruit orchard shall have, and operate in accordance with, a Psa-V Orchard Management Plan.

**Rule 2: Psa-V Risk Management Plan** - Every post-harvest operator and processor shall have, and operate in accordance with, a Psa-V Risk Management Plan.

**Rule 3: Reporting** - Every person who recognises the symptoms, or potential symptoms, of Psa-V on an orchard for the first time, must report these to KVH within 48 hours.

**Rule 4: Provision of information** - Every person must provide KVH with information that is reasonable for the monitoring of Psa-V.

**Rule 5: Crop Protection Programme** - Every landowner or occupier responsible for management of a kiwifruit orchard must have an effective crop protection programme in place.

**Rule 6: Unmanaged orchards** – Every orchard where Psa-V is present must be managed to reduce the risk of spread.

**Rule 7: Abandoned orchards** - Every landowner or occupier responsible for management of a kiwifruit orchard must ensure that kiwifruit vines are winter pruned and tied at 1 October each year and that the majority of commercially-viable kiwifruit is harvested by 1 July each year.

**Wild kiwifruit**

Council manage wild kiwifruit through its Regional Pest Management Plan (RPMP) as a Containment pest due to the risk it poses to biodiversity, as it can smoother native vegetation and cause canopy collapse. The RPMP requires landowners to control wild kiwifruit on their property with support and advice from Bay of Plenty Regional Council staff. In previous years, New Zealand Kiwifruit Growers Incorporated (NZKGI) have also provided funding to support our RPMP programme.
KVH are now mandated to work with Councils’, on behalf of the industry, on wild kiwifruit issues.

The objectives for wild kiwifruit for KVH are similar to those of Council, therefore the two agencies are looking to work collaboratively in areas of common interest. The two agencies are in the discussion regarding the development of a Memorandum of Understanding (MOU) that will outline how the agencies will work together to control wild kiwifruit and abandoned orchards.

Shane Grayling

Land Management Officer (Rotorua)

for General Manager Natural Resource Operations

12 June 2013
Executive Summary

This report provides an overview of the number and location of hydro-electric consents within the Bay of Plenty Region as well as the various levels of compliance for these consents.

There are currently 34 active resource consents for six major schemes within the region and during the June 2010-2013 reporting period all of these sites had a high level of compliance.

This report does not cover consents for small schemes as those monitoring and reporting dates fall outside this reporting period.

1 Recommendations

That the Operations, Monitoring and Regulation Committee under its delegated authority:


2 Introduction

The Bay of Plenty Regional Council has a responsibility under the Resource Management Act 1991 to monitor consented activities, including hydro-electric consents. Under the Compliance and Impact Monitoring Policy 2001 all hydro dams with significant water resource impacts are monitored on a yearly basis and reported on a three yearly cycle. All other dams are monitored and reported on a five yearly cycle.

This report has been prepared to outline the level of compliance for 34 resource consents for six current hydro-electric schemes in the Bay of Plenty region.

3 Method of compliance monitoring

Site inspections have been undertaken and compliance field sheets have been completed. The purpose of these inspections and field sheets is to assess
compliance with the consent conditions as well as providing a report to the consent holder outlining any issues that need addressing and acknowledging any good work that has been undertaken. This enables the consent holder to gauge their progress and to identify any matters that require attention.

Some of these consents require that the consent holder submit self-monitoring data to the Bay of Plenty Regional Council and the monitoring officer assesses the results in conjunction with the consent conditions and where appropriate compliance with compensation and recreational release flows.

4 Site description and compliance issues

An overview of each hydro-electric consent, the consent conditions, a site summary and details of any compliance issues including an overall compliance rating is provided in Appendix 1.

There were no compliance issues at any of the sites.

5 Compliance ratings

Each site has been given an overall compliance rating which takes into account the sites performance over the whole reporting period. Sites are rated as follows:

- High: indicates compliance with all or most consent conditions with non-compliance being of a low risk to the environment.
- Moderate: indicates compliance with most conditions and the environmental consequence of non-compliance is deemed to be minor, but has the potential to result in moderate environmental effects.
- Poor: indicates a failure to comply with a number of consent conditions and/or the consequence of non-compliance is deemed to be significant.

Table 1: Summary of Compliance Ratings for Schemes - June 2010 – 2013 monitoring period

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Total consents</th>
<th>High</th>
<th>Moderate</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trustpower Limited - Kaimai</td>
<td>12</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Trustpower Limited - Matahina, Rangitaiki</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Trustpower Limited - Wheao, Rangitaiki</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nova Energy - Aniwihenua, Rangitaiki</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Summary of 2010 – 2013 monitoring period

- The amount of consents that relate to major hydro-electric schemes total 34.
- One hundred percent of the 34 sites have a high rating.
- No hydro schemes operating within the 2010 to 2013 cycle received ratings of moderate or poor.
- No abatement notices or infringement notices were issued for the 2010 to 2013 period.
- No prosecutions have been undertaken during this period.
- Any reported non-compliance by consent holders has been evaluated and summarised as not being a breach of the conditions and has been attributed to natural conditions such as lack of rainfall in these areas.

Conclusion

- It is satisfying to see a high level of compliance for the major hydro-electric schemes in the Bay of Plenty Region.
- The Regional Council have built up good relationships with the consent holders and their representatives which makes it easier to solve problems and work through certain issues that may arise.

Mike Caldwell
Pollution Prevention Officer Mount

for Pollution Prevention Manager

11 June 2013
APPENDIX 1

Appendix 1 Hydro-electric consents - Site descriptions and compliance June 2010 – June 2013
Appendix 1

Hydro-electric consents - Site descriptions and compliance
June 2010 – June 2013

1 Trustpower Limited: Kaimai Scheme

1.1 Trustpower Limited: Kaimai Scheme – Consent 20195

Purpose: To dam, divert and discharge water at the Opuiaki Stream, Tauwharawhara Stream, Ngatuhoa Stream, Awakotuku Stream, Mangaonui Stream, Omanawa River, Ruakaka Stream, Mangapapa River, and Dam Scotts Dry Gully, and to discharge up to 14.2 cubic metres per second water flow to generate electricity through the tunnel 6 outlet turbine power station and use up to 14.2 cubic metres of water per second to generate electricity in the Lloyd Mandeno Power Station.

Condition Details: Inspection and maintenance of warning signs, safety booms, intake screens, compensation flows, fish ladders and passes, vegetation clearance and water levels.


