

NORTHLAND REGIONAL COUNCIL

Agenda

Meeting of the
ENVIRONMENTAL MANAGEMENT COMMITTEE
to be held in the Council Chambers, 36 Water Street, Whangarei
on Tuesday, 19 February 2013 commencing at 9:30am

MEMBERSHIP OF THE COMMITTEE

Cr J Carr, Chairman

Cr G Ramsey (Deputy Chairman)
Cr T Davies-Colley
Ms D Maxwell
Dr G Blunden
Mr A Clarkson

Cr C Brown (ex officio)
Cr B Rossiter
Mr C Jenkins
Mr R Booth

Cr B Hunt
Mr C Christie
Ms N Anderson
Mr G Gover

OPEN MEETING

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ISSUE: Confirmation of Minutes – 5 December 2012

ID: A294935

To: Environmental Management Committee, 19 February 2013

From: Peternel McLean, Committee Secretary

Date: 4 February 2013

Summary: The purpose of this report is to confirm the minutes of the Environmental Management Committee meeting held on 5 December 2012.

Normal Operations ☒

Report:

The minutes are **attached**.

Compliance with decision making processes:

Councils are required to keep minutes of proceedings in accordance with the Local Government Act 2002.

Recommendation:

1. That the minutes of the Environmental Management Committee meeting held on 16 October 2012 be confirmed.
-

**NORTHLAND REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE**

Minutes of the Environmental Management Committee meeting
held in the Council Chambers,
Northland Regional Council, 36 Water Street, Whāngārei, on
Wednesday 5 December 2012, commencing at 10.05 am

Present:

Northland Regional Council

Cr Joe Carr (Chairman)
Cr Craig Brown (ex officio) (part)
Cr Tony Davies-Colley
Cr Bronwyn Hunt
Cr Bill Rossiter

Whāngārei District Council

Cr Crichton Christie

Environmental Interest Groups

Dr Greg Blunden

Farming Community

(vacant position)

Department of Conservation

Mr Chris Jenkins

Cultural Interests

Ms Nicole Anderson

Forestry Industry

Mr Geoff Gover

In Attendance:

Mr Alan Clarkson
Mr Paul Dell, Whāngārei District Council (part)
Mr Marty Taylor, Enviroschools (part)
for **Northland Regional Council -**
Chief Executive Officer (part)
Operations Director
General Manager – Planning and Policy
General Manager – Community Relations (part)
Consents/Monitoring Senior Programme Manager
Land/Rivers Senior Programme Manager
Biosecurity Senior Programme Manager
Policy Programme Manager
Land Programme Manager
Rivers Programme Manager
Water and Wastes Programme Manager
Growth and Infrastructure Manager
Policy Analysts
Biodiversity Officer
Economist
Environmental Education Officer
Water Allocation Officer
Committee Secretary

Not present: **Kaipara District Council**
Mr Richard Booth, Commissioner

Apologies

Moved (Christie/Rossiter)

That apologies from Crs Ramsey and Maxwell for non-attendance and from Cr Brown and Mr M Nicolson for lateness, be received.

Carried

Declaration of Conflict of Interest

There were no declarations of conflicts of interest in any items of business.

1. Confirmation of Minutes of the Environmental Management Committee meeting held on 16 October 2012 **A268074**

Moved (Rossiter/Hunt)

1. That the minutes of the meeting of the Environmental Management Committee held on 16 October 2012 be confirmed; with the exception of an amendment to the seconder at item 6 of the agenda (Environment Fund update); this to read Ramsey and not Carr.

Carried

2. Appointment of Environmental Management Committee Member **Report from Peternel McLean, Committee Secretary dated 19 November 2012.** **A266190**

Moved (Carr/Hunt)

1. That the report Appointment of Environmental Management Committee Member by Peternel McLean, Committee Secretary, dated 19 November 2012, be received.
2. That in accordance with council delegation and Clause 31(2) of the 7th Schedule of the Local Government Act 2002, the Environmental Management Committee accepts the nomination of Mr Alan Clarkson to represent the farming community.
3. That the committee recommends to council the appointment of Alan Clarkson as a suitably qualified person for the reasons that he has a long history of involvement within the farm industry and the region, has practiced as a veterinary surgeon and his nomination is supported by Federated Farmers.

Carried

3. Waiora Northland Water progress

**Report from Tony Phipps, Operations Director dated 27 November 2012.
A269236**

Moved (Blunden/Jenkins)

1. That the report Waiora Northland Water progress by Tony Phipps, Operations Director and dated 27 November 2012, be received.

Carried

4. Whāngārei Harbour Water Quality Action Plan

**Report from Ben Tait, Policy Analyst, dated 20 November 2012.
A267230**

Paul Dell, General Manager District Living, Whāngārei District Council noted that the action plan would be presented to his council for adoption the following week. He also noted the opportunity this project had given both councils to collaborate on stormwater and sewerage issues in the district.

Moved (Carr/Rossiter)

1. That the committee receives the report “Whāngārei Harbour Water Quality Action Plan” by Ben Tait, Policy Analyst, dated 20 November 2012.
2. That the committee recommends to council that it should formally adopt the Whāngārei Harbour Action Plan as an operational plan for improving water quality in the harbour and its catchment, and that staff start implementing its recommendations; and
3. That, once adopted by both Northland Regional Council and Whāngārei District Council, staff implement the Whāngārei Harbour Water Quality Action Plan and report on progress at six-monthly intervals to the Environmental Management Committee as part of Waiora Northland Water.

Carried

5. Land and Water Forum – Update

**Report from Jonathan Gibbard, Project Manager – RPS dated 20 November 2012.
A266028**

Moved (Rossiter/Hunt)

1. That the report Land and Water Forum – Update, by Jonathan Gibbard, Project Manager – RPS, dated 20 November 2012, be received.

Carried

6. Wetland Issues and Options

**Report from James Griffin, Policy Analyst dated 21 November 2012.
A254956**

Moved (Carr/Jenkins)

1. That the report Wetland Issues and Options, by Tony Phipps, Operations Director and James Griffin, Policy Analyst, dated 21 November 2012, be received.
2. That the committee supports the development of non-regulatory guidance and a register of constructed wetlands and recommends to council that these should be done as a matter of urgency.
3. That the committee supports the development of wetlands related plan changes at the same time as other plan changes driven by the RPS and NPS Freshwater are developed and recommends to council that these plan changes should be developed in consultation with the Environmental Management Committee and the Regional Policy Committee.

Carried

7. Environment Fund Update and Criteria/Policy Review

**Report by Dean Evans, Land Programme Manager dated 21 November 2012.
A265670**

Moved (Rossiter/Blunden)

1. That the report Environment Fund Update and Criteria/Policy Review prepared by Dean Evans Land Programme Manager, dated 21 November 2012, be received.
2. That the Environment Fund criteria/policy is changed to include the following:
 - That no more than \$10,000 can be allocated to any individual stream fencing project in any given year, unless approved by the Environmental Management Committee under the exceptional projects funding stream.

Carried

8. Land Management Water Quality and Soil Conservation Programmes update

**Report by Dean Evans, Land Programme Manager dated 21 November 2012.
A267027**

Moved (Carr/Gover)

1. That the report Land Management Water Quality and Soil Conservation Programmes update, prepared by Dean Evans, Land Programme Manager, dated 21 November 2012, be received.

Carried

9. Northland Effluent Improvement Project – update of activities

**Report from Tess Dacre, Monitoring Programme Manager – Water and Wastes
dated 23 November 2012.
A268471**

During discussion it was agreed that staff would further report back to the committee regarding the council's role in giving advice to farmers on effluent management, criteria for classifying non-compliance and the merits of non-notified and notified compliance monitoring.

Moved (Rossiter/Davies-Colley)

1. That the report Northland Effluent Improvement Project – update of activities by Tess Dacre, Monitoring Programme Manager – Water and Wastes, dated 23 November be received.

Carried

10. Community Wastewater Treatment plant Discharges – current compliance status (updated)

**Report from Tess Dacre, Monitoring Programme Manager – Water and Wastes
dated 21 November 2012.
A256537**

Moved (Carr/Rossiter)

1. That the report Community Wastewater Treatment Plant Discharges – current compliance status (updated) from Tess Dacre, Monitoring Programme Manager – Water and Wastes, dated 21 November 2012, be received.

Carried

11. Environmental Monitoring for the period 1 November – 18 November 2012

**Report by Colin Dall, Consents/Monitoring Senior Programme Manager dated
21 November 2012.
A267831**

Moved (Hunt/Christie)

1. That the Environmental Monitoring report for the period 1–18 November 2012 from Colin Dall, Consents/Monitoring Senior Programme Manager, dated 21 November 2012, be received.

Carried

12. River Schemes – Update Report

Report from Joseph Camuso, Rivers Programme Manager dated 21 November 2012.

A266796

Moved (Carr/Anderson)

1. That the report River Schemes update by Joseph Camuso, Rivers Programme Manager, dated 21 November 2012, be received

Carried

13. Biosecurity Responses

Report by Don Mckenzie, Biosecurity Senior Programme Manager dated 21 November 2012.

A267118

Moved (Rossiter/Jenkins)

1. That the report Biosecurity Responses by Don Mckenzie, Senior Programme Manager Biosecurity, dated 21 November 2012, be received.

Carried

During further discussion, reference was made to a letter received from Auckland Council, in response to a request from the NRC Chairman to take a more active role in marine pest management. It was confirmed that council staff would continue to promote a proactive approach to marine pest management, and seek to influence and collaborate with other organisations in an endeavour to reduce the risk of marine pest incursions.

14. Kauri Dieback - update

Report from Don Mckenzie, Biosecurity Senior Programme Manager dated 4 November 2012.

A264234

Moved (Jenkins/Gover)

1. That the report, Kauri Dieback - update, from Don Mckenzie, Biosecurity Senior Programme Manager, dated 4 November 2012, be received

Carried

15. Roadside Weeds update

**Report from Don Mckenzie, Biosecurity Senior Programme Manager dated 23 November 2012.
A268968**

Moved (Davies-Colley/Carr)

1. That the report Roadside Weeds update by Don Mckenzie, Biosecurity Senior Programme Manager, dated 23 November 2012, be received.
2. That the committee supports staff in ensuring that management plans, being a Regional Pest Management Strategy requirement, are submitted by roading authorities, enacted and monitored.

Carried

16. Climate and Water Resources – update

**Report from Dale Hansen, Water Resources/Hydrology Programmer Manager dated 19 November 2012.
A267477**

Moved (Rossiter/Jenkins)

1. That the report Climate and Water Resources – update by Dale Hansen, Water Resources/Hydrology Programmer Manager, dated 19 November 2012, be received.
2. That the proposed response/monitoring plan be supported.

Carried

17. Presentation: Enviroschools programme – Wai Restoration project

**Report from Susan Karels, Environmental Education Officer / Regional Enviroschools Co-ordinator dated 21 November 2012.
A268076**

A presentation given by Marty Taylor, Enviroschools Facilitator (secondary) accompanied the report and outlined the purposes of the project and how it is proposed to be delivered to primary and secondary school children in Northland as part of the national school curriculum.

Moved (Anderson/Jenkins)

That the report and presentation provided by Susan Karels, Environmental Education Officer / Regional Enviroschools Co-ordinator on the Wai Restoration project be received.

Carried

Conclusion

The meeting closed at 12.15pm.

ISSUE: Waiora Northland Water progress – December 2012 – 11 February 2013

ID: A294939

To: Environmental Management Committee, 19 February 2013

From: Tony Phipps, Operations Director

Date: 11 February 2013

Summary The purpose of this report is to provide an update on progress with Waiora Northland Water and contributing programmes.

Normal Operations



Background

Waiora Northland Water is Northland Regional Council's water quality and water management improvement project, encompassing new policy development and linked implementation programmes. It is a priority project for the council and it includes the council's programmes for the implementation of the National Policy Statement for Freshwater Management.

Waiora Northland Water integrates the council work programmes relating to water quality and management as well as collaborations with other stakeholders and their related activities.

The detailed background to Waiora Northland Water has been reported to previous committee meetings and workshops. This report is an update on progress with various components of the project. Some individual contributing programmes are the subject of separate reports in this agenda.

Summary of Progress:

Policy development

The government has not reported any progress or decisions in relation to the implementation of the Land and Water Forum recommendations, as reported to the last committee meeting; neither is there any word on timing for the provision of a national water objectives and limits framework or guidance document.

At a **regional** level, the summary of submissions on the Proposed Regional Policy Statement has been prepared and further submissions have been invited. Staff will then prepare reports for the hearings before independent commissioners in April.

Following on from the December report on **wetland** policy and implementation issues, work has progressed on developing non-regulatory guidance on wetlands and a register for constructed wetlands has been set up. Progress is reported later in the agenda.

NPS Freshwater Management Implementation:

Outstanding Water Bodies

The formal identification and development of specific policy to protect a region's outstanding water bodies is required by the NPS. There are two papers in this agenda on progress with the NPS implementation work on Northland's outstanding water bodies. The first paper reports on the Kai Iwi Lakes and Waipoua River, previously identified as outstanding water bodies. The second recommends 12 Northland dune lakes be also identified and treated as outstanding water bodies. The recommendation stems from an assessment of the ecological value of Northland lakes by NIWA. The assessment and advice on protecting those values and managing the lakes is contained in a report Northland Lakes Strategy¹. The report is advice and not an adopted council strategy. The other recommendations on lake management contained in the report will be considered at a future meeting.

Use and Values of Water

Determining what uses are made of a particular water body and what values a community attributes to that water body is an essential step in being able to set management objectives and associated limits. There are a wide range and diversity of values from spiritual, ecological to consumptive uses, some much easier than others to assess and quantify. This agenda contains a report (item 3) on the use of the River Values Assessment System (RiVAS)² which is being trialled around the country and which we propose to trial in Northland, as part of the Waiora Northland Water project and as a collaborative project with the Integrated Kaipara Harbour Management Group.

Priority Catchments

Work is continuing on the catchment descriptions.

Whangarei Harbour catchments

Following the adoption of the Whangarei Harbour Water Quality Action Plan by both NRC and Whangarei District Council, staff are establishing a joint implementation working group and consulting with various catchment stakeholders over participation.

On the NRC owned dairy farm in the catchment of the Oakleigh arm of the harbour, about 2km of fencing for the exclusion of stock from the coast has been completed, with the fencing of water courses and wetlands scheduled for autumn.

Waitangi River Catchment

As previously reported, this catchment is subject to a NZ Landcare Trust lead project "Waitangi River Catchment: Farming for the Future...". Progress is reported in the NZ Landcare Trust e-newsletter "Landcare in the North Summer 2013" (contact jon.hampson@landcare.org.nz for a copy). It is anticipated that NZ Landcare Trust staff will provide the committee with a progress report at the next meeting.

¹ The NIWA report can be viewed at www.nrc.govt.nz/EMCagendas

² Background papers and reports of RiVAS can be found at www.lincoln.ac.nz/Research-Centres/LEaP/Environmental-Management-Planning/Projects/Prioritising-river-values/

Mangere River Catchment

As dairying is the major productive land and water uses in the Mangere river catchment, the dairy industry is a major stakeholder in water management and needs to play a major role in developing water quality and use objectives for the catchment and practices that will enable objectives to be met. To that end, a workshop and a Mangere catchment familiarisation tour were held with DairyNZ staff; Helen Moodie, Catchment Engagement Leader, Mike Scarsbrook, Environmental Policy Manager and Tom Stephens, Water Quality Specialist. The form of DairyNZ involvement and contribution were discussed and initial tasks agreed on. DairyNZ is to assess the water quality reports for the catchment and then work with NRC land management staff, Fonterra Sustainable Dairying Advisors and other Northland farm advisors to develop on-farm good practice guidance for farmers. This will build on the considerable amount of existing knowledge and while initially targeted at the Mangere catchment, the objective is good practice guidance for the whole region. All the farmers in the catchment have been invited to make use of the new farm water quality improvement plan programme.

While work with the dairy industry in the catchment is underway there is a need to formally engage the full range of stakeholders in the catchment in the catchment management process. As there is no existing structure or entity that could fill the role, a new group will be needed and a proposal will be prepared for consideration at the next meeting. The Land and Water Forum collaborative stakeholder group model is one of the options available.