Site Summary: On the 8 February 2010 a change was granted to the consent increasing the discharge through tunnel 6 from 12 to 14.2 cubic metres per second. At the last site inspections in 2011, 2012 and 2013 apart from maintenance matters relating to flashboards and walkways after flood events all other requirements were being completed and structures were in place.

All monitoring results have been submitted and are up to date.

In 2010 and 2013 the Kaimai stakeholder meetings were held which includes representation from key stakeholders involved with the scheme.

1.2 Trustpower Limited: Kaimai Scheme – Consent 20011

Purpose: To dam the Mangapapa River to form a reservoir, and divert and take the water from the reservoir for electricity generation at the Lower Mangapapa power house and to discharge the surplus water into the Mangapapa River.

Condition Details: Inspection and maintenance of warning signs, safety booms, intake screens, compensation flows, and water levels and operational records.


Site Summary: At the last site inspections in 2011, 2012 and 2013 all requirements were being completed and structures were in place.

1.3 Trustpower Limited: Kaimai Scheme – Consent 23297

Purpose: To dam, divert and discharge water at the Mangakarengorengo River, Mangapapa River, Tributary One (Mairoa Stream), Tributary Two, Tributary Three, and to use up to 28 cubic metres per second water flow to generate electricity at the Ruahihi Power Station.
Condition Details: Inspection and maintenance of warning signs, safety booms, intake screens, compensation flows, fencing maintenance, vegetation clearance, and water levels.


Site Summary: At the last site inspections in 2011, 2012 and 2013 all requirements were being completed and structures were in place.

1.4 Trustpower Limited: Kaimai Scheme – Consent 64716

Purpose: To discharge aquatic herbicides, (Diquat and Glyphosate) to Lake McLaren, and to air over Lake McLaren to control submerged weeds and willows in the lake.

Condition Details: The consent holder has notification conditions which include several parties. They have monitoring and reporting conditions relating to dissolved oxygen and temperature profiles at various locations. They also have yearly reports to be submitted.


Site Summary: In 2008 it was agreed that the application of Glyphosate on willows is permitted pursuant to the Regional Water and Land Plan. Spraying was completed in January 2010. It is envisaged that spraying will be completed in March 2013. The annual report has been submitted for 2010 and 2012. The next report is due in July 2013.

1.5 Trustpower Limited: Kaimai Scheme – Consent 64717

Purpose: To discharge aquatic herbicides, (Diquat) to Lloyd Mandeno Canal, and to air over Lloyd Mandeno Canal to control submerged weeds in the canal.

Condition Details: The consent holder has notification conditions to the Regional Council. There is monitoring and reporting conditions that concentrate on visual inspections and the submission of a report and plan by the 31 July each year.


Site Summary: Spraying was completed in March 2010. It is envisaged that spraying will be completed in March 2013. The annual report has been submitted for 2010 and 2012. The next report is due in July 2013.

1.6 Trustpower Limited: Kaimai Scheme – Consent 64718

Purpose: To discharge aquatic herbicides, (Diquat) to the Ruahihi Canal, and to air over the Ruahihi Canal to control submerged weeds in the canal.

Condition Details: The consent holder has signage, and notification conditions that include several parties. There is monitoring and reporting conditions that concentrate on visual inspections and the submission of a report and plan by the 31 July each year.


Site Summary: Spraying was completed in March 2010, March 2011, and March 2012. It is envisaged that spraying will be completed in March 2013.
The annual report has been submitted for 2010, 2011 and 2012. The next report is due in July 2013.

1.7 **Trustpower Limited: Kaimai Scheme – Consent 50216**

**Purpose:** To construct a new intake structure and remove the existing structure in the Ngatuhoa Stream and reconstruct the embankment of the Ngatuhoa Canal.

**Condition Details:** The consent holder has a maintenance condition and notification to the Regional Council prior to maintenance works commencing.

**Compliance Issues:** Nil.  **Rating:** High.

**Site Summary:** At the last site inspections in 2011, 2012 and 2013 all requirements were being completed and no maintenance had been completed.

1.8 **Trustpower Limited: Kaimai Scheme – Consent 50396**

**Purpose:** To construct a new spillway channel and control gate on McLarens Lake dam.

**Condition Details:** The consent holder has a maintenance condition and notification to the Regional Council prior to maintenance works commencing.

**Compliance Issues:** Nil.  **Rating:** High.

**Site Summary:** At the last site inspections in 2011, 2012 and 2013 all requirements were being completed and no maintenance had been completed.

1.9 **Trustpower Limited: Kaimai Scheme – Consent 61766**

**Purpose:** To excavate sediment and debris from behind the Ngatuhoa intake weir in the Ngatuhoa Stream.

**Condition Details:** The consent holder has a notification condition to contact the Regional Council five days prior to works commencing. Works are to be undertaken in December, January, or February of any year.

**Compliance Issues:** Nil.  **Rating:** High.

**Site Summary:** At the last site inspections in 2011, 2012 and 2013 all requirements were being completed and no maintenance had been completed.

1.10 **Trustpower Limited: Kaimai Scheme – Consent 63409**

**Purpose:** To place and use an access way over the bed of Lake Mangaonui.

**Condition Details:**
The consent holder has a maintenance condition and keeping records of all maintenance completed.

**Compliance Issues:** Nil.  **Rating:** High.

**Site Summary:** At the last site inspections in 2011, 2012 and 2013 all requirements were being completed and no maintenance had been completed.
1.11 Trustpower Limited: Kaimai Scheme – Consent 65788

**Purpose:** To install gabion baskets as an erosion protection in the bed and bank of the Mangaonui stream.

**Condition Details:** The consent holder has a maintenance condition.

**Compliance Issues:** Nil. **Rating:** High.

**Site Summary:** At the last site inspections in 2011, 2012 and 2013 all requirements were being completed and no maintenance had been completed.

1.12 Trustpower Limited: Kaimai Scheme – Consent 65843

**Purpose:** To remove a rubber spillway dam and replace it with hydraulic steel gates at Lake Mangaonui.

**Condition Details:** The consent holder has a maintenance condition and keeping records of all maintenance completed.

**Compliance Issues:** Nil. **Rating:** High.

**Site Summary:** At the last site inspections in 2011, 2012 and 2013 all requirements were being completed and no maintenance had been completed.

2 Trustpower Limited: Matahina, Rangitaiki Scheme

2.1 Trustpower Limited: Matahina, Rangitaiki Scheme – Consent 22195

**Purpose:** To dam the Rangitaiki River to form a reservoir known as Lake Matahina, take and use up to 160 cubic metres of water per second from Lake Matahina for the purpose of generating electricity at the Matahina Power Station, and discharge from Lake Matahina and the Power Station to the Rangitaiki River.

**Condition Details:** Inspection of warning signs, safety booms, intake screens, compensation flows, elver passes, monitoring river flow and erosion, reporting and water levels.

**Compliance Issues:** Nil. **Rating:** High.

**Site Summary:** Site inspections were completed in 2012 and 2013 and all structures were in place as required. In 2006 an alarm was fitted to identify reservoir level exceedance. Biennial monitoring reports were received for 2010 and 2012 and the next is due in August 2014.

All monitoring results have been submitted and are up to date.

This consent expired on 30 November 2009. A replacement application has been submitted and is still before the Environment Court. Therefore the consent holder can continue to operate under the existing consent.

2.2 Trustpower Limited: Matahina, Rangitaiki Scheme – Consent 63388

**Purpose:** To use and maintain two existing boat ramps and ajetty on Lake Matahina.
2.3 **Trustpower Limited: Matahina, Rangitaiki Scheme – Consent 60102**

**Purpose:** To disturb the bed of, and to erect and use a jetty in the bed of Lake Matahina.

**Condition Details:** The consent holder has a maintenance condition.

**Compliance Issues:** Nil.  
**Rating:** High.

**Site Summary:** Site inspections were completed in 2012 and 2013 and there were no issues detected.

2.4 **Trustpower Limited: Matahina, Rangitaiki Scheme – Consent 50880**

**Purpose:** To disturb the bed of, and to erect and use an access ramp in the bed of the Rangitaiki River.

**Condition Details:** The consent holder has a maintenance condition.

**Compliance Issues:** Nil.  
**Rating:** High.

**Site Summary:** Site inspections were completed in 2012 and 2013 and there were no issues detected.

2.5 **Trustpower Limited: Matahina, Rangitaiki Scheme – Consent 63299**

**Purpose:** To carry out small scale earthworks and remove, place and use a structure in the Rangitaiki River.

**Condition Details:** The consent holder has a notification condition and reporting condition to the Regional Council of any works completed.

**Compliance Issues:** Nil.  
**Rating:** High.

**Site Summary:** These works were to repair erosion on the banks of the Rangitaiki River below the Matahina Dam caused by the July 2004 floods. Site inspections were completed in 2012 and 2013 and there were no issues detected.

3 **Trustpower Limited: Wheao, Rangitaiki Scheme**

3.1 **Trustpower Limited: Wheao, Rangitaiki Scheme – Consent 20253**

**Purpose:** To dam, divert and discharge water at the Rangitaiki River, Wheao River, Flaxy Creek, and to use the water from the penstocks for the generation of electric power.

**Condition Details:** Inspection of warning signs, safety booms, intake screens, compensation flows, vegetation clearance and water levels and subsequent reporting.

**Compliance Issues:** Nil.  
**Rating:** High.
Site Summary: Site inspections were completed in 2012 and 2013. During the reporting period Council staff were advised of several incidents that primarily relate to weather conditions, system failure and maintenance. None of these incidents equated to a breach of the consent. At some stages there has been a shortage of rainfall and the flow has slipped below the 6 cumecs. This would be described as exceptional circumstances and therefore not classified as a breach of the consent.

All monitoring results have been submitted and are up to date.

Survey results have been submitted in 2011 and 2012.

3.2 Trustpower Limited: Wheao, Rangitaiki Scheme – Consent 64049

Purpose: To discharge aquatic herbicides, (Diquat) to control weed growth in the Flaxy Canal.

Condition Details: The consent holder has signage, and notification conditions that include local newspapers and several parties including the Regional Council. A report is to be submitted on a yearly cycle.


Site Summary: Site inspections were completed in 2012 and 2013. No spraying has been completed over this reporting period.

3.3 Trustpower Limited: Wheao, Rangitaiki Scheme – Consent 60594

Purpose: To discharge herbicides containing Diquat to control weed growth in the Rangitaiki-Wheao canal.

Condition Details:
The consent holder has signage, and notification conditions that include local newspapers, forestry owners and the Regional Council.


Site Summary: Site inspections were completed in 2012 and 2013. No spraying has been completed over this reporting period. This consent expired in August 2012 and the consent holder has decided not to renew it.

3.4 Trustpower Limited: Wheao, Rangitaiki Scheme – Consent 62487

Purpose: To deposit and discharge sediment into the Wheao River and intake dam.

Condition Details: The consent holder has notification conditions concerning sluicing operations. There is trout monitoring survey conditions and reporting of these surveys.


Site Summary: Sluicing operations were completed in 2010 and 2011. Site inspections were completed in 2012 and 2013. The trout monitoring was discontinued in 2008 after consultation with the water science and support manager. No issues were detected.
3.5 **Trustpower Limited: Wheao, Rangitaiki Scheme – Consent 62903**

**Purpose:** To complete the dredging operation for the Rangitaiki canal.

**Condition Details:** The consent holder has notification conditions concerning dredging operations.

**Compliance Issues:** Nil.  **Rating:** High.

**Site Summary:** Dredging was completed in 2011 and notification was completed. Site inspections were completed in 2012 and 2013. Checking of the disposal areas for the sludge revealed no issues. No issues were detected.

3.6 **Trustpower Limited: Wheao, Rangitaiki Scheme – Consent 65536**

**Purpose:** To construct and use a sediment trap in the Rangitaiki canal.

**Condition Details:** The consent holder has notification conditions concerning dredging operations as well as monitoring and reporting on dissolved oxygen levels.

**Compliance Issues:** Nil.  **Rating:** High.

**Site Summary:** Site inspections were completed in 2012 and 2013. Removal of sediment was completed in 2010 and 2012. Checking of the disposal areas for the sludge revealed no issues. No issues were detected.

4 **Nova Energy: Aniwhenua, Rangitaiki Scheme**

4.1 **Nova Energy: Aniwhenua, Rangitaiki Scheme – Consent 20190**

**Purpose:** To dam, divert and discharge water at the Rangitaiki River, and Pokairoa Stream to form Lake Aniwhenua and use water from Lake Aniwhenua for the generation of electric power.

**Condition Details:** Inspection of warning signs, sound signals, safety booms, intake screens, compensation flows, vegetation clearance and weed control, water levels, sediment and ecological surveys.