Doubtless Bay Catchment

There is a progress report in this agenda (Item 7). After discussions with FNDC it has been agreed to have a catchment stakeholder working group to guide practical actions rather than the formal priority catchment process of developing new catchment specific objectives and policy.

Contributing Programmes

The work on improving dairy farm effluent management continued with the workshop held with NRC, DairyNZ and Fonterra staff (following the December report of the Northland Effluent Improvement Project) to clarify roles, improve consistency of messaging and advice to farmers and start on the updating and making more consistent Northland specific guidance material.

The improvements in dairy effluent management are now seen in the improved compliance figures for 2012/13 reported in this agenda (Item 9), with some 80% of Northland dairy farmers being either fully compliant or with only minor issues.

The Waiora Northland Water project is the major theme for NRC displays at the Northland Agricultural Field Days, 21-23 February at Dargaville and the Kaitia A&P Show on 2 March. The displays will emphasise the values of good water quality and good management practices for improving water quality.

Legal compliance and significance assessment:

The relevant legislation in relation to this issue is the Local Government Act 2002. The information provided in this report and its recommendations are compliant with that legislation. This issue is considered to be of low significance under council policy, because it is in keeping with the council's overarching programme for NPS implementation adopted in May 2012 as detailed in the 2012-2022 Long Term Plan.

Recommendation:

1. That the report Waiora Northland Water progress by Tony Phipps, Operations Director and dated 11 February 2013, be received.
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ISSUE: River Values Assessment System (RiVAS)

ID: A295719

To: Environmental Management Committee, 19 February 2013

From: Darryl Jones, Economist

Date: 7 February 2013

Summary The purpose of this report is to introduce the River Values Assessment System (RiVAS) tool to the committee and outline how RiVAS can assist with the implementation of the NPS Freshwater and improved water management for Northland.

Normal Operations



Introduction

In New Zealand, communities and water resource managers are frequently faced with the challenge of deciding between competing river values arising from both in-stream and out-of-stream uses. According to economic theory, an allocation of resources is said to be efficient if the benefits gained from the use of those resources is maximized. The National Policy Statement on Freshwater Management (NPS-FW) picks this principle up in that it requires regional councils to establish water quantity and quality limits based on objectives which are in turn based on a consideration of a wide range of values including economic, ecological, social and cultural uses.

One tool that can help determine relative values in a local setting is the River Values Assessment System (RiVAS), which is being used by a number of other councils to assist them. Northland Regional Council (NRC) staff have determined that RiVAS will be a good tool to initially assist with three values: natural character, native fish and swimming. Background papers and reports of RiVAS can be found at www.lincoln.ac.nz/Research-Centres/LEaP/Environmental-Management--Planning/Projects/Prioritising-river-values/.

RiVAS - Background

RiVAS is a tool that has been developed for regional councils in response to a need for a cost effective process for ranking all the rivers in a region according to their importance for a particular water use or value. The project began in 2008 with funding from Envirolink and has since been supported by additional central government funding. It is a standardized method using multi-criteria analysis that can be applied to a wide range of river values, whether a river-related tangible resource (e.g. native birdlife), activity (e.g. swimming) or resource use (e.g. irrigation). It has also been used to assess potential future as well as current river values. To date, RiVAS applications have been completed for nine values across a total of eight councils (Table 1). The next two value assessments being developed are for white-baiting and hydro.

Method

For each value, a national expert panel identifies between 6-10 primary attributes that best describe the value. This panel then determines key indicators (e.g. number of uses, a specific water quality measure) for each attribute, and for each indicator defines thresholds of high, medium and low relative importance (scores 0-3). The national panel may also decide to weight the attributes to reflect the relative contribution of each attribute to the river value. The default is that all attributes are weighted equally. The national expert panel also defines national, regional or local significance thresholds based on a set of criteria or cut off points. This standard way of measuring a particular value (indicators, thresholds and weights) is then applied in each region. This process ensures consistency in assessing rivers across regions for a particular value.

Table 1. Summary of locations and years of RiVAS applications

Value cluster	Value	Councils by year of application			
		2008	2009	2010	2012
Recreation	Salmonid angling	Tasman		Marlborough	Hawke's Bay, Gisborne
	Swimming		Manawatu-Wanganui	Tasman	Hawke's Bay, Gisborne
	White-water kayaking			West Coast	Hawke's Bay, Tasman
Ecological	Native birds		Canterbury	Tasman	Hawke's Bay, Gisborne
	Natural character			Marlborough, Tasman	Hawke's Bay, Gisborne
	Native fish				Gisborne, Hawke's Bay, Tasman
Cultural	Tangata whenua		Southland		
Development	Irrigation		Canterbury	Tasman	Hawke's Bay, Gisborne
	Potable water				Gisborne

To apply the value in a region, a list of rivers (or river segments) to be assessed is developed. The indicators are populated with data for each river. A regional expert panel is used to estimate the scores where quantitative data does not exist using the best available information. Based on this a threshold score is assigned for each indicator for each river. Indicator thresholds are then added up (weights applied where relevant) to obtain a single score for each river for that value. The end result is a list of ranked rivers for that value. A facilitator guides the process for each value, advising on the process, facilitating a one-day workshop of the regional expert panel and writing up the result. To date the same facilitator has been used for each value in both leading the national expert panel and in its application at the regional level – further ensuring consistency in application.

The output for each value consists of a single report containing a step by step description of the process, the credentials of the expert panel members, a ranking of the rivers, full details of the scoring and maps showing the relative significance of the rivers for the value.

Recommended use of RiVAS in Northland

RiVAS Project Manager, Professor Ken Hughey of Lincoln University, met with council staff with in November 2012 to discuss RiVAS and its potential application in Northland. After considering the values currently covered by RiVAS and the Northland situation, it was agreed that initial work should centre on three values: natural character, native fish and swimming.

These three assessments will take place in the first half of 2013, with the cost paid for out of money already budgeted by NRC for the implementation of the NPS-FW in 2012/13. The assessments will cover the Northland region as a whole, not just the priority catchments, and provide results that will be helpful in setting default and interim limits. Council staff are in discussion with Professor Hughey about using the RiVAS Tangata Whenua value methodology in Northland. This is proceeding on a slower track because of the intricacies involved developing an expert panel(s).

A crucial step in the application of RiVAS at a regional level is the selection of regional expert panels for each of the three values. Based on their work to date with the application of RiVAS, the RiVAS Project Manager has developed the following list of key attributes required of the regional expert panel members:

- Credibility, i.e. they are known and respected 'experts' in the value – such experts would include value practitioners, relevant scientists/consultants (e.g., a bird ecologist for native birds, a recreation specialist for river swimming,, and appropriate policy makers (e.g., planner from a regional or district council with an understanding of the value, policy advisor from key stakeholder organisations such as a field officer from the local Fish and Game New Zealand region);
- An appreciation of the value from a regional/district perspective;
- Ideally one member who is a 'national' expert for that value and also familiar with the process;
- A demonstrated record of working within the collaborative approach of an expert panel context; and
- Ideally, the regional expert panel will reflect the types of expertise and perspectives present in the original national expert panel. This will minimise discussion about the appropriateness of the methodology and focus time to assessing the values.

This criteria list will be used to select an appropriate mix of panel members for each of the three values. The committee will be kept informed of developments in the application of RiVAS to Northland. Progress reports will be presented to the committee meetings on 26 March and 28 May 2013. It is planned that the results of the assessments for the first three values will be presented at the committee meeting on 30 July 2013.

Legal compliance and significance assessment:

The activities detailed in this report are provided for in the council's Long Term Plan and as such are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002.

In relation to section 79 of the Local Government Act 2002, this issue is considered to be of low significance under Council policy because the report does not seek a decision other than that information be received.

Recommendations:

1. That the report River Value Assessment System (RiVAS), by Darryl Jones, Economist, and dated 7 February 2013, be received.
 2. That the criteria for selecting the Northland regional expert panel members be used.
-

ISSUE: Northland's Outstanding Waterbodies: Kai Iwi Lakes and Waipoua River

ID: A284228

To: Environmental Management Committee, 19 February 2013

From: Ben Tait, Policy Analyst

Date: 7 February 2013

Summary The purpose of this report is to provide the committee with an update on the development of catchment management plans for the Kai Iwi Lakes and Waipoua River. It concludes with the recommendation that the report is received.

Normal Operations



Report:

Background

Kai Iwi Lakes and the Waipoua River catchment are widely regarded as two of Northland's outstanding freshwater resources because of their highly significant ecological, landscape, cultural, and recreational values. They are also economically important as tourist draw cards.

Because of their outstanding characteristics, the council has prioritised them for protection in accordance with the National Policy Statement for Freshwater Management 2011 (NPS). See Attachment 1 for further details on the relevant requirements of the NPS.

Good information is necessary to be able to effectively and efficiently manage the region's water resources. For example, without an understanding of where contaminants are coming from, it's almost impossible to understand their impact on water resources and to target management efforts effectively and efficiently. Equally important is to have a good understanding of water resources so that clear and measurable management objectives can be set for them.

The appended catchment descriptions (Attachments 2 and 3¹) provide an overview of existing information on the Kai Iwi Lakes and the Waipoua River, characterise the condition of the waterbodies based on data analyses, identify important water related uses and values and pressures and threats, and make recommendations on addressing key information gaps. In addition to guiding council activities the reports will be used to inform interested stakeholders and as a basis for the development of lake management plans.

¹ These attachments are separately included with agenda papers for committee members. They can also be viewed at www.nrc.govt.nz/EMCagendas

Catchment description summary - Kai Iwi Lakes

Introduction

The Kai Iwi Lakes include the three lakes within the Taharoa Domain: Taharoa, Waikare, and Kai Iwi. The entire catchment of the lakes is within the rohe of Te Roroa. The lakes are basin dune lakes formed in depressions of consolidated sand underlain by relatively impermeable ironsand pans. They are the oldest dune lakes in the Pouto Peninsula, at approximately 10,000 years old.

State

The Kai Iwi lakes have excellent water quality and high ecological significance with a diversity of indigenous species including sustainable populations of endangered species. They also have very important recreational value, and rich cultural and historical values, including by being culturally and spiritually significant to tangata whenua.

The excellent quality and many of their unique features has led to them being well studied over the last 50 years, with routine data being collected in the last 10 years. The data shows that while the quality of the lakes is high there are some deteriorating trends.

Trend analysis indicates water quality has declined in Lake Kai Iwi between 2002 and 2011. A significant trend was detected in water clarity with it decreasing at a rate of 14 cm/year, which could be due to increasing algal biomass. A deteriorating trend was detected for total nitrogen with it increasing at a rate 5.8 mg/m³/year. These deteriorating trends in three of the four variables to calculate the lake's trophic level index (TLI) have resulted in a deteriorating TLI trend.

Based on monitoring results water quality in Taharoa and Waikere appears to have remained stable over the last 10 years of routine sampling.

Pressures and threats

The reasons for an increasing trend in nitrogen is unknown but given the very small lake surface water catchment area, and the distance of pastoral land use from the lake, suggests that the nitrogen may be coming into the lake through groundwater inputs and/or as a consequence of introduced nitrogen fixing plants in the catchment. There are often considerable lags in the time it takes groundwater to enter surface water. The extent and nature of the groundwater and surface water catchments are poorly understood.

The major threat to the integrity of the ecology and water quality of the lakes is pest species, particularly pest fish. This is a constant risk and there is clear evidence of a slow but steady trend of more pest fish populations establishing in Northland as a result of illegal introductions. The impacts of the introduction of pest fish to the Kai Iwi lakes should not be underestimated. Impacts would likely include a reduction in native fish and aquatic plant populations, possible extinction of rare dune lake galaxids, predation of trout fingerlings, and a reduction in water quality due to foraging behaviour.

Catchment description summary - Waipoua River Catchment

State

The Waipoua River Catchment is within the rohe of Te Roroa and the river itself is one of its significant wahi tapu sites. Te Roroa are major landowners within the catchment. There is still customary use of the natural resources in the catchment today, including the collection of eels and other freshwater fish from the river and its tributaries. Given their long and established relationship with the land Te Roroa are the kaitiaki of Waipoua Forest and everything in it and they assert that they maintain tino rangitiratanga over the forest.

The upper reaches of the Waipoua River (the area within the Waipoua Forest) are currently identified as an outstanding river in the Regional Water Soil Plan (RWSP). The lower reaches of the river are not currently identified as outstanding in the RWSP. The main production land use in the lower catchment is forestry. Protection is afforded in the RWSP to the area through controls on the taking, use, damming, and diverting of water. The plan is silent however on protecting the quality of water in outstanding waterbodies. See Attachment 1 for a brief overview of provisions dealing with outstanding waterbodies in the RWSP.

Available information indicates that water quality in the upper and mid reaches of the Waipoua River is excellent and suitable for supporting its rich and diverse ecological values, as well as recreation, cultural activities, and water supply. While the periphyton and freshwater invertebrate communities and stream habitat data shows that the catchment's aquatic ecological values are high and currently being supported by this excellent water quality, fish monitoring suggests that its fish communities may be being affected, possibly likely by a ford in the lower reaches restricting migration. This is important because as all of the native fish species in the catchment have a marine phase to their migratory lifecycles. Council staff are to undertake additional fish surveys in the river this financial year. The findings are expected to reveal any spatial barriers or pressures.

It also highlights the importance of the lower reaches of the river to the maintenance of the health of the upper catchment, and therefore supports an argument that the entire catchment should be considered as a whole.

Pressures and threats

Pressures on water quality and quantity in the upper catchment are likely to be insignificant because it is dominated by protected forest. However there are several potential pressures in the lower catchment including production forestry, recreational use, water takes, and wastewater. However, these are named as potential pressures because there is a lack of detailed information on those pressures and on water quality and quantity in the lower catchment.

Next steps

The following next key relevant steps are noted:

1. There is a need to improve our understanding on the nature and extent of the groundwater and surface water catchments of the Kai Iwi Lakes and to obtain information on water quality and quantity in the lower Waipoua River.
2. Staff are to meet with the Taharoa Domain Governance Committee on February 25 to the management of water quality and quantity and biosecurity in the catchment of the Kai Iwi Lakes.
3. Staff will be investigating community and stakeholder engagement model for establishing catchment/water body specific freshwater objectives, limits, timeframes, and any new or revise management methods for the priority catchments. Options will be discussed at a future committee meeting.

Legal compliance and significance assessment:

The activities detailed in this report are provided for in the council's Long Term Plan and as such are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002.

In relation to section 79 of the Local Government Act 2002, this issue is considered to be of low significance under Council policy because the report does not seek a decision other than that information be received.

Recommendation:

-
1. That the report Northland's Outstanding Waterbodies: Kai Iwi Lakes and Waipoua River by Ben Tait, Policy Analyst and dated 7 February 2013 be received.
-

Northland's Outstanding Waterbodies: Kai Iwi Lakes and Waipoua River

National policy directive to protect outstanding freshwater bodies

The National Policy Statement for Freshwater Management 2011 (NPS) requires regional councils to identify and protect outstanding freshwater bodies, which are defined as water bodies with “outstanding values, including ecological, landscape, recreational and spiritual values”. The implementation guide to the NPS provides additional guidance (although without legal weight):¹

An “outstanding” waterbody is one that is exceptional in some way. It may be exceptional in relation to one particular attribute, but it may also have a number of outstanding attributes. An outstanding value is a high threshold... A water body that is not nationally significant may be outstanding for local reasons. Communities will determine outstanding freshwater bodies in establishing objectives and limits through the regional plan process.

In order to achieve protection the NPS requires regional councils to establish and include freshwater objectives (desired environmental outcomes) and associated water quality and quantity limits for water bodies in regional plans, as well as regulatory and non-regulatory methods to avoid over-allocation (the situation where freshwater objectives or limits are not being met).

The operative Regional Water and Soil Plan and the protection of outstanding freshwater bodies

The operative Regional Water and Soil Plan for Northland (RWSP) provides for the protection of rivers, sections of rivers, and lakes that have outstanding features and values. However, protection is only afforded in the plan through controls on the taking, use, damming, and diverting of water. The RWSP is silent on protecting the quality of water in outstanding water bodies. In this regard the RWSP will need to be amended to give effect to the NPS.