**Compliance Issues:** Nil.  **Rating:** High.

**Site Summary:** A site inspection was completed in 2013 and the consent holder is in the process of changing their name from Bay of Plenty Energy Limited to Nova Energy. Maintenance work is continually being completed. The annual sediment surveys have been submitted for 2010, 2011 and 2012. All monitoring results have been submitted and are up to date.

The ecological survey was submitted in 2012 and is to be submitted on a 5 yearly cycle. No issues were detected.

4.2 **Nova Energy: Aniwhenua, Rangitaiki Scheme – Consent 50158**

**Purpose:** To carry out maintenance works in the bed of the Rangitaiki River at the dam barrage.

**Condition Details:** The consent holder is to notify the Regional Council of trout stranding and when maintenance work is to be completed.

Site Summary: A site inspection was completed in 2013 and the consent holder is in the process of changing their name from Bay of Plenty Energy Limited to Nova Energy. Council staff were advised of recent maintenance work below the barrage. No issues were detected.

4.3 Nova Energy: Aniwhenua, Rangitaiki Scheme – Consent 50341

Purpose: To carry out maintenance works on the two existing training banks at the head of Lake Aniwhenua.

Condition Details: The consent holder is to notify the Regional Council when maintenance work is to be completed.


Site Summary: A site inspection was completed in 2013 and the consent holder is in the process of changing their name from Bay of Plenty Energy Limited to Nova Energy. Some maintenance work was completed in 2011. No issues were detected.

4.4 Nova Energy: Aniwhenua, Rangitaiki Scheme – Consent 60548

Purpose: To use a jetty on the bed of Lake Aniwhenua.

Condition Details: There is a maintenance condition and every five years the consent holder is to supply to the Regional Council an independent structural integrity survey.


Site Summary: A site inspection was completed in 2013 and the consent holder is in the process of changing their name from Bay of Plenty Energy Limited to Nova Energy. The next survey is to be completed in September 2013. No issues were detected.

4.5 Nova Energy: Aniwhenua, Rangitaiki Scheme – Consent 20458

Purpose: To divert the Hikurangiha Stream and discharge back into Lake Aniwhenua.

Condition Details: The consent holder is to maintain the stream.


Site Summary: A site inspection was completed in 2013 and the consent holder is in the process of changing their name from Bay of Plenty Energy Limited to Nova Energy. Some maintenance work was completed in 2012. No issues were detected.
5 Karaponga Hydro Limited: Karaponga Scheme

5.1 Karaponga Hydro Limited: Karaponga Scheme – Consent 24433

**Purpose:** To dam water at the Karaponga Stream to create a reservoir for the purpose of power generation.

**Condition Details:** Undertake an evaluation of native fish and submit a report to the Regional Council. Inspection of intake screens, undertake stability monitoring of the reservoir area.

**Compliance Issues:** Nil. **Rating:** High.

**Site Summary:** Site inspections were completed in 2012 and 2013. The consent holder has recently changed the name from Karaponga Power Limited to Karaponga Hydro Limited. This scheme has been completely overhauled with a large amount of upgrade work being completed and should be operational in 2013. The fish survey was submitted in 2013. When the scheme is operational then the remaining monitoring will be completed. No issues were detected.

5.2 Karaponga Hydro Limited: Karaponga Scheme – Consent 24434

**Purpose:** To take surface water at the Karaponga dam for the purpose of power generation.

**Condition Details:** Undertake weekly records of water measurement and submit records to the Regional Council. Inspection of intake screens.

**Compliance Issues:** Nil. **Rating:** High.

**Site Summary:** Site inspections were completed in 2012 and 2013. No weekly records have been submitted as the scheme has been off line whilst the upgrade works are being completed.

5.3 Karaponga Hydro Limited: Karaponga Scheme – Consent 24435

**Purpose:** To discharge water used in power generation to the Karaponga Stream.

**Condition Details:** Undertake monitoring of water flow and submit records to the Regional Council.

**Compliance Issues:** Nil. **Rating:** High.

**Site Summary:** Site inspections were completed in 2012 and 2013. No weekly records have been submitted as the scheme has been off line whilst the upgrade works are being completed.

5.4 Karaponga Hydro Limited: Karaponga Scheme – Consent 24437

**Purpose:** To discharge compensation flow to the residual channel between the dam and the power house for the purpose of fish access.

**Condition Details:** Undertake testing and monitoring of water flow and submit records to the Regional Council.

**Compliance Issues:** Nil. **Rating:** High.
**Site Summary:** Site inspections were completed in 2012 and 2013. No weekly records have been submitted as the scheme has been off line whilst the upgrade works are being completed.

6 **Ngatuhoa Lodge Outdoor Education Society Incorporation: Ngatuhoa Lodge Scheme**

6.1 **Ngatuhoa Lodge Outdoor Education Society Incorporation: Ngatuhoa Lodge Scheme – Consent 21458**

**Purpose:** To dam, divert, and discharge water at the Ngatuhoa Stream for the purpose of generating hydro-electric power.

**Condition Details:** To monitor and maintain the scheme.

**Compliance Issues:** Nil. **Rating:** High.

**Site Summary:** Site inspections were completed in 2011, 2012 and 2013. No issues were detected.

6.2 **Ngatuhoa Lodge Outdoor Education Society Incorporation: Ngatuhoa Lodge Scheme – Consent 61939**

**Purpose:** To replace and use a weir and canal structure in the Ngatuhoa Stream. To disturb the bed and divert the flow of water in the Ngatuhoa Stream to a hydro-electric scheme.

**Condition Details:** To monitor and maintain the scheme.

**Compliance Issues:** Nil. **Rating:** High.

**Site Summary:** Site inspections were completed in 2011, 2012 and 2013. No issues were detected.
Executive Summary

This report details the compliance history of the Tauranga Eastern Link (TEL) project from the commencement of construction in April 2010 to May 2013. The project is due for completion in 2016.

Stormwater management will likely continue to be a contentious issue for landowners and drainage scheme managers. As part of addressing these concerns, and to future-proof the catchments for flood protection, two pump station up-grades and works to install a third new pump station have now been completed.

To date, overall levels of compliance have been moderate. Dust discharges are the only recorded incidents of non-compliance. Two infringement notices have been issued for dust nuisance. A major project of this scale and nature presents significant challenges trying to control dust. The main contractors are to be commended for their efforts in early reporting of incidents, and efforts to manage the site to try and achieve full compliance. The relationship between the Regional Council and main contractors remains collaborative and positive. Dust management remains an on-going challenge and a top priority for the main contractors.

Collaboration and a multi-agency approach to compliance has been essential. Proactive engagement with a wide variety of affected stakeholders and interested parties is key to reducing complaints and compliance issues. For example, the TEL Alliance employs an Iwi Liaison Officer to ensure regular liaison occurs between Tauranga Eastern Link Tangata Whenua Advisory Group (TELTWAG), contractors and representatives from the Historic Places Trust. So far this system has worked well, with no significant compliance issues relating to effects on iwi values.

The high priority of the project and the time-critical nature and pressure of compliance monitoring has resulted in re-prioritising other less urgent compliance monitoring. Staff have been trialling the use of a contractor to undertake routine monitoring which has been working well. Compliance inspections are fully cost recoverable and staff are pursuing opportunities using a council appointed contractor in the 2013-14 financial year.

The project is running smoothly and is currently on track for completion on time.
1 **Recommendations**

That the Operations, Monitoring and Regulation Committee under its delegated authority:

1 Receives the report, Tauranga Eastern Link Project Progress and Compliance Report.

2 **Background**

The Tauranga Eastern Link (TEL) is the Bay of Plenty’s largest earthworks project involving the movement of 3 million tonnes of fill and the construction of seven bridges at an estimated 2010 cost of NZ$455 million. The alignment is designated as a Road of National Significance, and is a key strategic corridor, strongly linked to the economic growth and prosperity of the region.

The project is primarily being undertaken by a group of companies called the TEL Alliance. The Alliance comprises two main construction contractors Fulton Hogan and HEB Construction. URS, Opus, Peters and Cheung and Bartley Consultants also make up the TEL Alliance, contributing to design aspects of the project.

The contractors hold a number of ancillary consents relating to dust control. There are also a number of consents authorising works, additional to the main earthworks, some of which are being undertaken by independent contractors. These are called enabling works and are either authorised by the main consents or by separate consents held by other authorities, such as Tauranga City Council.

This report restricts its focus to compliance issues relating to the main TEL construction consents. Other earthworks relating to enabling works will be reported elsewhere as will consents for water takes and the use of dust suppressants.

New Zealand Transport Agency (NZTA) holds the consents and consultancy company Beca is employed to oversee the project on behalf of NZTA.
Key partners

A project of this scale requires the cooperation and collaboration of many authorities, organisations, groups and individuals. Three key partners are recognised as having critical regulatory and operational functions in relation to the project. These partners are:

- The Bay of Plenty Regional Council
- Tauranga City Council
- Western Bay of Plenty District Council

Important functions include:

- Resource consenting and compliance monitoring
- Issuing bylaw approvals
- Upgrading, operating and maintaining key infrastructure and utilities
- Reviewing technical design plans
- Engaging with Stakeholders including iwi, interest groups and private landowners
- Responding to public complaints and enquiries
- Providing advice.

Issues often impact upon more than one partner and where cross-over occurs a multi-agency approach to compliance management is required.
4 Key stakeholders

The project has been of great interest to stakeholders such as landowners, iwi and a wide array of interest groups and organisations. Proactive engagement has been an important factor in the success of the project. The main site office off Tara Road provides a focal point for public engagement and education with interesting displays and information about the project. The TEL Alliance also employs an Iwi Liaison Officer to ensure regular liaison occurs between Tauranga Eastern Link Tangata Whenua Advisory Group (TELTWAG), contractors and representatives from the Historic Places Trust. This liaison occurs in accordance with agreed protocols and procedures set out in the consent. So far this system has worked very well with no significant compliance issues relating to effects on iwi values.

The Tauranga Eastern Link Community Liaison Group is a key stakeholder group formed to enable the community to discuss project related concerns with the project group, be kept up to date on progress, and pass information back to their interest groups. There are 17 different groups listed as belonging to the liaison group. This also seems to be working well with no issues reported.

5 Permanent drainage and stormwater management

The embankment for the TEL alignment cuts across the Kaituna River catchment and the historical flood plain. At the Tauranga end of the project, run-off from the alignment is fed into Tauranga City Council’s storm water network prior to discharge into the Wairakei Catchment or into the harbour at Rangataua Bay under the Pāpāmoa and Mangatawa comprehensive stormwater discharge consents respectively. The management of peak flood flows has been a major challenge for the designers with careful attention directed to drainage design throughout the project.

A key design requirement is that there must be no difference between pre to post-construction peak flows. This has largely been achieved through the application of low impact design with drainage swales and ponds placed along the alignment to provide the necessary containment and soakage capacities.

In some locations this has meant that runoff has had to be redirected around catchments resulting in some issues to be worked through with affected landowners. In the vicinity of Domain Road an enquiry from a local farmer led to the discovery of a previously unknown pipe, which drained water out of the Wairakei Catchment into the Bell Road Catchment. As a result, the stormwater system in the area had to be redesigned. To ensure similar problems did not occur elsewhere, compliance staff requested a review of the original design assumptions and a statement of assurance from the project designers.
Some local landowners, who are now seeing the landscape change and are having impositions placed on them, are feeling nervous about what the future effects, particularly during larger rainfall events, will finally look like and how it could impact them. For example, recent rainfall events in the Bell Road Catchment have caused significant flooding and ponding on pastures. This is a concern to local landowners and scheme managers as the events were not particularly extreme and the feeling is that this will only get worse as development of the Pāpāmoa area continues.

As part of addressing these concerns and to future-proof the catchments for flood protection, two pump station upgrades and works to install a third new pump station have now been completed. The new Bell Road pump station is being vested with the Regional Council. The operation of the new drainage systems and pump stations is still bedding in and once optimal operation is achieved this will help relieve some recent concerns about runoff and ponding.
6 The design and build methodology

The TEL is being constructed using what is termed a design and build methodology. When the project was sent to tender the design plans were only at the general concept stage. The TEL Alliance, having won the tender process, then had to complete concept designs into final design plans for construction. As part of this process a series of stormwater plans have had to be submitted to the Regional Council for technical review and approval. Usually this occurs at the consent processing stage not after the consents are issued. The plan approval process required the input of consents staff as well as technical and engineering staff from both within and outside the regional council.