The RWSP identifies the following rivers, parts of rivers, and lake as having outstanding values and requiring protection from hydrological modification:

- The [Upper] Waipoua River Catchment
- Waikohatu
- Wairua
- Whirinaki
- Waipapa
- Mangamuka
- Punaruka
- Lake Ora

¹ Ministry for the Environment. 2011. *National Policy Statement for Freshwater Management 2011: Implementation Guide*. Wellington: Ministry for the Environment. pg 10

Policy 9.5.2 of the RWSP provides for the identification and protection of additional water bodies:

To include by way of a plan change further rivers, or sections of rivers, and lakes as having outstanding value where they meet any of the following criteria:

- (a) Have catchments which are dominated by indigenous vegetation and which are largely unmodified natural ecosystems or ecological sequences from headwaters to lowlands; or*
- (b) Are recognised by any judicial authority or which subject to agreement by the Council in consultation with an iwi authority are recognised to be a taonga requiring flow preservation in a natural or near natural state; or*
- (c) Are an essential part of an outstanding natural feature of landscape, and where changing the water level or flows would adversely affect those values.*

Currently, the regional council's programme for implementing the NPS only identifies the Kai Iwi Lakes and the Waipoua River as outstanding freshwater bodies for the purposes of giving effect to the NPS. Recommendations on the inclusion of an additional nine lakes is the subject of the following agenda item ("Northland's Outstanding Waterbodies: Addition of Other Outstanding Lakes").

Staff will continue to review the status of Northland's freshwater bodies, including those currently identified as outstanding in the RWSP, to ensure that those that fall within the scope of the NPS definition of outstanding are identified and protected. In addition, staff are to review the existing criteria in the RWSP (Policy 9.5.2) to ensure that it aligns with the NPS definition. Findings and recommendations will be reported to the committee at a future committee meeting.

ISSUE: Northland's Outstanding Waterbodies: Addition of Other Outstanding Lakes

ID: A284950

To: Environmental Management Committee, 19 February 2013

From: Ben Tait, Policy Analyst

Date: 7 February 2013

Summary The purpose of this report is to bring to the committee's attention that a number of Northland lakes are of considerable national and international importance and are deserving of protection. It concludes with the recommendation that the committee endorses them as "outstanding freshwater bodies" for the purposes of implementing the National Policy Statement for Freshwater Management 2011.

Normal Operations



Report:

Background

In 2012 the regional council commissioned NIWA to provide advice on the management and protection of Northland's lakes. NIWA's report (**Attachment 1** – circulated with agenda papers to committee members only¹) sets out:

1. An overview of the national and international significance of Northland's lakes;
2. A recommended classification system for the lakes;
3. A measurement of the ecological values of the 76 most important lakes and a ranking of them based on the values;
4. Identification of threats and pressures, and an assessment of these for each lake; and
5. A recommended framework for an integrated Northland lakes strategy.

The report confirms that Northland's lakes are of considerable national and international significance: Northland has the greatest number of dune lakes nationally, and most probably internationally; many lowland lakes still have relatively good water quality; and the lakes and their surrounding wetland margins support a diversity of native species, including a range of endangered species. They are also of considerable social and cultural value.

Despite the high value of many of Northland's lakes their status is not secure. Pressures and threats include biosecurity threats (aquatic weeds and pest fish), eutrophication pressures from land such as pasture and pine forestry, predominance of planktonic algal blooms, and water level fluctuations, especially dropping lake levels.

¹ The NIWA report can be viewed at www.nrc.govt.nz/EMCagendas

The focus of this item is the ecological component of the report that assessed 12 lakes as being of outstanding ecological value. Based on the assessment staff consider that these lakes qualify for protection as outstanding freshwater bodies under the National Policy Statement for Freshwater Management 2011 (NPS).

Please note that staff are investigating the development of an integrated Northland lakes strategy. Progress and recommendations will be reported on to the committee at a future committee meeting.

Policy context

As pointed out in the preceding item ("Northland's Outstanding Freshwater Bodies: Kai Iwi Lakes and Waipoua River") the NPS directs the regional council to "protect the quality of outstanding freshwater bodies".

Protection will involve establishing and including freshwater objectives (desired environmental outcomes) and associated water quality and quantity limits for water bodies in regional plans, as well as regulatory and non-regulatory methods to avoid over-allocation (the situation where freshwater objectives or limits are not being met). Currently, the regional council's programme for implementing the NPS only identifies the Kai Iwi lakes and the Waipoua River as outstanding freshwater bodies.

Status of outstanding lakes in Northland

NIWA assessed the status of Northland's lakes against the following ecological values: habitat size, buffering, water quality, aquatic vegetation diversity and integrity, presence of endangered and key species, and connectivity. Based on the scores the report ranks them as having either low, moderate-low, moderate, moderate-high, high, or outstanding ecological value. The 12 lakes ranked as outstanding are:

- Morehurehu
- Wahakari
- Waihopo
- Waiporohita
- Ngatu
- Kai Iwi Lakes (Waikere, Taharoa, Kai Iwi)
- Humuhumu
- Mokero,
- Rotokawau (Pouto)
- Kanono

Conclusion

Staff consider that these lakes are outstanding freshwater bodies as defined in the NPS and should be protected accordingly.

Protection should be advanced collaboratively through the development of catchment management plans for the lakes, which will be incorporated into the regional plan.

Legal compliance and significance assessment:

The activities detailed in this report are provided for in the council's Long Term Plan and as such are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002.

In relation to section 79 of the Local Government Act 2002, this issue is considered to be of low significance under Council policy because the report does not seek a decision other than that information be received.

Recommendations:

1. That the Northland's Outstanding Waterbodies: Addition of Other Outstanding Lakes by Ben Tait, Policy Analyst, and dated 7 February 2013, be received.
 2. That the committee endorses the following additional lakes as "outstanding freshwater bodies" for the purposes of progressing the implementation of the National Policy Statement for Freshwater Management 2011: Morehurehu, Wahakari, Waihopo, Waiporohita, Ngatu, Humuhumu, Mokero, Rotokawau (Pouto), and Kanono.
 3. That staff reports to the committee in July on the development of catchment descriptions for the outstanding lakes.
-

ISSUE: Wetlands Update

ID: A277591

To: Environmental Management Committee, 19 February 2013

From: Tony Phipps, Operations Director; and James Griffin, Policy Analyst

Date: 1 February 2013

Summary The purpose of this report is to provide the committee with a progress report on addressing issues surrounding wetlands. Included is a description of the constructed wetlands register and guidelines for processing resource consents involving wetlands.

Normal Operations



Report:

Reports were presented to the Environmental Management Committee in August and December 2012 providing an overview of the current approach to wetland management in the Regional Water and Soil Plan (RWSP). The December report identified several issues arising from the current approach and presented options to address these. It was resolved to:

1. Develop non-regulatory guidance on wetlands and a register of constructed wetlands; and
2. Develop wetlands related plan changes at the same time as other plan changes driven by the RPS and NPS Freshwater are developed consultation with the Environmental Management Committee and the Regional Policy Committee.

Progress on item one above is detailed in this report.

Wetland Guidelines

Council commissioned a report from Wildlands Consultants Ltd to assist in the identification and assessment of wetlands (**Attachment 1**: 'Report on wetland guidelines for the Northland region' – circulated with agenda papers to committee members only¹). The Wildlands report includes guidelines on identification of various types of wetlands using descriptions of key characteristics. It also provides a useful comparison of wetland provisions in other regional plans and findings in case law. Importantly, the Wildlands report provides clear guidance on hydrological characteristics of the different indigenous wetland types and the various types of wetland can be considered to be significant indigenous wetlands.

The Wildlands report concludes with recommended changes to the definition used in the RWSP and principles to assist in determining significance. A key recommendation is that the minimum size for an indigenous wetland should be increased from 50m² to 0.1ha (1000m²). Interestingly Wildlands do not recommend the groundwater conditions be removed from the definition.

¹ The Wildlands report can be viewed at www.nrc.govt.nz/EMCagendas

While the Wildlands recommendations are useful, amending the RWSP definition requires a plan change. Such a plan change is better addressed in association with other changes driven by the NPS Freshwater and Regional Policy Statement as per the previous resolution. Staff also consider a size threshold is more appropriately used to determine significance (rather than whether a wetland is indigenous or not). A thorough review of the wetland definition and provisions is recommended at the time these plan changes are progressed.

In the meantime however, the guidelines will be of real value in interpreting the Regional Water and Soil Plan for Northland (RWSP) Appendix 13B in relation to wetlands. Appendix 13B provides the criteria for identification of significant indigenous wetlands. It will also assist in assessing degree of significance and potential sensitivity to adverse effects for the purposes of consent processing.

In other words while the RWSP definition of significant indigenous wetlands and disturbance rules still apply, the guideline can be used to more accurately identify:

- The significance of a particular indigenous wetland
- The nature of adverse effects that can be considered appropriate
- Whether consent can be granted
- Determine where control is required via consent conditions.

Therefore, while an activity may still trigger the RWSP definition of significant indigenous wetland and associated disturbance rules, the guideline can be used to inform the resource consent assessment. For example, the Wildlands report can be used to state with confidence that an indigenous wetland of less than 1000m² is unlikely to be a significant indigenous wetland.

The Wildlands report, while useful for those with technical expertise, is not user friendly for the lay person. Staff will continue to develop a user friendly wetland guide, building on the Wildlands report and the material in the Forestry Guidelines. This would include a simplified version of the flow chart used to apply the RWSP definitions (Figure 2: Wildlands report). It would also include guidance on distinguishing between constructed and naturally occurring wetlands. Staff will update the committee on progress with the wetlands guideline by March.

Constructed Wetlands Register

The objective of establishing this register was raised in previous reports. The key reasons for having a register are:

- Current rules distinguish between wetlands constructed for various purposes (e.g. stormwater or effluent management) and those that are natural, and then place greater control over natural wetlands
- Council has few records or data on constructed wetlands as resource consent is often not necessary
- It can be difficult to establish that a wetland has been artificially constructed and once the hydrology is in place, wetland vegetation colonises. Therefore without a register, there may be little to distinguish constructed wetlands from naturally formed wetlands.
- In the absence of such certainty, property owners may be discouraged from wetland construction.

ITEM: 6

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- By enabling parties to register constructed wetlands, they gain confidence that in the future such wetlands can be clearly identified so that an exemption from planning provisions relating to natural wetlands applies.

An existing council wetland database has been modified to include a “constructed wetland” field that will form the register. The register will record the property details, the purpose and / or manner in which the wetland has been created and other information such as a plan of the wetland, details of the site visit and any other supporting information. Once registered this would be confirmed in writing to the landowner and would confirm exemption from indigenous wetland rules.

Confirmation the wetland has been constructed is to be provided by way of:

- Documented evidence that the indigenous wetland forms part of an effluent or stormwater management or treatment system (e.g resource consent records or stormwater management plans); and / or
- A site visit by staff that confirms the indigenous wetland has formed within an artificial waterbody / watercourse such as constructed water storage facilities and drains.

There remains some uncertainty around ‘induced’ indigenous wetlands (where a wetland has formed as a result of changes in hydrology through roading / tracking and culverts – wetlands forming in forestry are a common example). While such wetlands have not been constructed for a specific purpose, they can be considered to be artificial in many cases given they arise through physical alteration of hydrology through mechanical human modification. This typically requires a case by case judgement and potentially, investigation of soil profiles to confirm the history of the site.

Two other grey areas in identifying wetlands are:

1. Where a wetland reverts over time (e.g. fencing allows a wetland to revert and form an indigenous wetland). In this instance, the wetland has not been purposefully constructed by mechanical change to hydrological conditions and as such the time clause in the definition is the relevant factor, namely; *“Land which was modified prior to 27 October 2001 to the extent that it is no longer ecologically viable”*. Indigenous wetlands of this sort are not proposed to be included in the register, however methods to establish whether this clause is met should be included in the guidelines.
2. As identified in section 6.2.7 of the Wildlands Report, where gumlands extend into sites with soils of extreme infertility that are only very intermittently wet. *“Further work needs to be done to determine whether all gumlands meet the definition of wetland ... and if not, what indicators are most appropriate for determining the boundary between wetland and dryland.”*

Some additional changes are necessary to ensure the register retains compatibility with ‘IRIS’ the core business computer application replacing “Worksmart”, however the register is now essentially live.

Far North Top Wetlands mailout

Feedback from landowners / stakeholders contacted in relation to the Top Wetlands Project has been collated (**Attachment 2**). A total of 369 landowners in the Far North were contacted, while the majority did not respond, 22 expressed support in one form or another.

As a result of the mail out a number of requests to provide further information, confirm mapping and undertake site visits have been received. There has also been interest in council assistance in the form of environment funding (11), pest / weed control advice (8) and legal protection (2). A request to register a constructed wetland was also received. Responses have been directed to the relevant staff to follow up and progress will be reported in due course.

Conclusion

The Wildlands report provides a useful basis for developing a wetlands guide that will include:

- How to define / identify a wetland, indigenous wetland;
- How to define / identify constructed wetlands and how to register these with council;
- Which wetlands are significant and why.

It will also prove useful for processing consents for activities that indigenous wetlands and in drafting conditions of consents. Staff will provide an update on progress on a draft wetland guide in March.

Legal compliance and significance assessment:

In relation to section 79 of the Local Government Act 2002, this issue is considered to be of low significance under Council policy because the report does not seek a decision other than that information be received and it has previously been provided for in the council's Long Term Plan.

Recommendation:

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1. That the report Wetland Update by James Griffin, Policy Analyst and dated 1 February 2013, be received.
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November 2012 Far North Top Wetlands Mailout - Analysis of Landowner Feedback (105 wetlands)

Total Wetlands = 105	Total landowners contacted	Total wetland/landowner boundaries	Total Feedback	Letters Returned	Supportive of project	Not supportive	Partly supportive	Unknown	Mapping errors identified	Disagree area is wetland	Landscape project issues	Need to maintain drains	Extra Info. requested	Site visit requested	Want to work with NRC	Meeting requested	Pest advice requested	Past/current efund	Potential efund wetland	Advice on legal protection requested	Request to register a constructed wetland	Shapefiles for planning purposes requested	No action needed	Want rates relief
Private land	289	295	17	14	11	3	2	1	12	4	3	1	1	8	2	1	5	2	8	1	1			1
Maori land/trusts	66	75	2	8	1			1					2		1			1						
Govt and Councils	8	63	2	1	2										2	1	1		1					
Forestry/Farm Companies	6	27	2		2																2			
Mailout total	369	460	23	23	16	3	2	2	12	4	3	1	3	8	5	2	6	3	9	2	1	2	0	1
Other Far North callers	0	6	6		6								1	3			2		2				2	1
Grand Total	369	466	29	23	22	3	2	2	12	4	3	1	4	11	5	2	8	3	11	2	1	2	2	2

Note: **Private land** is all private landowners and companies. **Maori Land/Trusts** are Maori trusts, trustees, incorporations etc. **Forestry/farm companies** include. Landcorp Farming LTD, Juken New Zealand Ltd, Ngati Hine Forestry Trust. **Govt and Councils** include all government and local government agencies e.g. Department of Conservation, Historic Places Trust, Office of Treaty Settlements. Northland Fish and Game Council, Far North District Council etc. **Other Far North callers** responded because they heard about the mailout via newspaper articles or from neighbours who had received letters

ISSUE: Doubtless Bay Catchment management

ID: A278988

To: Environmental Management Committee, 19 February 2013

From: Tony Phipps, Operations Director

Date: 7 February 2013

Summary The purpose of this report is to provide an update on discussions held with the Far North District Council, and provide recommendations on what water related actions should be progression for the Doubtless Bay catchment and how actions should be prioritised and guided. A catchment stakeholder working group is proposed.

Normal Operations



Report:

As previously agreed, a small working group of councillors and staff from the Northland Regional Council and the Far North District Council met on 12 December 2012 to discuss the scope and nature of the water related issues within the Doubtless Bay catchment and what actions are necessary to address them.