The drainage implications of the project have resulted in an almost continuous involvement by Rivers and Drainage staff with the design team, the contractors and various affected landowners. Natural Hazards Group staff has responsibilities as drainage scheme managers for issuing bylaw approval authorities and for the process of technical design plan review. Drainage and Engineering staff report a positive relationship with TEL Alliance staff with only a few minor concerns relating to a temporary bridge crossing obstructing flood flows, the realisation that some pre-existing ponding areas such as the Bell Road ox-bow are no longer available for storage as well as some minor sediment and stormwater issues that are being resolved.

A significant part of future work will relate to the review and approval of planting plans and the progress of restoration projects associated to the TEL in the lower Kaituna area.

Approval for winter earthworks have been sought and granted each year of the project. The contractor has demonstrated that it is easier to manage the site in winter when dust is less of a problem. A consent variation to widen the scope of permitted winter works is being progressed as this would eliminate the need for annual winter earthworks approvals.

7 Information management

The project has generated a huge volume of documentation. For example, the main earthworks consent consists of 15 file volumes, seven of which were created since the consent was issued and actual construction commenced. The electronic file for consent compliance contains more than 1.67 gigabytes of documents related to the project.

When plans come in for review the process is often time-critical in terms of the logistics, planning and delivery of this major project. This means that staff have had to re-prioritise other compliance monitoring work that is less urgent in order to quickly turn-around TEL correspondence so as to avoid any delay in the project. Plan reviews and approvals have regularly been accomplished in days, rather than the weeks that the standard consent conditions and statutory timeframes allow for.

8 Monitoring inspections by Council contractors

Regular and routine compliance inspections of dust, erosion and sediment controls are a critically important part of maintaining consent compliance. The value of proactive inspections is recognised by the site contractors who welcome a consistent and regular monitoring regime. Compliance work on the project is fully
cost recoverable and the main contractors and council staff are considering a more formal arrangement to facilitate regular and consistent monitoring by a Council appointed contractor. This would free up Pollution Prevention staff to focus on more strategic management of the project and other related work. From the end of April 2013 a contractor has been assisting with TEL site inspections on a trial basis. So far this arrangement is working very well.

9 **Method of compliance monitoring**

Monitoring of TEL earthworks generally consists of the following:

- **A pre-construction meeting.** This is where Bay of Plenty Regional Council staff meet the key contacts at the earthworks site, such as consultants, contractors and consent holders;
- **Routine compliance inspections.** Staff undertake programmed inspections of the site, generally making contact with the consent holder, or representative, prior to any visit;
- **Complaint response.** These inspections are the result of staff receiving complaints, generally through our Pollution Hotline system, alleging that some type of consent breach or adverse effect is occurring on the site; and
- **Issue of bylaw approval authority for drainage and assorted technical design plan review and approvals associated with each stage of the works.**

After a compliance inspection, staff issue a field sheet to the consent holder, the contractor and the consultant. These summarise any issues or concerns that may have been noted during the inspection. The field sheet also clearly details any actions required to bring the site into compliance. At that time, staff allocate a compliance rating based on their site visit observations.

10 **Compliance results**

Each field sheet details a compliance rating as follows:

- **High**: indicates compliance with all or most consent conditions with non-compliance being of a low risk to the environment.
- **Moderate**: indicates compliance with most conditions and the environmental consequence of non-compliance is deemed to be minor, but has the potential to result in moderate environmental effects.
- **Poor**: indicates a failure to comply with a number of consent conditions and/or the consequence of non-compliance is deemed to be significant.
The NZTA consents

There are three main consents for the project which are held by NZTA. The table below summarises compliance issues and ratings.

*Table 1*  Compliance Ratings for TEL Consents

<table>
<thead>
<tr>
<th>Consent Numbers</th>
<th>Consent Purpose</th>
<th>Key Compliance Issues</th>
<th>Number of Field Sheets and Compliance Rating April 2010-May 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>65435</td>
<td>Bulk earthworks</td>
<td>Dust Failure to Erect Signage (Paengaroa weigh station contract)</td>
<td>High 42 Moderate 2 Poor 0</td>
</tr>
<tr>
<td>65436</td>
<td>Install structures and discharge storm water</td>
<td>None</td>
<td>12 0 0</td>
</tr>
<tr>
<td>65437</td>
<td>Kaituna Bridge construction and structure</td>
<td>None</td>
<td>9 0 0</td>
</tr>
</tbody>
</table>

Dust complaints and enforcement

Overall levels of compliance on the site have been moderate. The management of dust has been a great challenge for contractors with the alignment cutting through sand country adjacent and upwind of sensitive land uses such as main highways and roads, residential subdivisions and areas of intensive horticulture. The main contractors state they have dedicated in excess of $2 million to dust control so far. This includes consents and infrastructure for water takes, use of dust suppressants, as well as physical controls such water carts and sprinklers.

Despite this significant investment, site inspections and responses to public complaints have verified a number of dust nuisance incidents.

The table below summarises all the complaints received to the complaints hotline about the project. All relate to alleged dust nuisance.

*Table 2*  Total numbers of verified complaints

<table>
<thead>
<tr>
<th>Total number of complaints received.</th>
<th>Reason</th>
<th>Total number of complaints verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Dust nuisance</td>
<td>5</td>
</tr>
</tbody>
</table>

All verified dust incidents where controls were found to be inadequate were reported to contractors via field sheets and other correspondence. Investigations found that the cause most often related to human error when sub-contractors failed to follow established site procedures and practices relating to dust control.
Further verified incidents led to the issue of a formal warning letter on 25 October 2012 to the main contractors in relation to recurring dust discharges.

Following the formal warning letter, further incidents then resulted in the issue of one infringement notice of $300 to each of the main contractors on the 11 February 2013.

An abatement notice was not issued in relation to the incidents as investigation found that the cause was sub-contractors exceeding site speed limits and/or continuing to drive on already dusty roads without waiting for dust control. The incident was not part of a systematic failure by the main contractors as there were adequate resources available for dust control. The decision not to abate also acknowledges the commitment of the main contractors to address the problem quickly and maintain a transparent, positive and collaborative relationship with compliance monitoring staff.

Following the issue of the infringement notices, the main contractors issued all staff and contractors entering the site with warning notices reminding them of their obligations to prevent a dust nuisance and detailing consequences for failure to follow established site procedures. No further dust issues have since been recorded.

Considering the size and scale of the project, the main contractors are to be commended for their efforts to manage the site and trying to achieve full compliance.