The group received presentations outlining the purpose and scope of Waiora Northland Water, the programme for implementing the National Policy Statement for Freshwater Management, and the water related issues in the catchment and other initiatives undertaken across Northland. Similar presentations have been made to either Environmental Management Committee meetings or workshops.

It was agreed that new catchment-specific policies (freshwater objectives, targets and limits) are not required to address the water related issues within the Doubtless Bay catchment. Rather, a working group comprising NRC and FNDC councillors and staff, and community/sector representatives (i.e. representing tangata whenua, farming, forestry, tourism and urban) should be established to further clarify the water related issues and identify practical solutions. A draft Terms of Reference and membership will be prepared for consideration at the next committee meeting.

It is suggested that an Environmental Management Committee member from close to the area chair the group, and that the group be served and supported by NRC Kaitiaki-based staff who have considerable local experience and knowledge of the catchment issues and community.

Legal compliance and significance assessment:

The activities detailed in this report are provided for in the council's Long Term Plan and as such are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002.

In relation to section 79 of the Local Government Act 2002, this issue is considered to be of low significance under Council policy because the report does not seek a decision other than that information be received.

Recommendations:

1. That the report Doubtless Bay Catchment management by Tony Phipps, Operations Director, dated 7 February 2013 be received.
 2. That a Doubtless Bay catchment working group be established, comprising representatives of NRC Environmental Management Committee, FNDC and catchment stakeholders, to prioritise and guide water management activities in the catchment.
 3. That a Terms of Reference and membership list be drafted for consideration by the committee in March.
-

**ISSUE: Community wastewater treatment plant discharges
– current compliance status (updated)**

ID: A267976

To: Environmental Management Committee, 19 February 2013

From: Tess Dacre, Monitoring Programme Manager – Water and Wastes

Date: 7 February 2013

Summary The purpose of this report is to give an update on the resource consent compliance status of Northland's community wastewater treatment plants, and the actions being taken to remedy any non-compliance.

Normal Operations ☒

Report:

Consent processes

The FNDC has consent applications for four wastewater treatment plants (Ahipara, Rāwene, Russell and Taipa) which are in various stages of the consenting process, details of which are included in the attached table. The Russell replacement consent application was made in December 2012.

Enforcement

FNDC is subject to two abatement notices. These notices relate to the (nine months) overdue upgrade of the Hihi treatment plant and on-going non-compliance with water quality conditions at Paihia. The Hihi abatement notice compliance date is 28 February 2013. The plant upgrade infrastructure is on-site, awaiting installation. The Paihia abatement notice compliance date is 30 June 2013.

Summary

The majority of Northland's community wastewater treatment plants have up-to-date consents and routinely meet their required discharge and water quality standards.

There are about eight FNDC treatment plants that at times fail to comply with the water quality conditions of their consents. It is expected that this will be resolved, in time, through the re-consenting process for those treatment plants and plant upgrades. Where this is not the case for any of these treatment plants, formal enforcement action will be taken.

On the whole, the WDC and KDC wastewater treatment plants are complying with their water quality conditions of consent. Where there are some issues, these are being worked through with the WDC and KDC to resolve.

The compliance data for the last calendar year has been reviewed. There were eight community wastewater treatment plants that were significantly non-compliant with water quality conditions of consent at some point over this period. This equates to 25%.

Compliance with decision making processes

The activities detailed in this report are provided for in the council's 2012-22 Long Term Plan, and as such are in accordance with the council's decision-making process and Sections 76-82 of the Local Government Act 2002.

Recommendation

1. That the report Community wastewater treatment plant discharges – current compliance status (updated) from Tess Dacre, Monitoring Programme Manager – Water and Wastes, dated 7 February 2013 be received.
-

Location/Consent Status	Plant Description	Status & Issues	Update as at February 2013
Ahipara (FNDC) Consent expired 2010. Replacement consent in process – on hold until iwi consultation completed.	<ul style="list-style-type: none"> Oxidation pond, surface flow wetland, overland flow to drain. Discharges to a tributary of Wairoa Stream. 	<ul style="list-style-type: none"> No major operational issues. Management Plan submitted as per agreed schedule. Community liaison group meetings have not been completed as required by the resource consent. However, FNDC has held meetings with submitters on the replacement consent and has engaged Runanga o Te Rarawa to prepare a cultural impact assessment of the replacement consent. Work to begin soon on remediation of its wetland, including sludge removal and replanting. 	<ul style="list-style-type: none"> Some outstanding reporting requirements.
Awanui (FNDC) Consent issued 2005, expiry 2021.	<ul style="list-style-type: none"> Small aerated package treatment system and surface flow wetland. System has UV disinfection. Discharges to Awanui River. 	<ul style="list-style-type: none"> Consistently complies with water quality conditions of consent. Looking to potentially reticulate to Kaitāia. Management Plan submitted as per agreed schedule. FNDC advise that project on target to enable the Awanui WWTP to be decommissioned by June 2013. 	<ul style="list-style-type: none"> Nothing new to report.
Hihi (FNDC) Consent issued 2011, expiry 2022.	<ul style="list-style-type: none"> Extended aeration treatment system with flow equalisation followed by surface flow wetland. Discharges to the Hihi Stream. 	<ul style="list-style-type: none"> At times does not comply with the Ecoli condition of consent (for the discharge from the treatment plant). Consent required an upgrade to the plant by 1 May 2012 – this has not been done. There is significant stormwater infiltration to the reticulation system for the treatment plant, however some improvements have been made in relation to this. Further work is planned to resolve key infiltration issues and then FNDC will re-assess the situation and determine what else needs to be done. Management Plan submitted 25 May 2012, as per agreed schedule. FNDC advised on 26 March that the plant upgrade will not be completed by 1 May 2012 deadline. NRC issued Abatement Notice on 1 June 2012 for non-compliance with upgrade condition. NRC Operations Director and Consents/Monitoring SPM met with FNDC General Manager (Infrastructure & Asset Management) and Operations Manager on site in September to discuss upgrade proposal, including adding sand filter and UV disinfection. 	<ul style="list-style-type: none"> Abatement notice timeframe extended to 28 February 2013.
Kaeo (FNDC) Consent issued 2007, expiry 2022. Changed consent issued October 2011.	<ul style="list-style-type: none"> Settlement and oxidation ponds Packed bed reactor incorporating vermiculture. Wetland. Discharges to the Kaeo River. 	<ul style="list-style-type: none"> Consent requires 4-log reduction of viral indicators to protect downstream oyster farms. The system and discharge standards were proposed by FNDC. Management Plan submitted as per schedule. Upgrade to treatment plant has been completed. Commissioning commenced on 29 June 2012. FNDC currently bringing new system up to optimal operational condition. 	<ul style="list-style-type: none"> Nothing new to report.

Location/Consent Status	Plant Description	Status & Issues	Update as at February 2013
		<ul style="list-style-type: none"> • Further investigation required before committing to UV treatment system. • August sample result: phages below detection limits. September and October samples: >4-log reduction. 	
Kaikohe (FNDC) Consent issued 2005, expiry 2021. Changed consent issued on 19 April 2011.	<ul style="list-style-type: none"> • Anaerobic pond, large facultative pond, three surface flow wetlands. • Discharges to a tributary of the Wairoro stream. 	<ul style="list-style-type: none"> • The Kaikohe ponds suffer from blue green algae blooms in summer. • Problems with compliance during low flows (ammoniacal nitrogen exceeds consent limit). • Floating wetlands proposed to improve treatment. • Stormwater infiltration report submitted as required by consent. • Management Plan submitted as per agreed schedule. • Consideration of process options and requirements will include review of Kaeo vermiculture data. 	<ul style="list-style-type: none"> • November sampling had elevated ammoniacal nitrogen concentration.
Kaitiāia (FNDC) Consent issued 2005, expiry 2021.	<ul style="list-style-type: none"> • Two ponds plus floating wetland cells. • Discharges to the Awanui River. 	<ul style="list-style-type: none"> • Main issue is the blue green algae and discharge during summer. • Should there be further significant blue green algae discharges, FNDC will be required to cease the discharge to the river, using formal enforcement action if need be. • Recent upgrades have been carried out and include floating wetlands, baffle curtains and sludge reception. • Upgrade condition requiring installation of a disinfection unit by August 2008 – this has not been done. However, monitoring results from January to April 2012 show >5 log reduction in phages. Average reduction over 2011 >4log. • Management plan received as per agreed schedule. • Resource consent for sludge drying beds obtained. 	<ul style="list-style-type: none"> • Some outstanding reporting requirements.
<ul style="list-style-type: none"> • Kawakawa (FNDC) Consent issued 2012, expiry 2036. 	<ul style="list-style-type: none"> • Aeration tank, a secondary clarifier, a disc filter, UV treatment and then to constructed wetlands. • Discharges to Kawakawa River. 	<ul style="list-style-type: none"> • System working well since upgrade. • Upper Kawakawa shellfish monitoring site for viruses once one of the worst sites now one of the best. • Management plan received as per agreed schedule. 	<ul style="list-style-type: none"> • Nothing new to report.
Kerikeri (FNDC) Consent issued 2005, expiry 2015.	<ul style="list-style-type: none"> • Aerated treatment system (solids separation, RCBs, and clarifiers). • System has UV unit (operates poorly). • Discharges to the Waitangi forest natural wetland (a tributary of the Kerikeri Inlet). 	<ul style="list-style-type: none"> • Historically, the system has had significant odour problems. • System upgraded a couple of years ago. However ongoing issues with performance of disinfection unit due to poor quality effluent. • Balance tank collapsed during March 2012 storm event. • All three balance tanks have been replaced. • Management plan received as per agreed schedule. • New consent for BOI issued (combined Paihia and Kerikeri system). • Kerikeri WWTP will become redundant (sewage pumped to Paihia). • Community liaison meeting outstanding. FNDC advise this is planned for the near future. 	<ul style="list-style-type: none"> • Some outstanding reporting requirements. • December faecal coliform concentrations non-compliant with consent condition.

Location/Consent Status	Plant Description	Status & Issues	Update as at February 2013
Paihia (FNDC) Consent issued 2004, expiry 2014.	<ul style="list-style-type: none"> Two pond system. Discharges to the Waitangi forest natural wetland (a tributary of the Kerikeri Inlet). 	<ul style="list-style-type: none"> Resource consent granted for BOI scheme in mid 2012. Current system in significant non-compliance with consent conditions (ammoniacal nitrogen frequently exceeds consent limits) and in need of upgrade regardless of progress on new system. Upgrade to meet ammonia conditions outstanding. Management plan received as per agreed schedule. FNDC investigating a biological (vegetation) filtration treatment system (currently being used in Europe). Decision was expected by end of October 2012. No decision has been communicated to NRC regarding upgrade to Paihia. 	<ul style="list-style-type: none"> An abatement notice was issued in November 2012. Compliance date is 30 June 2013.
Kohukohu (FNDC) Consent issued 2002, expiry 2016.	<ul style="list-style-type: none"> Septic tanks followed by oxidation pond and surface flow wetland. Discharges to Hokianga Harbour. 	<ul style="list-style-type: none"> Consistently complies with water quality conditions of consent. No outstanding issues. Management plan received as per schedule. 	<ul style="list-style-type: none"> Nothing new to report.
Opononi and Omāpere (FNDC) Consent issued 2009, expiry 2019.	<ul style="list-style-type: none"> Primary screen, aerated pond, facultative pond, surface flow wetland. Discharges to Hokianga Harbour (on outgoing tide). 	<ul style="list-style-type: none"> Stormwater infiltration is an issue. At times the plant discharges outside of the tidal flow condition to prevent overtopping of the wetland. Management plan received as per agreed schedule. FNDC are assessing options for refurbishing the wetlands. Access for sludge removal is a constraint. An affordable solution for desludging and replanting the wetland is being sought. Additional funding has been targeted in the Annual Plan. 	<ul style="list-style-type: none"> Still having issues complying with ecoli condition of consent.
Rangiputa (FNDC) Consent issued 2008, expiry 2032.	<ul style="list-style-type: none"> Oxidation ponds. Discharges to ground via the base of a third pond. 	<ul style="list-style-type: none"> No current known issues with this treatment system. Management plan received as per agreed schedule. 	<ul style="list-style-type: none"> Nothing new to report.
Rāwene (FNDC) Consent expired 2008. NRC decision on replacement consent appealed by local group.	<ul style="list-style-type: none"> Anaerobic pond, facultative pond and surface flow wetland. Discharges to the Omanaia River. 	<ul style="list-style-type: none"> No current performance issues with this treatment system. Still going through appeal process. Management plan received as per agreed schedule. Infiltration study requested by appellants has checked Council reticulation and only minor issues identified. 	<ul style="list-style-type: none"> Nothing new to report.
Russell (FNDC) Consent issued 2002, expiry 2013.	<ul style="list-style-type: none"> Aerated treatment system, surface flow wetland, filtration and UV disinfection. Discharges to deep bores. 	<ul style="list-style-type: none"> No significant issues at this point. Consistently complies with water quality conditions of consent. Management plan received as per agreed schedule. 	<ul style="list-style-type: none"> Replacement consent application received in December 2012.
Taipā (East Coast Bays) (FNDC) Consent expired 2008. Replacement consent in	<ul style="list-style-type: none"> Facultative pond and aerated pond followed by surface flow wetland (4 cells). 	<ul style="list-style-type: none"> Problems with blue green algae in the discharge at times. High ammonia and suspended solids from the marsh discharge at times. 	<ul style="list-style-type: none"> Nothing new to report.

Location/Consent Status	Plant Description	Status & Issues	Update as at February 2013
process – on hold to allow assessment of land disposal option. Significant iwi opposition.	<ul style="list-style-type: none"> Discharges to a tributary of the Parapara Stream. 	<ul style="list-style-type: none"> Currently investigating land application options as part of the consent renewal process. Application is still in process. Management plan received as per agreed schedule. 	
Whatuwhiwhi (FNDC) Consent issued 2007, expiry 2025.	<ul style="list-style-type: none"> Two aerated ponds equipped with biological growth media. Discharges to natural wetland which extends down to Karikari Bay. 	<ul style="list-style-type: none"> Consistently does not comply with faecal coliform discharge condition of consent. Discharge standards were proposed by FNDC. NRC does not consider there to be adverse effects on the receiving environment. Management plan received as per agreed schedule. FNDC investigating options for amending the resource consent. 	<ul style="list-style-type: none"> Nothing new to report.
Dargaville (KDC) Consent issued 2007, expiry 2022.	<ul style="list-style-type: none"> Facultative pond and wetland/maturation pond. Discharges to the Northern Wairoa River. 	<ul style="list-style-type: none"> Non-compliance with requirement to investigate stormwater inflow and infiltration. Consistently complies with water quality conditions of consent. 	<ul style="list-style-type: none"> Nothing new to report.
Kaiwaka (KDC) Consent issued 2010, expiry 2022.	<ul style="list-style-type: none"> Aerated pond and constructed wetland. Discharge to the Pukekaroro Stream. 	<ul style="list-style-type: none"> Issues with complying with water quality conditions of consent. 	<ul style="list-style-type: none"> Currently non-compliant with water quality conditions of consent. Improvements to plant scheduled for early 2013.
Maungaturoto (KDC) Consent issued 2008, expiry 2032.	<ul style="list-style-type: none"> Aerated pond, membrane filtration plant, storage pond, discharge to rock filter. Discharges to the Wairau River. 	<ul style="list-style-type: none"> No current issues. 	<ul style="list-style-type: none"> Nothing new to report.
Mangawhai – Ecocare (KDC) Consent issued 2007, expiry 2042.	<ul style="list-style-type: none"> Screening, CASS tanks, chlorination and then pumped to storage dam. Irrigated to farmland. 	<ul style="list-style-type: none"> Consistently complies with water quality conditions of RC. Storage pond for irrigating holding more effluent than ideal due to lack of suitable application area. Irrigation area has been increased by 5 ha (now 30 ha). Further area is required. Kaipara LTP budget of \$400,000 for expansion of irrigation area. Lack of irrigation area resulted in application during winter. 	<ul style="list-style-type: none"> Nothing new to report.
Te Kopuru (KDC) Consent issued 2010, expiry 2044.	<ul style="list-style-type: none"> Oxidation ponds and constructed wetland. Discharges to N Wairoa River. 	<ul style="list-style-type: none"> Contractor currently tendering for wetland desludging works. Anticipating works to be completed by April 2013. 	<ul style="list-style-type: none"> Still non-compliant for suspended solids and ecoli. Waiting on KDC to indicate timeframes for planned improvements.
Hikurangi (WDC) Consent issued 2007 (re-issued 2010), expiry 2025.	<ul style="list-style-type: none"> Settling pond, aerated pond, wetland and membrane filter for disinfection. Discharges to Mangawhero str. 	<ul style="list-style-type: none"> Plant has been non-compliant with respect to discharge volumes of treated wastewater for the 12 months to 31 March 2012. Change to the RC recommended. 	<ul style="list-style-type: none"> Nothing new to report.