![Figure 4 Dust nuisance in the vicinity of Parton Road](image.jpg)

### Conclusion

- Collaboration and a multi-agency approach to compliance has been essential.
- Proactive engagement with a wide variety of affected stakeholders and interested parties is considered key to reducing complaints and compliance issues.
The design and build methodology creates extra work pressure for compliance staff and affects other sections of Council. The high priority of the project and the time-critical nature and pressure of compliance has resulted in re-prioritising other less urgent compliance monitoring.

Stormwater management will likely continue to be a contentious issue for landowners and drainage scheme managers. As part of addressing these concerns and to future-proof the catchments for flood protection two pump station up-grades and works to install a third new pump station have now been completed.

Staff have been trialling the use of a contractor to undertake routine monitoring which has been working well. As a result of this staff are pursuing opportunities to formalise a contract for this work using a council appointed contractor in the 2013-14 financial year.

The overall compliance rating for the TEL project in the period April 2010 to May 2013 is moderate. This is because of the dust issues that have arisen, resulting in infringements notices being issued.

Staff recognise that with a project of this scale and nature there will be significant challenges trying to control dust with the material that the contractors are working with; in some of the driest weather conditions we have experienced for some time.

The main contractors are to be commended for their efforts in early reporting of incidents, remedying them and efforts to manage the site to try and achieve full compliance.

Dust management is an ongoing challenge and a top priority for the main contractors.

Winter earthworks present a lower environmental risk over much of the site.

Despite enforcement action in relation to dust discharges, the relationship between the Regional Council and main contractors remains collaborative and positive.

The project is running smoothly and is currently on track for completion on time.

Adrian Heays
Senior Pollution Prevention Officer Mount

for Pollution Prevention Manager

12 June 2013
Executive Summary

Monitoring of Rotorua stream inflows has been undertaken as part of the Bay of Plenty Regional Council’s integrated catchment management activities. The objective of this report is to examine the state and trends in the major streams to Lake Rotorua and test these against some of the Management Strategy’s targets. The report examines trends and nutrient statistics from 9 major streams that flow into Lake Rotorua. For more detail on discussion and analysis refer to accompanying full report. A summary of some of the full reports’ findings are discussed here.

Nitrogen loads continue to increase, with nitrate concentrations in most streams having doubled over the past 37 years. No levelling off of total combined nitrogen inputs via streams into the lake was observed.

Annual average phosphorus levels are fairly consistent over most of the nine major streams at baseflow. Average phosphorus concentrations were consistently elevated in recent years due to the higher frequency of intense storm events, potentially explaining increasing phosphorus trends in some streams.

Particulate nutrient strongly correlates to floodflow. Hence, efforts to reduce particulate nutrient can be prioritised based on catchment flood flow contributions.

Increasing nitrogen will continue to risk recent water quality gains in Lake Rotorua. As nutrient entering the lake is largely determined by climate and land use, a mix of restoration management tools will be required to meet nutrient load reduction targets in line with community objectives for Lake Rotorua.

1 Recommendations

That the Operations, Monitoring and Regulation Committee under its delegated authority:

1 Receives the report, Trends and State of Nutrients in Lake Rotorua Streams, 2013.
2 Introduction

Monitoring of Rotorua stream inflows has been undertaken as part of the Bay of Plenty Regional Council’s integrated catchment management activities, and previously as part of the old Catchment Boards programme (now the Kaituna Catchment Control scheme) to maintain lake and stream water quality. The monitoring now supports the Rotorua Te Arawa Lakes Programme which is a partnership between Rotorua District Council, Bay of Plenty Regional Council and Te Arawa Lakes Trust.

Policies in the operative Bay of Plenty Regional Council Regional Water and Land Plan consolidate policies to manage land and water resources in an integrated catchment management framework. Policies relevant for this report centre around key objectives such as:

1. the maintenance and enhancement of water quality for Lake Rotorua, as measured by the trophic level index (TLI);
2. the management of nitrogen and phosphorus in individual Rotorua lake catchments;
3. reducing cyanobacterial algal blooms on the Rotorua Lakes by managing nutrient inputs in the lake catchments.

Monitoring stream inflows to Lake Rotorua and assessing their state and trend will play a part in determining causes of water quality degradation, and aligns with the Lakes Management Strategy and the Regional Water and Land Plan policy objective of ‘prioritising the causes of water quality degradation’.

Monitoring of inflows into Lake Rotorua provides insight into potential causes of lake water quality degradation and helps indicate if restoration methods are being successful. Stream monitoring data also provides on-going data for modelling of present and future scenarios of nutrient exports to the lake and actual lake water quality. The objective of this report is to examine the state and trends in the major streams to Lake Rotorua and test these against some of the Management Strategy’s targets.

3 Methods

Data used in this report is based on monthly monitoring of streams and for the majority of streams flow is measured by physical gauging around the time of monitoring.

Trend analysis was undertaken on sites with five or more years of data where the data offers reasonable continuity. Analysis was undertaken taking into account both temporal trends and flow adjusted trends where appropriate, with temporal analysis undertaken over two periods 1990 to 2012, and 2002 to 2012. The approach to trend analysis follows the non-parametric methods of Helsel and Hirsch (1992) which have been utilised by Vant and Smith (2004), and more recently have been used to analyse New Zealand’s National River Water Quality Network.

Positive slopes indicate an increase in the values of a water quality parameter and negative slopes indicate an overall decrease. For each trend slope the probability of the slope occurring due to chance was also calculated. The p-value indicates if the trend detected is statistically significant. Conventionally, p-values of 5% (or p<0.05)
or less are regarded as statistically significant (i.e. the 95% confidence level, unlikely to occur due to chance).

4 Results and Discussion

4.1 Nitrogen

The annual combined loading of nitrogen to Lake Rotorua from the nine major inflows shows an increase over the last two decades (Figure 1). Further nutrient load will also come from groundwater directly to the lake, other inflows, and flood flow.

Looking for changes in loading to Lake Rotorua is better expressed by changes/trends in nitrate-nitrite-nitrogen (NNN). This is because NNN trends are adjusted for flow and seasonality and provide a more reliable estimate of increasing nitrogen over time than comparing annual load estimates of total nitrogen (TN) which can be influenced by changing annual rainfall totals. As Rutherford found in 2003, nitrate concentrations in Rotorua streams continue to increase with the exception of the Puarenga, Waiohewa and Waiowhiro Streams (Table 1).
Table 1  Significant trends in nitrate-nitrite-nitrogen (NNN) in major Rotorua streams.