Location/Consent Status	Plant Description	Status & Issues	Update as at February 2013
Ngunguru (WDC) Consent issued 2010, expiry 2035.	<ul style="list-style-type: none"> Aerated pond, settling pond, constructed wetland and UV unit. Discharges to tributary of the Waitoi creek. 	<ul style="list-style-type: none"> On-going issues with telemetry. 	<ul style="list-style-type: none"> Telemetry working, but alarm system still requires further work.
Oakura (WDC) Consent issued 2006, expiry 2025.	<ul style="list-style-type: none"> Screening, sedimentation tanks, biological contactor unit, disc filter and UV unit. Discharges to forest land via dripper lines. 	<ul style="list-style-type: none"> Non-compliance with water quality conditions from October 2011 to March 2012. WDC has rectified problems and latest results are compliant. Inundation of treatment plant occurred in August. Remedial actions taken by WDC and improvements to plant as a result made. Plant now fully operational following failure in August. 	<ul style="list-style-type: none"> Nothing new to report.
Portland (WDC) Consent issued 2004, expiry 2024.	<ul style="list-style-type: none"> Oxidation pond and constructed wetland. Discharges to Tokitoki Creek. 	<ul style="list-style-type: none"> Consistently complies with water quality conditions of consent. 	<ul style="list-style-type: none"> Nothing new to report.
Ruakaka (WDC) Consent issued 2008, expires 2018.	<ul style="list-style-type: none"> Aerated pond and constructed wetland. Discharges to Bream Bay sand dunes. 	<ul style="list-style-type: none"> 3 bores (out of 20) are showing high nitrogen levels. Further investigation required to determine possible causes for elevated N levels. Elevated N is possibly not related to WDC discharge. Have commenced working on the Rama Road disposal area (this is covered by the new Ruakaka consent). Still operating under the existing consent. 	<ul style="list-style-type: none"> Nothing new to report.
Tutukaka (WDC) Consent issued 2004, expiry 2024	<ul style="list-style-type: none"> Screening, primary treatment, denitrification recirculation tanks, sand filters, UV unit and constructed wetland. Discharges to a tributary of Tutukaka Harbour. 	<ul style="list-style-type: none"> Do not currently have reliable alarms. UV data now being received into SCADA and reports available. 	<ul style="list-style-type: none"> Telemetry now working.
Waiōtira (WDC) Consent issued 2008, expiry 2030.	<ul style="list-style-type: none"> Septic tank and constructed wetland. Discharges to Waiōtira Stream. 	<ul style="list-style-type: none"> Consistently complies with water quality conditions of consent. 	<ul style="list-style-type: none"> Nothing new to report.
Waipū (WDC) Consent issued 2007, expiry 2015.	<ul style="list-style-type: none"> Aerated pond, constructed wetland with discharge to rapid in-fill basins. Discharges to the Bream Bay coast via subsurface flow. 	<ul style="list-style-type: none"> Consistently complies with water quality conditions of consent. 	<ul style="list-style-type: none"> Nothing new to report.
Whāngārei Main WWTP (WDC) Consent issued 2004, expiry 2022. Change to consent	<ul style="list-style-type: none"> Screening, primary clarifiers, 1st and 2nd stage trickling filters, activated sludge basin and clarifiers, effluent filter, UV unit and normal to high flows 	<ul style="list-style-type: none"> Over the last 2 years there have been minor non-compliances with the water quality conditions of consent and also for reporting requirements. Compliance is improving. With the upgrade of the Okara Park Pump Station it is recognised that the extra volume has resulted in the need to upgrade the main 	<ul style="list-style-type: none"> Stage 2 upgrade works are underway.

Location/Consent Status	Plant Description	Status & Issues	Update as at February 2013
applied for – currently in process.	go through wetlands. • Discharges to Limeburners Creek.	WWTP. The upgrade will occur in three stages: Stage 1: Upgrade existing UV channel to treat 50ML/d (currently 30 ML/d). Stage 2: Install new UV channel in UV building with capacity to treat a further 50 ML/d. Stage 3: Install new separate UV system to treat balance of influent that can't be processed by stage 1 and 2 units. • New UV channel installed. Installation went very smoothly. • Recent upgrade works to UV unit means that increased flows can be treated prior to discharge to Limeburners Creek.	
Hātea Pump Station (WDC)	• Storage tank, UV unit and chemical treatment.	• Newly constructed pump station with storage and treatment has been installed. • RC will be issued shortly. • Abatement notice issued in August 2010 now cancelled.	• Nothing new to report.

ISSUE: Farm Dairy Effluent – report on monitoring 2012/13 season

ID: A295544

To: Environmental Management Committee, 19 February 2013

From: Tess Dacre, Monitoring Programme Manager – Water and Wastes

Date: 4 February 2013

Summary The purpose of this report is to give an update on the results of the 2012/13 farm dairy effluent monitoring season.

Normal Operations ☒

Report:

Monitoring and reporting of all dairy farms was completed by 24 December 2012. A total of 978 farms were visited between 13 August 2012 and 28 November 2012. The results for consented and permitted activity farms are tabled below. Final figures show a significant improvement in the rate of full compliance – overall 61% of farms were fully compliant with resource consent conditions and/or permitted activity rules (see graph on page 2 of this report). This is the first time that over 50% of farms have been fully compliant. There was also a large improvement in the rate of significant non-compliance of non-consented farms, which dropped from 46% in 2011/12 to 26% in 2012/13. In total, almost 80% of Northland farms were either fully complying or had only minor compliance issues.

Consented (MCO) FDE discharges

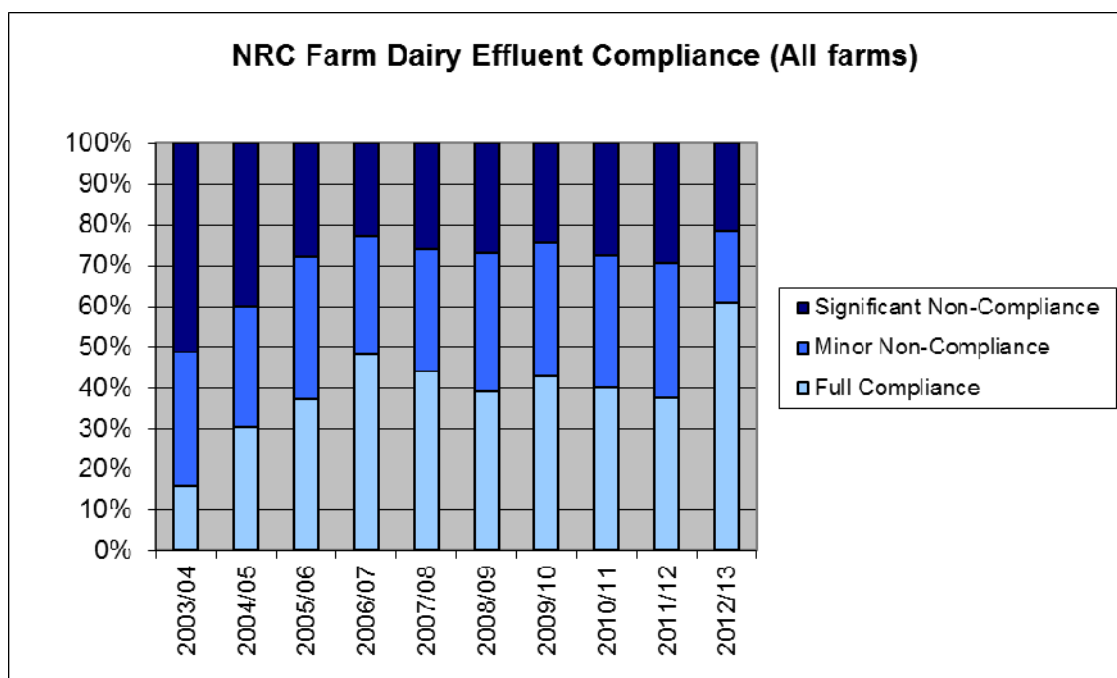
Full Compliance		Non-Compliance		Significant Non-Compliance	
This Year	Last Year	This Year	Last Year	This Year	Last Year
446	291	139	260	142	165
61%	41%	19%	36%	20%	23%

Non-consented (MNC) FDE discharges

Full Compliance		Non-Compliance		Significant Non-Compliance	
This Year	Last Year	This Year	Last Year	This Year	Last Year
149	80	36	65	66	124
60%	30%	14%	24%	26%	46%

It is hoped that these figures will continue to improve as new/upgraded infrastructure continues to be installed on-farm and farmers are coming to grips with management of their new infrastructure.

It is encouraging that the number of farms discharging treated effluent to water continues to drop. In August 2012, 76% of farms checked were exercising their right to discharge to water. However, by November this had dropped to 42% of farms.



Reasons for significant non-compliance

Summary tables are shown below (these indicate the main reason for a farm being allocated the significant non-compliance grade). Untreated effluent discharges are the single main reason - accounting for about one-third of the significant non-compliance. Further work will be done in this area to raise farmer awareness and to improve compliance in this regard.

Summary of MCO significant non-compliance 2012

Main reason for non-compliance	Aug	Sep	Oct	Nov	Dec	YTD
Water quality test results outside consent limits	6	5	13	6	2	32
Untreated effluent discharged to water (e.g. feedpad; underpass; entry/exit race; stormwater bypass)	13	20	7	8	4	52
Discharge from irrigator to water	0	1	5	3	1	10
Excessive ponding; overland flow; discharge from irrigator into setback distances	0	1	3	1	0	5
Inadequate management (e.g. broken pipes, sump overflow)	2	4	3	5	3	17
High risk of adverse environmental effects (but no discharge to water at time of inspection)	0	0	2	2	0	4
Required upgrade not completed by due date	0	3	6	6	4	19
Discharge to water when should be irrigating	0	0	0	0	4	4
Total	21	34	39	31	18	143

Summary of MNC significant non-compliance 2012

Main reason for non-compliance	Aug	Sep	Oct	Nov	Dec	YTD
Untreated effluent discharged to water (e.g. feedpad; underpass; entry/exit race; discharge via stormwater bypass)	6	6	6	1	0	19
Unauthorised discharge of treated effluent to water	4	6	4	2	1	17
Discharge from irrigator to water	1	0	3	2	0	6
Excessive ponding; overland flow; discharge from irrigator into setback distances	2	4	7	2	0	15
No (or inadequate) contingency storage	0	3	1	2	2	8
Inadequate management (e.g. broken or blocked pipes; sump overflow; irrigator/pump maintenance)	0	0	1	0	0	1
High risk of adverse environmental effects (but no discharge to water at time of inspection)	0	0	0	0	0	0
Total	13	19	22	9	3	66

NRC initiatives to improve FDE compliance

The positive trends indicate that we are on the right track. The following activities will continue:

- One-on-one follow-up visits to all significantly non-compliant farms.
- One-on-one visits to farms where requested by farm owners.
- Production and circulation of Dairy Farmer Newsletters.
- Development of effluent publications and resources for farmers.
- Promotion of Effluent Management Plans tailor made to each farm.
- Continue to take lead role in the Northland Effluent Improvement Project group.

Clean Streams Snapshot Report 2011/12

It should be noted that the latest Clean Streams Snapshot due to be released this month reports compliance data from last year (the 2011/12 season) – not for this year's data as above. The other important point is that the while the data from all regional councils is compiled in a table for comparative purposes – the figures are not actually comparing like with like. There are significant differences in the monitoring regimes between regions, with Northland having one of the most, if not the most, rigorous compliance monitoring regimes.

Compliance with decision making processes

The activities detailed in this report are provided for in the council's 2012-22 Long Term Plan, and as such are in accordance with the council's decision-making process and Sections 76-82 of the Local Government Act 2002.

Recommendation

1. That the report Farm Dairy Effluent – report on monitoring 2012/13 season from Tess Dacre, Monitoring Programme Manager – Water and Wastes, dated 4 February 2013 be received.

ISSUE: Environmental Monitoring for the period 19 November 2012 – 31 January 2013

ID: A295743

To: Environmental Management Committee Meeting, 19 February 2013

From: Colin Dall, Consents/Monitoring Senior Programme Manager

Date: 5 February 2013

Summary The purpose of this report is to provide an update on council's monitoring and compliance work for the period 19 November 2012 – 31 January 2013. It concludes with the recommendation that the report be received.

Normal Operations



Report:

ABBREVIATIONS KEY:

WDC	Whāngārei District Council	FNDC	Far North District Council	KDC	Kaipara District Council
DOC	Department of Conservation	NPC	Northland Port Corporation	NZRC	NZ Refining Company
NRC	Northland Regional Council	FNHL	Far North Holdings Ltd	CH	Consent Holder
STS	Sewage Treatment System	POD	Point of Discharge	PA	Permitted Activity
ESCP	Erosion and Sediment Control Plan	RAQP	Regional Air Quality Plan	RWSPN	Regional Water and Soil Plan for Northland
RC	Resource Consent	CMA	Coastal Marine Area	RCPN	Regional Coastal Plan for Northland

CONSENT COMPLIANCE – AGENDA CODE DESCRIPTION:

This code indicates:

- the degree of environmental **Impact**;
- the **Response** taken, or to be taken, by staff; and
- the **Status** of the situation.

Impact to the Environment

N	Natural Event	Such as flooding, earth movement or algae blooms over which there is little or no control.
U	Unknown	Results do not clearly differentiate between contamination and natural causes; or an incident has been reported sometime after its occurrence and the impact cannot readily be estimated.
0	None Detected	Inspection and/or sampling shows no impact.
1	Minor	The impact of the activity on the receiving environment was minor; effects were localised and/or temporary with non-significant deterioration in water quality, flows, and amenity value and/or land stability.
2	Significant	Environmental impact is likely to extend over some distance or area, and/or could continue for some time (1-3 days), and/or a significant human health risk is likely.
3	Large	The impact is large with the environment requiring restoration or a substantial amount of time to recover (more than one week) and/or a major human health risk is likely.

Response of Regional Council

N	None Required or Warranted	It is a natural event or no impact has been detected. Source unknown further investigation is not warranted. Report resulting from a routine monitoring event where no follow up is required.
F	Further Investigation Required	To confirm impact, to assess impact, to locate source, or to determine compliance.
I	Information or Advice	Given on how to avoid future adverse effects.
R	Request	An explanation of the situation or how the situation arose, a statement of the mitigation measures proposed or request certain mitigation measures to be undertaken, maintenance or upgrading to prevent impacts occurring in the future.
W	Written Warning	Written warning to avoid recurrence.
C	Clean Up	Clean up by Regional Council.
E	Formal Enforcement	Abatement Notice, Enforcement Order, Infringement Notice, Prosecution.

Status

R	Resolved	Party has fully complied with Regional Council's requests and there is no unacceptable impact to the environment, natural event that the Regional Council cannot realistically influence, no response required or warranted.
P	Pending Inspection	Prevention or mitigation measures have been reported to the Regional Council, as being in place but this has not yet been confirmed by re-inspection.
U	Unresolved	Regional Council requests to prevent or mitigate environmental impacts have not yet been met. The situation has not yet been investigated thoroughly enough to determine environmental impact. The time given for requested or required mitigation measures to be put in place have not elapsed.
M	Routine Monitoring	Routine monitoring.

Compliance Code Key

SNC1	Repeated minor non-compliance or significant non-compliance resulting in minor to moderate effects.	SNC2	Significant non-compliance with significant effects.	FUS	Follow up significant non-compliance.
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ENVIRONMENTAL INCIDENTS

S	Significant Impact
M	Moderate Impact

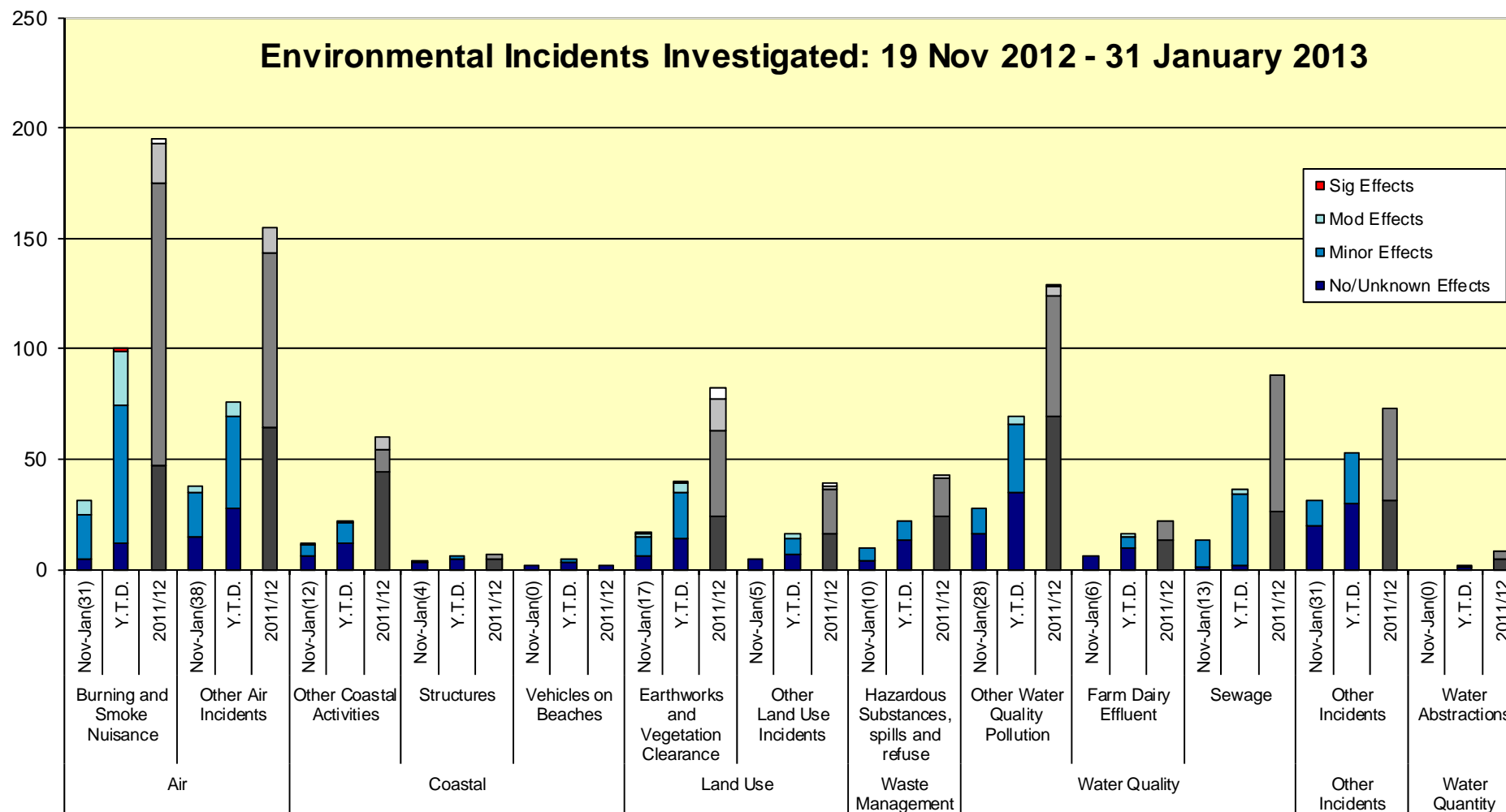
MARITIME INCIDENT RESPONSE CODES

Response

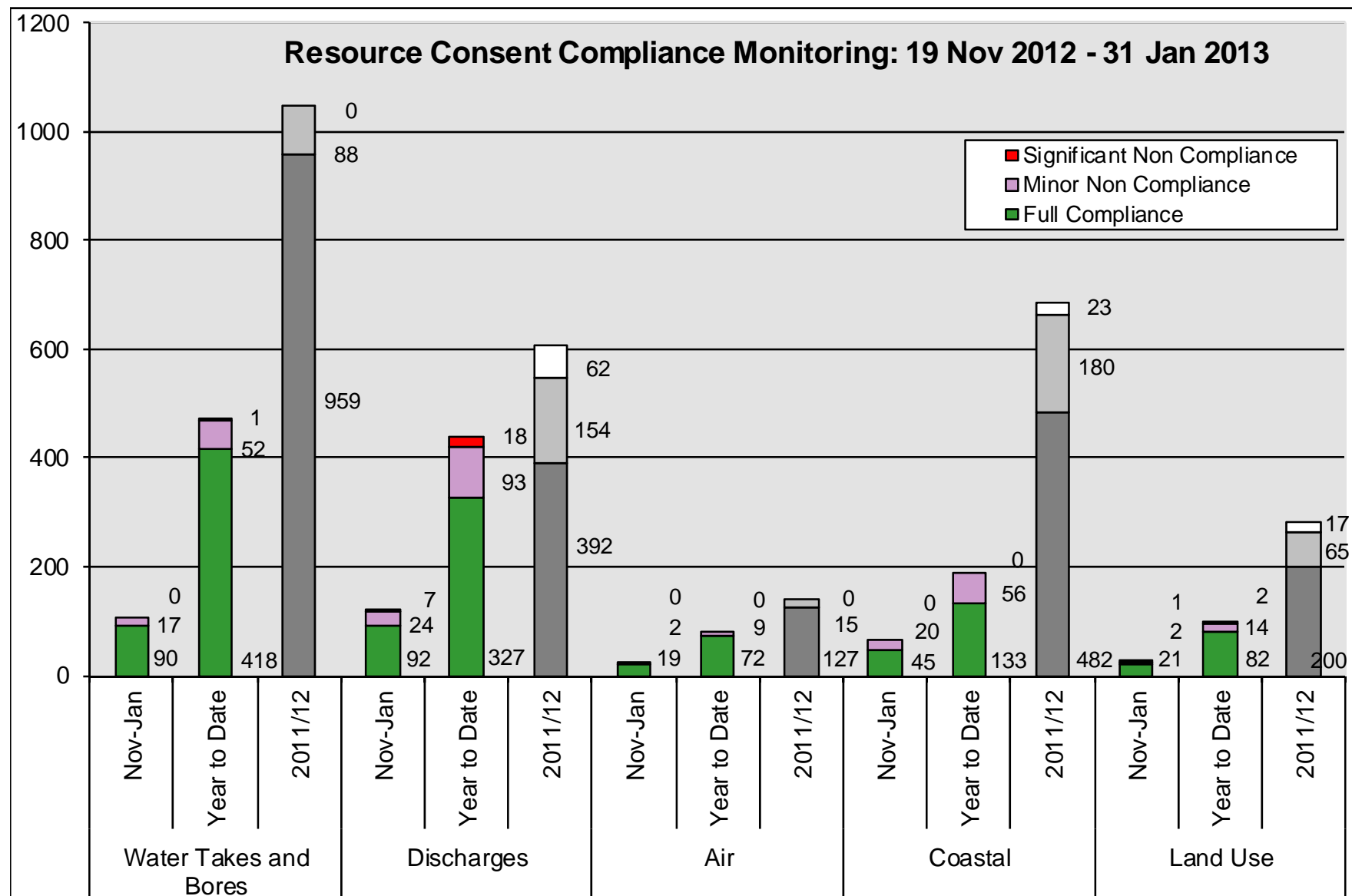
N	No Response Required
F	Further Investigation Required
I	Information or Advice
R	Repaired/Replaced/Removed
W	Written warning issued to offender (offence notice, abatement notice)
P	Prosecution action pending
O	Other Agency

Status

R	Resolved	Party has fully complied with Regional Council's requests and there is no unacceptable impact to the environment, natural event that the Regional Council cannot realistically influence, no response required or warranted.
P	Pending Inspection	Prevention or mitigation measures have been reported to the Regional Council, as being in place but this has not yet been confirmed by re-inspection.
U	Unresolved	Regional Council requests to prevent or mitigate environmental impacts have not yet been met. The situation has not yet been investigated thoroughly enough to determine environmental impact. The time given for requested or required mitigation measures to be put in place have not elapsed.
M	Routine Monitoring	Routine monitoring.



Notes: (1) Number of incidents **investigated** will differ from number of incidents **reported** during period
(2) Greyscale data represents the previous year's total incidents investigated, for comparison purposes



Note: Greyscale data represents the previous year's total compliance monitoring reporting, for comparison purposes

DISCHARGES TO AIR - No significant non-compliant events were recorded during the period 19 November 2012 – 31 January 2013.

COASTAL ACTIVITIES - No significant non-compliant events were recorded during the period 19 November 2012 – 31 January 2013.

LAND USE ACTIVITIES - No significant non-compliant events were recorded during the period 19 November 2012 – 31 January 2013.

WATER TAKES - No significant non-compliant events were recorded during the period 19 November 2012 – 31 January 2013.

DISCHARGES TO WATER OR LAND

Date	Consent	Details	Location	Notes	Code	Comp
12-Nov-12	241701	FNDC: Discharge treated municipal sewage - Kaikohe	Kaikohe Sewage Treatment System	<ul style="list-style-type: none"> The water sample results indicated slightly elevated ammonia levels at the downstream river site in non-compliance with the RC conditions. 	1NM	SNC1
21-Nov-12	720301	FNDC: Discharge treated municipal sewage - Whatuwhiwhi	Whatuwhiwhi Sewage Treatment System	<ul style="list-style-type: none"> The faecal coliform levels from the final discharge were in non-compliance with the RC conditions. 	1RM	SNC1
19-Dec-12	110801	FNDC: Discharge treated municipal sewage - Paihia	Paihia Sewage Treatment System, Waitangi Forest	<ul style="list-style-type: none"> The water sample results from the downstream site indicated elevated ammonia levels in non-compliance with the RC conditions. Formal enforcement action taken. 	2FM	SNC1
19-Dec-12	411101	FNDC: Discharge treated municipal sewage - Kerikeri	Kerikeri Sewage Treatment System	<ul style="list-style-type: none"> The water samples taken after the UV treatment system indicated non-compliance with the median faecal coliform levels. However, the receiving environment levels were in compliance with the RC conditions. Reports and plans have not been received as required by the RC. 	1NM	SNC1

DISCHARGES TO WATER OR LAND - ADMINISTRATIVE NON-COMPLIANCES

Date	Consent	Details	Location	Notes	Code	Comp
01-Nov-12	93201	FNDC: Discharge treated municipal sewage - Kaitia	Kaitia Sewage Treatment System	<ul style="list-style-type: none"> The water samples taken from the receiving waters did not indicate elevated contaminant levels. The annual review has not been completed as required by the RC. 	0RM	SNC1
01-Nov-12	377501	FNDC: Discharge treated municipal sewage - Ahipara	Ahipara Sewage Treatment System	<ul style="list-style-type: none"> The water sample results from the drain complied with the RC conditions. The annual review has not been completed and the community liaison group meetings have not been completed as required by the RC. 	0NM	SNC1

07-Nov-12	739901	FNDC: Discharge treated municipal sewage - Hihi	Hihi Sewage Treatment System	<ul style="list-style-type: none"> The water samples from the receiving waters did not indicate elevated contaminant levels at the downstream site. The plant has not been upgraded as required by the RC. Formal enforcement action taken. 	0RM	SNC1
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FARM DAIRY EFFLUENT DISCHARGES – NON CONSENTED (MNC)

Date	Consent	Details	Location	Notes	Code	Comp
02-Oct-12	864683	Clear Ridge Station Ltd: FDE 8638	Mititai Road, Okahu	<ul style="list-style-type: none"> Untreated effluent from entry/exit race discharged to water. Effluent from sprinklers caused overland flow to water. Effluent from leak in pond embankment discharged to water. 	2IU	SNC1
08-Oct-12	804393	Byers Farms Ltd: FDE 825	Punakitere Road, Kaikohe	<ul style="list-style-type: none"> Treated effluent from storage pond pumped to drain which flowed to water. 	2IU	SNC1
16-Nov-12	800261	Carter R & B K: FDE 1121	State Highway 1, Kaiwaka	<ul style="list-style-type: none"> Effluent from irrigator caused excessive effluent ponding and overland flow. 	2IU	SNC1
21-Nov-12	804135	McAulay B I: FDE 1814	Cullen Road, Waipū Cove	<ul style="list-style-type: none"> Treated effluent discharged to water without RC. 	2IU	SNC1
26-Nov-12	800379	Clotworthy R S & D M L: FDE 2002	Riverside Road, Onerahi	<ul style="list-style-type: none"> No contingency storage. 	2IU	SNC1
11-Dec-12	800012	Bryan N A: FDE 31	Far North Road, Houhora	<ul style="list-style-type: none"> No contingency storage. Irrigator caused excessive effluent ponding. 	2IU	SNC1

Follow-up of significant non-compliance (non-consented farms)

15-Nov-12	800232	Goodhue B H & K M: FDE 949	State Highway 1, Moerewa	<ul style="list-style-type: none"> Will upgrade to full storage and land application by 30 June 2013. 	1IU	FUS
26-Nov-12	800884	Nilsson G & T: FDE 8199	Baylys Coast Road, Mangatara	<ul style="list-style-type: none"> Solids had been removed from edge of drain. Discharge from feedpad to drain had been eliminated. 	0NR	FUS
26-Nov-12	801044	Blagrove M J & C Ltd: FDE 8756	Hoanga Road, Hoanga	<ul style="list-style-type: none"> Farmer advised that he would retain effluent from the standing and race area in a ditch and pump effluent to land or to ponds. 	1IU	FUS
29-Nov-12	800555	G R & P J Powell Ltd : FDE 3512	Whatitiri Road, Poroti	<ul style="list-style-type: none"> Race will no longer be used for stand-off. Will construct calving pad and reticulate all effluent to the storage pond. Agreed to construct additional storage volume by 31 March 2013. 	0NR	FUS
03-Dec-12	800438	Erceg B G: FDE 2752	Erceg Road, Mata	<ul style="list-style-type: none"> New pond and land application to be commissioned by no later than 28 February 2013. 	1IU	FUS

24-Jan-13	800469	Anderson D G & L S: FDE 3012	Kokopu Road, Kara	<ul style="list-style-type: none"> Did not have storage pond empty prior to winter 2012. Therefore had to irrigate to saturated pastures. Will have pond empty prior to winter 2013. 	0NR	FUS
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FARM DAIRY EFFLUENT DISCHARGES - CONSENTED (MCO)