<table>
<thead>
<tr>
<th>Stream</th>
<th>1992-2012 NNN</th>
<th>2002-2012 NNN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awahou Stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hamurana Stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utuhina Stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ngongotahā Stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puarenga Stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waingaehi Stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiohewa Stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiowhiro Stream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiteti Stream</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Trend: † significant increasing or decreasing trend of parameter over time (p<0.05); ‡ significant & meaningful trend (p<0.05, %/yr >1%); ◻ not significant.

Despite reductions in nitrate levels in the Puarenga, and lack of increases in the Waiohewa and Waiowhiro, we did not observe any levelling off of total combined nitrogen inputs via streams into the lake. Indeed, nitrogen loads continue to increase.

The Awahou and Hamurana catchments, which also have old groundwater contributions (mean residence times (MRT) of 61 and 110 years respectively (Morgenstern and Gordon, 2006)), both display increasing positive NNN concentration slope trends between the 1992 to 2012 and 2002 to 2012 analysis periods. Being large contributors of flow to Lake Rotorua, these catchments have a strong influence on the nitrogen (and phosphorus) loading, and together with the Ngongotahā and Waitetī catchments help drive increasing nitrogen loading to the lake.

4.2 Phosphorus

Several streams show clear decreasing trends in soluble phosphorus (DRP) over the past two decades. In particular, the Utuhina Stream has the largest decreasing trend (Table 2), and this is thought to reflect alum dosing in this stream. Furthermore, the rate of decline in DRP has increased from 1992-2012 to 2002-2012 in the Ngongotaha and Waiohewa streams. Lack of a significant trend in TP for these streams suggests that it is only the DRP fraction that has decreased, whereas it is likely that the particulate phosphorus (or TP) load in these catchments has not changed, or even increased.

Hamurana Stream has the highest phosphorus load of all the streams while the Waiowhiro Stream has the lowest (Figure 2). Nutrient loads in 2011 have been influenced by intense rain events of this time, and give some indication of the contribution of phosphorus and to a lesser extent nitrogen, during flood flow. As monthly sampling is typically taken during baseflow conditions, nutrient loading to the lake is likely to be underestimated. Rutherford (2008) estimated that flood flows in the Puarenga and Ngongotahā Streams makes up 36% and 44% of the total flow respectively. Given the strong correlation between particulate phosphorus and flow during floodflow (Rutherford, 2008; Abell, 2012), it is possible to create a priority...
catchment list for the reduction of particulate phosphorus from the Rutherford (2008) flood flow percentage calculations relative to baseflow such that:

- Ngongotahā > Puarenga > Utuhina > Waiohewa > Waitetī > Waiowhiro > Waingaehe ~ Awahou > Hamurana.

**Figure 2** Annual and daily phosphorus estimated loads from 9 major Rotorua Streams (note annual figures are not continuous).
Table 2  Significant trends in phosphorus in major Rotorua streams, percentage change per year.

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Trend: ↗️ significant increasing or decreasing trend of parameter over time (p<0.05); ↘️ significant & meaningful trend (p<0.05, %/yr >1%); = not significant.

5 Conclusion

Nitrate to the lake continues to increase, with concentrations in most streams having doubled over the past 37 years. Three streams have displayed changes to this trend in the past decade, the Puarenga, Waiohewa and Waiowhiro Streams. No levelling off of total combined nitrog en inputs via streams into the lake was observed. Nitrogen loads continue to increase, albeit despite smaller random temporal fluctuations.

Annual average TP levels are fairly consistent over most of the nine major streams at baseflow, but average TP concentrations were consistently elevated in 2011 due to the higher frequency of intense storm events. Increasing trends in phosphorus are likely influenced by increases in flood flow events. Efforts to reduce particulate nutrient can be prioritised based on catchment flood flow contributions.

As the dissolved component of phosphorus appears to be in a steady state, or decreasing in the case of some catchments, the balance of phosphorus entering the lake is largely determined by climate and land use. Controlling phosphorus input to achieve the Rotorua Lake water quality objective and the Action Plan target of 10 tonnes per year is currently being achieved by alum dosing of the Utuhina and Puarenga Streams. As internal phosphorus loads reduce, replacing gains made by alum treatment with phosphorus reduction by a range of land management options will play a role in a sustainable solution towards achieving the lake water quality objective.

Phosphorus management will play only one part in maintaining lake water quality. Nitrogen reductions will also play a significant part in this co-nutrient limited lake. There is evidence that reducing the lake's internal phosphorus and nitrogen releases will improve lake water quality. As nitrogen input to the lake continues to increase and as phosphorus continues to be reduced or maintained at current levels, there will likely be an increased trend towards P-limitation of algal growth. However, future phytoplankton responses to changing nutrient balance will be dependent on phytoplankton assemblages and their physiological and competition status.
6 References


Note: For a full list of references refer to full Report.

Paul Scholes
Environmental Scientist

for Lakes Operations Manager

11 June 2013
Executive Summary

The purpose of this report is to inform this committee that the Rotorua Te Arawa Lakes Strategy Group has endorsed and approved the Annual Programme Plan 2013-2014 to be released to the Ministry for the Environment.

There are no significant deviations from the programme as agreed in the ten year plan.

Key programme deliverables in the Programme Plan for the next year include the full scale Tikitere treatment plant, land use change incentives for Rotorua and Rotoehu and on-going operation

1  Recommendations

That the Operations, Monitoring and Regulation Committee under its delegated authority:

1  Receives the report, Rotorua Te Arawa Lakes Programme Plan 2013/2014.

2  Annual Programme Report 2013-14

The attached Annual Programme Plan 2013/14 was endorsed by the Rotorua Te Arawa Lakes Strategy Group on 6 June 2013 for submission to the Ministry for the Environment.

The report fulfils reporting obligations to the Crown as well as providing information on planned actions and water quality outcomes for the 12 lakes in the Rotorua Te Arawa Lakes Programme.

In summary, the key priorities for the next financial year will be:

- Commencing the full scale design and build of the Tikitere treatment plant
- Land Use Change incentives policy and implantation plan finalised and approved
- Ōkataina Action Plan implementation commenced
- Aeration trials on Lake Rotoehu will continue with initial results available late 2013
- Waste Water Treatment Plant options assessment and consultation
- Development of action plans for Lakes Tarawera and Rotokakahi

3 Financial implications

Budget detail is provided within the attached report. There is no significant variance from current planned expenditure for the 2013/14 year.

Anna Grayling
Rotorua Lakes Business Manager

for General Manager Natural Resource Operations

12 June 2013