Date	Consent	Details	Location	Notes	Code	Comp
05-Nov-12	916901	Godzone Partnership: FDE 1325	Hames Road, Maungaturoto	<ul style="list-style-type: none"> Untreated effluent discharged from a sump to water. 	2IU	SNC1
12-Nov-12	362001	Wintle D D & B J: FDE 5631	Garbolino Road, Hakuru	<ul style="list-style-type: none"> Effluent was discharged to water when RC required application to land. 	2IU	SNC1
12-Nov-12	928201	Whitaker A & M E: FDE 5643	Kapawiti Road, Kaiwaka	<ul style="list-style-type: none"> Untreated effluent from entry/exit race discharged to land. Effluent from milking pit discharged to water. 	2IU	SNC1
12-Nov-12	933001	McClellan B W & I C: FDE 1024	Pukenui Road, Kaiwaka	<ul style="list-style-type: none"> Effluent from an irrigator discharged to water causing significant adverse effects. 	2IU	SNC1
14-Nov-12	728302	Matawhera Farms Ltd: FDE 585	Kohe Road, Pawarenga	<ul style="list-style-type: none"> Untreated effluent from milk room, silage area and entry/exit race discharged to water. Required land application system not installed. 	2IU	SNC1
14-Nov-12	923001	Brown G & M Ltd: FDE 7136	Jubilee Road, Marua	<ul style="list-style-type: none"> Effluent from a broken transfer pipe discharged to water. 	2IU	SNC1
14-Nov-12	948601	Morris C K & K D: FDE 7154	Marua Road, Hikurangi	<ul style="list-style-type: none"> Untreated effluent from a broken pipe discharged to water. 	2IU	SNC1
14-Nov-12	1936001	Brown Bros Marua Ltd: FDE 7116	Jubilee Road, Marua	<ul style="list-style-type: none"> Effluent from an irrigator discharged to water. 	2IU	SNC1
15-Nov-12	1124701	Waipuke Farm: FDE 3737	Tauraroa Road, Tauraroa	<ul style="list-style-type: none"> Water quality test results outside RC limits. 	2IU	SNC1
15-Nov-12	1289601	Sawford D R: FDE 3749	Old School Road, Maungakaramaea	<ul style="list-style-type: none"> Required upgrade not completed. 	2IU	SNC1
16-Nov-12	965001	Saunders L K & J G: FDE 6782	Oruawharo Road, Oruawharo	<ul style="list-style-type: none"> Required upgrade not completed. Discharged to water when conditions good for land application. 	2IU	SNC1
16-Nov-12	1778201	M T Ventures Ltd : FDE 6704	SH1, Kaiwaka	<ul style="list-style-type: none"> System maintenance inadequate. Water quality test results outside RC limits. Untreated effluent from entry/exit race discharged to water. 	2IU	SNC1
19-Nov-12	2071601	Underwood B K: FDE 1130	Tain Road, Maungaturoto	<ul style="list-style-type: none"> Pond maintenance was inadequate. The agreed increase in aerobic surface area had not been done. Water quality test results outside RC limits. 	2IU	SNC1

20-Nov-12	163701	Cullen N M & C J: FDE 1600	Gorge Road, Maungaturoto	<ul style="list-style-type: none"> Untreated effluent was scraped from a bridge and pushed into a river bed. 	2IU	SNC1
20-Nov-12	1276301	Mayflower Farms Ltd: FDE 1309	State Highway 12, Maungaturoto	<ul style="list-style-type: none"> Water quality results outside RC limits. 	2IU	SNC1
23-Nov-12	912401	Lea Rig Farms Ltd: FDE 7149	Whananaki North Road, Opuawhanga	<ul style="list-style-type: none"> Agreed upgrade not completed. Effluent discharged to water when it should have been applied to land. Maintenance was inadequate. 	2IU	SNC1
23-Nov-12	952401	Lea Rig Farms Ltd: FDE 7148	Whatmough Road, Opuawhanga	<ul style="list-style-type: none"> Untreated effluent discharged to water. 	2IU	SNC1
23-Nov-12	974601	Woodnock Properties Limited: FDE 7334	Whananaki North Road, Otonga	<ul style="list-style-type: none"> Effluent was discharged to water when conditions were suitable for land application. 	2IU	SNC1
23-Nov-12	1069101	Paramu Farms Ltd: FDE 7108	Byles Road, Hikurangi	<ul style="list-style-type: none"> Untreated effluent discharged from sumps to water. 	2IU	SNC1
23-Nov-12	1240501	Shaw B G & B J Ltd Family Trust: FDE 7246	Pigs Head Road, Opuawhanga	<ul style="list-style-type: none"> Required upgrade not completed. Pond maintenance was inadequate. Water quality results were outside RC limits. 	2IU	SNC1
23-Nov-12	1711701	Ogle I C & K E: FDE 7107	Jubilee Road, Opuawhanga	<ul style="list-style-type: none"> Untreated effluent from feedpad discharged to land. Effluent leaked through embankment to water. Discharge to water when conditions had been suitable for land application. 	2IU	SNC1
26-Nov-12	895501	Cotton Farms Ltd: FDE 2611	Caves Road, Mangapai	<ul style="list-style-type: none"> The agreed upgrade had not been completed. Milk discharged to a drain. 	2IU	SNC1
26-Nov-12	1213501	Huzza Farms Ltd (T/A Mata Farms): FDE 2745	Salmon Road, Mata	<ul style="list-style-type: none"> Discharged to water when conditions suitable for land application. Water quality test results outside RC limits. Dead cow in first pond. 	2IU	SNC1
27-Nov-12	1137201	Luond K D & J M Trust: FDE 820	Ninihi Road, Kaikohe	<ul style="list-style-type: none"> Upgrade required by time of follow up not done. Herd size increased without notification to council. 	2IU	SNC1
27-Nov-12	1161301	Tuupari Farms Ltd: FDE 4234	State Highway 12, Ruāwai	<ul style="list-style-type: none"> Silage stacks within one metre of water. 	2IU	SNC1
27-Nov-12	1174401	Chidham Trust: FDE 4317	Tramline Road, Ruāwai	<ul style="list-style-type: none"> Untreated effluent from feedpad discharged to water. Inadequate contingency storage. 	2IU	SNC1
27-Nov-12	1217901	Rogers & Rogers Ltd: FDE 814	Renwick Road, Otaua	<ul style="list-style-type: none"> Untreated effluent from a sump was likely to discharge to water. 	2IU	SNC1
27-Nov-12	1234901	Haynes Family Trust: FDE 836	Rakauwahia Road, Kaikohe	<ul style="list-style-type: none"> Water quality test results outside RC limits. 	2IU	SNC1
27-Nov-12	1434001	Beejay Stud Ltd: FDE 8574	Pukehuia Road, Pukehuia	<ul style="list-style-type: none"> Irrigator caused excessive ponding and overland flow. 	2IU	SNC1

28-Nov-12	870701	Puketarata Farms Limited: FDE 2524	Ormandy Road, Maungakarema	<ul style="list-style-type: none"> • Effluent ponds inadequately maintained. • Feedpad discharge would bypass effluent system. • Water quality results outside RC limits. 	2IU	SNC1
28-Nov-12	880801	Jones D A & E D: FDE 2525	Ormandy Road, Mangapai	<ul style="list-style-type: none"> • Discharged to water when conditions were suitable for land application. • Water quality results outside RC limits. 	2IU	SNC1
28-Nov-12	1250401	Lee Gordon Family Trust: FDE 2521	Purvis Road, Maungakarema	<ul style="list-style-type: none"> • Required upgrade not completed. • Irrigator maintenance inadequate. 	2IU	SNC1

Follow-up of significant non-compliance (consented farms)

17-Oct-12	938201	Jackson K M & A J: FDE 2433	Tavinor Road, Otaike Valley	<ul style="list-style-type: none"> • Agreed that ponds would be cleaned with slurry wagon as soon as conditions allowed. • Improved management required. 	2IU	FUS
12-Nov-12	1240001	Holland H A & Son Ltd: FDE 2803	Salle Road, Ruakaka	<ul style="list-style-type: none"> • No ponding or overland flow from irrigator. • Requires additional 900m³ of storage to accommodate effluent from new feed pad. 	0NR	FUS
15-Nov-12	1138401	Morris R B & G J: FDE 593	Pukemiro Road, Broadwood	<ul style="list-style-type: none"> • Effluent from feed pad had been reticulated to the treatment system. • Excessive water may overload the ponds. 	1IU	FUS
16-Nov-12	951301	Gurr Family Trust: FDE 7005	Otakairangi Road, Otakairangi	<ul style="list-style-type: none"> • Agreed to upgrade to industry recommended capacities. • The upgrade and pond dimensions will be included as conditions of renewed RC. 	1IU	FUS
30-Nov-12	1121001	River Lea Agri Ltd: FDE 3222	Wright Road, Pipiwai	<ul style="list-style-type: none"> • Pond construction underway. • Will install sludge bed and weeping wall at the dairy and 7,300m³ storage pond plus land application. 	1IU	FUS
30-Nov-12	1121801	Hoddi Limited: FDE 3302	Fraser Road, Titoki	<ul style="list-style-type: none"> • Agreed to upgrade treatment system to provide minimum total storage volume of 4,600m³ by 31 March 2013. 	1IU	FUS
03-Dec-12	880501	Harding T C & M J Family Trust: FDE 2753	Cotton Road, Mata	<ul style="list-style-type: none"> • Upgrade about to start. • Agreed that minimum 1,200m³ anaerobic pond and 800m² facultative ponds would be completed by 31 December 2012. 	1IU	FUS
05-Dec-12	744801	Pepper M J & M E: FDE 461	Matauri Bay Road, Kaeo	<ul style="list-style-type: none"> • Agreed that a minimum additional 500m² of aerobic pond surface area would be constructed by 31 March 2013. 	1IU	FUS
05-Dec-12	812201	Shepherd's Otoroa Ltd: FDE 459	Matauri Bay Road, Kaeo	<ul style="list-style-type: none"> • Agreed to increase the pond storage volume to 6,900m³ by 31 March 2013. 	1IU	FUS
05-Dec-12	928001	Ngawhitu Ltd : FDE 943	Ngawhitu Road, Moerewa	<ul style="list-style-type: none"> • Agreed to provide industry recommended storage volume by 28 February 2013. • Recommended solids separation. 	1IU	FUS

05-Dec-12	961701	Pinegrove Properties Ltd: FDE 454	State Highway 10, Kaeo	<ul style="list-style-type: none"> Agreed that the system would be upgraded to industry recommended treatment capacity by 30 April 2013. Box culvert used as an underpass is a problem. 	1IU	FUS
11-Dec-12	881101	Polglaze Dairy Park Ltd: FDE 146	Pukepoto Road, Pukepoto	<ul style="list-style-type: none"> No contingency storage. Agreed to upgrade. To include upgrade conditions in new RC. Recommended solids separation. 	2IU	FUS
12-Dec-12	185901	Vuglar J M: FDE 7543	Horahora Road, Towai	<ul style="list-style-type: none"> Maintenance of the system being done. Stormwater diversion had been installed. Agreed to increase the storage volume. 	1IU	FUS
12-Dec-12	1171101	Glenhope Farms Ltd: FDE 7499	Rusk Road, Hikurangi	<ul style="list-style-type: none"> A large new storage pond was under construction. 	0NR	FUS
12-Dec-12	1177301	Campbell Farms Maromaku Limited: FDE 7623	Maromaku Road, Maromaku	<ul style="list-style-type: none"> Agreed to complete overdue upgrade by 31 March 2013. 	1IU	FUS
13-Dec-12	163701	Cullen N M & C J: FDE 1600	Gorge Road, Maungaturoto	<ul style="list-style-type: none"> Agreed that effluent from bridge will be collected and spread onto paddock. 	0NR	FUS
13-Dec-12	1276301	Mayflower Farms Ltd: FDE 1309	State Highway 12, Maungaturoto	<ul style="list-style-type: none"> Agreed to investigate and resolve the cause of the high volume discharge. 	2IU	FUS
13-Dec-12	2420401	David Hugh Hartles Family Trust: FDE 1529	Golden Stairs Road, Maungaturoto	<ul style="list-style-type: none"> Discussed the need for improved management of the land application system. Very interested in having council assist with an effluent management plan. 	0NR	FUS
07-Jan-13	961401	Orcada (2011) Ltd: FDE 457	Martins Road, Kaeo	<ul style="list-style-type: none"> Additional major upgrade agreed. 	2IU	FUS
15-Jan-13	352601	Clark P M Family Trust: FDE 7532	4225 Maromaku Road, Maromaku	<ul style="list-style-type: none"> Agreed that the additional 4-500m² of aerobic pond would be constructed by 28 February 2013. 	1IU	FUS
16-Jan-13	921601	Evans W R & M G: FDE 7393	Waiotu Block Road, Waiotu	<ul style="list-style-type: none"> Excessive amount of water used at the dairy. No stormwater diversion for roof or concrete surround. Aerobic pond undersized. A water meter will be installed to investigate water use. Stormwater control will be improved. Land application to be investigated and costed. 	1IU	FUS
18-Jan-13	871301	Lister Farm (2012) Ltd : FDE 7046	Jordan Valley Road, Hikurangi	<ul style="list-style-type: none"> Additional 600m² of aerobic pond required. Recommended the installation of a sump and pump to allow levels in existing two ponds to be raised to improve treatment. 	1IU	FUS
23-Jan-13	1124701	Waipuke Farm: FDE 3737	Tauraroa Road, Tauraroa	<ul style="list-style-type: none"> System was not discharging. Agreed to install land application for 2013-14 season. 	0NR	FUS

23-Jan-13	1250401	Lee Gordon Family Trust: FDE 2521	Purvis Road, Maungakaramaea	<ul style="list-style-type: none"> Agreed to complete the storage pond upgrade for the feed pad, as required by RC, by 31 March 2013. 	1IU	FUS
24-Jan-13	1167301	Stuart A D & J: FDE 3036	Kokopu Road, Kokopu	<ul style="list-style-type: none"> Feed pad pond was empty and sump ready to fix. Stormwater diversion had been installed at the dairy. Explained that all four ponds must be emptied prior to winter. 	0NR	FUS
24-Jan-13	1171001	Nichol J R: FDE 3031	Kokopu Road, Kokopu	<ul style="list-style-type: none"> Agreed to upgrade the stormwater control at the dairy and around the ponds, to relocate the inlet/outlet pipes on the ponds and to increase the volume of the pond at the feedpad. 	1IU	FUS
29-Jan-13	1201501	Share Farms Ltd: FDE 7479	Russek Road, Hikurangi	<ul style="list-style-type: none"> First stage of a major upgrade including stormwater control, effluent collection and solids retention agreed by 31 March 2013. Second stage including minimum recommended storage to be completed by 31 March 2014. 	2IU	FUS

SOE MONITORING – AIR, LAKES AND WATER

Date	Number	Project	Location	Comment
21-Nov-12	802033	Poutō Lakes	Poutō Peninsula	<ul style="list-style-type: none"> Routine water quality monitoring: Lakes Kahuparere, Kanono, Rotokawhau, Humuhumu, Swan, Mokeno, Karaka, Rototuna, Wainui.
27-Nov-12	801427	Summer recreational bathing water quality surveys – Week 1		<ul style="list-style-type: none"> A total of 48 coastal and 12 freshwater sites sampled. One coastal site had unsuitable for swimming results.
04-Dec-12	801427	Summer recreational bathing water quality surveys – Week 2		<ul style="list-style-type: none"> A total of 48 coastal and 12 freshwater sites sampled. One freshwater site had unsuitable for swimming results.
05-Dec-12	802034	Kai Iwi Lakes	Kai Iwi	<ul style="list-style-type: none"> Routine water quality monitoring: Kai Iwi, Taharoa, Waikare lakes Lakes Waikare and Kai Iwi were stratified. Lake Taharoa was nearly stratified.
11-Dec-12	802714	Whangarei Airshed - Ambient Air Monitoring	Robert Street, Whāngārei	<ul style="list-style-type: none"> Continuous ambient air monitoring results for PM10, sulphur dioxide and carbon monoxide indicated compliance with the National Environmental Standard.
11-Dec-12	801427	Summer recreational bathing water quality surveys – Week 3		<ul style="list-style-type: none"> A total of 48 coastal and 12 freshwater sites sampled. One freshwater site had unsuitable for swimming results.
12-Dec-12	801302	Regional Water Quality Monitoring Network - Far North		<ul style="list-style-type: none"> Routine monthly water quality monitoring of the Mangamuka, Victoria, Awanui, Kaeo and Oruru Rivers.
12-Dec-12	801303	Regional Water Quality Monitoring Network - Western		<ul style="list-style-type: none"> Routine monthly water quality monitoring: Kaihu, Waipoua, Waimamaku, Punakitere, Utakura, Mangakahia, Opouteke Rivers.

12-Dec-12	801314	Regional Water Quality Monitoring Network - Southern		<ul style="list-style-type: none"> • Routine monthly water quality monitoring: Ruakaka, Hakaru, Manganui, Waipao, Mangere, Otaika Rivers, two sites on the Waiarohia Stream.
12-Dec-12	801338	Regional Water Quality Monitoring Network - Eastern		<ul style="list-style-type: none"> • Routine monthly water quality monitoring: Waitangi, Waipapa, Kerikeri, Waiharakeke, Waiotu, Ngunguru, Hātea and Whakapara Rivers, and two sites on Mangahahuru Stream.
20-Dec-12	801427	Summer recreational bathing water quality surveys – Week 4		<ul style="list-style-type: none"> • A total of 48 coastal and 12 freshwater sites sampled. • Four freshwater sites and two coastal sites had unsuitable for swimming results.
31-Dec-12	801427	Summer recreational bathing water quality surveys – Week 5		<ul style="list-style-type: none"> • A total of 48 coastal and 12 freshwater sites sampled. • Four freshwater sites and two coastal sites had unsuitable for swimming results.
08-Jan-13	801427	Summer recreational bathing water quality surveys – Week 6		<ul style="list-style-type: none"> • A total of 48 coastal and 12 freshwater sites sampled. • Three coastal sites had unsuitable for swimming results.
15-Jan-13	801427	Summer recreational bathing water quality surveys – Week 7		<ul style="list-style-type: none"> • A total of 48 coastal and 12 freshwater sites sampled. • Two freshwater sites and 10 coastal sites had unsuitable for swimming results.
16-Jan-13	801338	Regional Water Quality Monitoring Network - Eastern		<ul style="list-style-type: none"> • Routine monthly water quality monitoring: Waitangi, Waipapa, Kerikeri, Waiharakeke, Waiotu, Ngunguru, Hātea and Whakapara Rivers, and two sites on Mangahahuru Stream.
16-Jan-13	801314	Regional Water Quality Monitoring Network - Southern		<ul style="list-style-type: none"> • Routine water quality monitoring: Ruakaka, Hakaru, Manganui, Waipao, Mangere, Otaika Rivers, two sites on Waiarohia Stream. • Rivers levels generally low. Periphyton growth higher than usual.
16-Jan-13	801303	Regional Water Quality Monitoring Network - Western		<ul style="list-style-type: none"> • Routine water quality monitoring: Kaihu, Waipoua, Waimamaku, Punakitere, Utakura, Mangakahia and Opouteke Rivers. • River levels generally low. Periphyton growth noticeable.
16-Jan-13	801302	Regional Water Quality Monitoring Network - Far North		<ul style="list-style-type: none"> • Routine monthly water quality monitoring of the Mangamuka, Victoria, Awanui, Kaeo and Oruru Rivers.
23-Jan-13	801427	Summer recreational bathing water quality surveys – Week 8		<ul style="list-style-type: none"> • A total of 48 coastal and 12 freshwater sites sampled. • No sites had unsuitable for swimming results.
29-Jan-13	864726	Marsden Point Airshed - Ambient Air monitoring	Marsden Point Road	<ul style="list-style-type: none"> • Continuous ambient air monitoring results for PM10 at the Bream Bay College site showed compliance with the National Environmental Standard.
29-Jan-13	802714	Whangarei Airshed - Ambient Air Monitoring	Robert Street, Whāngārei	<ul style="list-style-type: none"> • Continuous ambient air monitoring results for PM10, sulphur dioxide and carbon monoxide indicated compliance with the National Environmental Standard.
30-Jan-13	801427	Summer recreational bathing water quality surveys – Week 9		<ul style="list-style-type: none"> • A total of 48 coastal and 12 freshwater sites sampled. • No freshwater sites and one coastal site had unsuitable for swimming results.

31-Jan-13	801320	Lake Omāpere Monitoring and Management	Lake Omāpere	<ul style="list-style-type: none"> • Routine water quality monitoring of Lake Omāpere, its outlet and inflowing streams. • The water level was very low in the lake as well as the inlets. • The inlets were all contaminated with blue-green algae apart from one site. No algae bloom was visible on the lake itself.
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ENVIRONMENTAL INCIDENTS

Date	Number	Details	Location	Comment	Code
19-Nov-12	424085	Dust nuisance.	Pipiwai Rd, Whāngārei	<ul style="list-style-type: none"> • Site visit confirmed dust nuisance from unsealed road. • Two DP gauge dust monitors were installed at two different addresses. • Further action will be decided on the basis of dust results. 	M
19-Nov-12	424141	Dust nuisance.	Opouteke Rd, Pakotai	<ul style="list-style-type: none"> • Site visit confirmed dust nuisance from an unsealed road • A DP gauge dust monitor was installed on the incident reporter's property. • Further action will be decided on the basis of dust results. 	M
21-Nov-12	423987	Earthworks on flood plain and wetland drainage.	SH12, Waiotira	<ul style="list-style-type: none"> • Large scale earthworks and wetland drainage caused sediment discharges and loss of wetland vegetation. • Enforcement action taken and council is working with the land owners to mitigate effects. 	S
27-Nov-12	424130	Smoke nuisance.	Raumanaga Valley Rd, Whāngārei	<ul style="list-style-type: none"> • Site visit confirmed open burning of vegetation within the Whangarei Airshed. • Warning letter sent to the person responsible advising rules on burning under the RAQP. 	M
28-Nov-12	424164	Smoke nuisance.	Paramount Parade, Tikipunga	<ul style="list-style-type: none"> • Site visit confirmed burning within the Whangarei Airshed. • Warning letter sent to the person responsible advising rules on burning under the RAQP. 	M
03-Dec-12	424200	Smoke nuisance.	Union East St, Whāngārei	<ul style="list-style-type: none"> • Site visit confirmed open burning at industrial premises. • Warning letter sent to the owner of the business advising rules on burning under the RAQP. 	M
11-Dec-12	424202	Smoke nuisance.	Jack St, Otangarei	<ul style="list-style-type: none"> • Site visit confirmed open burning within the Whangarei Airshed. • Warning letter sent to the person responsible advising rules on burning under the RAQP. 	M

11-Dec-12	424222	Smoke/odour nuisance.	Pyle Rd, Ruakaka	<ul style="list-style-type: none"> Site visit confirmed open burning within the Whangarei Airshed Warning letter sent to the person responsible advising rules on burning under the RAQP. 	M
03-Jan-13	424328	Cleaning boat hull in the CMA.	Ōpua	<ul style="list-style-type: none"> The occupants of a yacht had scraped the hull while in the water which resulted in contaminants discharging to the harbour. When spoken to the occupants refused to give their names or contact details. Investigation is ongoing. 	M
18-Jan-13	424157	Burning of prohibited material.	Fairburn Rd, Kaitāia	<ul style="list-style-type: none"> Formal enforcement action taken following a repeat offence. 	M
21-Jan-13	424118	Dust nuisance.	Pekerau Rd, Kaitāia	<ul style="list-style-type: none"> Ongoing dust discharge from unsealed road causing nuisance effects to resident. 	M
25-Jan-13	424310	Digger works in river.	Opouteke Rd, Opouteke	<ul style="list-style-type: none"> Ongoing maintenance carried out over many years to modify the river. Site visit to be planned with other NRC staff to assess options. 	M

MARITIME INCIDENTS

Date	Number	Details	Location	Comments	Code
19-Nov-12	4497	Dingy found semi-submerged.	Bay of Islands Harbour	<ul style="list-style-type: none"> Vessel at secure location awaiting contact by owner. 	NU
21-Nov-12	4499	Large log poses navigation hazard.	Lemons Bay	<ul style="list-style-type: none"> Log removed from beach and disposed of by Maritime team. 	RR
23-Nov-12	4503	Jet ski exceeding 5 knots.	Ruakaka River	<ul style="list-style-type: none"> Warning letter issued to jet ski owner. 	WR
29-Nov-12	4505	Diving without dive flags displayed.	Otehei Bay	<ul style="list-style-type: none"> Vessel operator investigated incident and implemented remedial measures. 	IR
30-Nov-12	4504	Net in fairway.	Whāngārei Harbour	<ul style="list-style-type: none"> Net removed by owners. 	RR
30-Nov-12	4506	Dingy adrift secured by local resident.	Kawakawa River	<ul style="list-style-type: none"> Vessel recovered by owner. 	NR
02-Dec-12	4509	Vessel grounded on sand bank.	Whāngārei Harbour	<ul style="list-style-type: none"> Vessel refloated. 	NR
03-Dec-12	4510	Mooring allegedly moved position.	McLeod Bay	<ul style="list-style-type: none"> Caller advised of correct mooring number and location. 	IR
04-Dec-12	4511	Vessel's swing too close to moorings.	Windsor Landing, Kerikeri	<ul style="list-style-type: none"> Moorings repositioned. 	RR
05-Dec-12	4515	Fishing vessel putting nets out in restricted area.	Near Refining NZ berths	<ul style="list-style-type: none"> Dealt with by Refining NZ security staff. 	OR

06-Dec-12	4513	Excessive speed by commercial vessel.	Taylors Island	• Verbal warning given by Harbourmaster.	IR
06-Dec-12	4514	No dive flags or buoys plus vessel exceeding 5 knots through moorings area.	Taurikura	• Information and warning passed on to vessel owner.	IR
07-Dec-12	4516	5 knot buoy missing.	Pataua	• 5 knot buoy to be relaid.	FU
08-Dec-12	4517	Jet ski exceeding 5 knots within 200 metres of shore.	Marsden Point	• The offender was given a written warning.	IR
10-Dec-12	4518	Mooring blocks and chain a hazard to navigation.	Waipiro Bay	• Moorings removed by contactor.	RR
12-Dec-12	4522	Barge and tow obstructed by small runabout in main channel.	Shell Cut	• Unable to identify runabout. • Education campaigns ongoing as to dangers of obstructing main channel.	IU
12-Dec-12	4524	Request for fireworks display.	Paihia	• Request granted.	IR
16-Dec-12	4527	Logs lost overboard during loading.	Whāngārei Harbour	• Logs recovered from harbour by stevedores.	RR
16-Dec-12	4528	Sunken vessel restricting access to beach users.	Onerahi	• Sunken vessel recovered by owner.	RR
19-Dec-12	4533	Floating log poses a navigation hazard.	Cable Bay	• Local navigation warning issued. • No further sightings of log.	IR
20-Dec-12	4538	Excessive speed by waterskiers.	Waitangi River	• Verbal warning given to offender.	IR
21-Dec-12	4537	Request for fireworks display.	Rawhiti	• Request withdrawn due to changes to the fireworks display site plan.	NR
26-Dec-12	4540	Port hand buoy M4 reported out of position.	Kaipara Harbour	• Buoy repositioned by Harbour Warden.	RR
26-Dec-12	4541	Log lost overboard during loading.	Marsden Point log wharf	• Log retrieved by contractor.	RR
26-Dec-12	4542	Log lost overboard during loading.	Marsden Point log wharf	• Log recovered by contractor.	RR
28-Dec-12	4544	Logs lost overboard during loading.	Marsden Point log wharf	• Logs recovered by contractor.	RR

29-Dec-12	4545	Mooring piracy.	Te Uenga Bay	• Owner of vessel pirating the mooring vacated the mooring after a verbal warning was issued.	RR
29-Dec-12	4546	Near miss in ski lane.	Coopers Beach	• Advice provided on use of ski lanes.	IR
29-Dec-12	4547	Seagull on beach found covered in oil.	Urquharts Bay	• Investigation revealed that this was not a marine oil spill incident.	NU
29-Dec-12	4548	Tree branch lodged in between berths.	Refining NZ berths	• Tree debris cleared from refinery. • Not a navigation hazard.	NR
30-Dec-12	4549	Beached vessel recovered and temporarily secured to a mooring.	English Bay	• Vessel owner contacted and retrieved the vessel.	IR
30-Dec-12	4550	Alleged non-compliance with collision regulations.	Veronica Channel	• Alleged offender and vessel could not be identified.	NR
31-Dec-12	4551	Mooring piracy.	Tamateatai Point	• Owner of vessel was located and will remove vessel from mooring.	RR
31-Dec-12	4553	Noise from vessel moored at repair berth.	Hātea River	• Noise generated by machinery essential for vessel operation at repair yard.	NU
01-Jan-13	4556	Navigation light reported to be operating erratically.	Poutō Point	• Light repaired and back in operation.	RR
01-Jan-13	4557	Buoy out of position.	Houhora	• No action required as buoy was found displaced only by a small distance and still marks the channel adequately.	NR
01-Jan-13	4558	Speeding vessel.	Urquharts Bay	• Vessel causing concern could not be identified.	IU
01-Jan-13	4559	Alleged drunk boat driver speeding and operating vessel dangerously.	Manawaora Bay	• Alleged offender and vessel could not be identified.	NR
04-Jan-13	4578	Jet ski speeding near beach and in between moorings.	Kowharewa Bay	• Written warning issued to alleged offender.	WR
05-Jan-13	4570	Navigation light reported extinguished.	Rangaunu Harbour	• A replacement light unit was installed.	RR
05-Jan-13	4572	Navigation beacon light reported extinguished.	Rangaunu Harbour	• Light replaced and working.	RR
06-Jan-13	4564	Jet skis speeding inbetween other vessels.	The Nook	• Jet skis had moved on.	IR
06-Jan-13	4569	Vessel sunk while on mooring.	Teal Bay	• Vessel removed from water.	RR
07-Jan-13	4573	Vessel grounded as a result of mooring failure.	Ngunguru Harbour	• Owner has sold the vessel.	WR
07-Jan-13	4574	Vessel grounded as a result of mooring failure.	Ngunguru Harbour	• Vessel removed from harbour by new owner.	RR

08-Jan-13	4575	Submerged buoy poses navigation hazard.	Motutara Island	• Buoy unable to be located.	NR
08-Jan-13	4576	Navigation light failure.	Kissing Point	• Light unit replaced.	RR
09-Jan-13	4579	Overturned vessel on beach.	Hihi	• Advice given on potential pollution. • Vessel retrieved by owner's insurer.	IR
10-Jan-13	4580	Request from oil tanker to transfer cargo tank at anchor.		• Permission granted by Harbourmaster on receipt of onboard risk assessments.	IR
10-Jan-13	4581	Moorings too close.	Orongo Bay	• Advice given.	IR
11-Jan-13	4583	Vessel occupying mooring without owner's authorisation.	Russell	• The owner had relocated the vessel when he realized he was on the wrong mooring.	RR
11-Jan-13	4584	Large log poses navigation hazard.	Roberton Island	• Log could not be sited by Maritime staff and was last reported on the seaward side of the island.	NR
11-Jan-13	4585	Mooring buoy submerged.	Ōpua Basin	• Mooring owner was advised and is to arrange to have the mooring checked.	IR
12-Jan-13	4587	Jet ski exceeding 5 knots.	Marsden Marina	• Investigation in progress.	FU
12-Jan-13	4589	Light reported extinguished.	Bay of Islands Harbour	• New battery has been installed.	RR
14-Jan-13	4590	Speeding vessel close to beach.	Long Beach	• Verbal warning issued to skipper of speeding vessel.	IR
14-Jan-13	4591	Alleged dangerous navigation.	Russell	• Alleged offender spoken to and reminded of obligation to pass other vessels at a safe distance.	IR
15-Jan-13	4597	Old fishing vessel on verge of sinking.	Houhora	• Condition of vessel not yet determined.	FU
15-Jan-13	4598	Vessel grounded.	Kerikeri Inlet	• Vessel secured by owner.	RR
16-Jan-13	4599	Green buoy missing from channel.	Kaipara harbour	• Buoy relaid.	RR
16-Jan-13	4601	Vessel occupying mooring without owner's authorisation.	Matawhi Bay	• Vessel has been removed from the mooring.	RR
19-Jan-13	4602	Water skiers exceeding 5 knots within 200m of shore.	Langs Cove	• Verbal warning given to offenders.	IR
19-Jan-13	4603	Vessel collision.	Roberton Island	• Unable to locate offender.	NR
23-Jan-13	4607	Collision between two jetskis.	Bay of Islands	• Operator's procedures reviewed and advice given.	IR
23-Jan-13	4608	Mooring too close.	Ōpua	• Mooring chain extended in same direction which created additional swing space.	RR
24-Jan-13	4618	Collision between jet boat and jet ski.	Mangawhai Harbour	• Further investigation to be carried out in coordination with Maritime New Zealand.	FU
25-Jan-13	4612	Hot Work permit application.	Northport	• Hot Work permit issued by Deputy Harbourmaster.	IR
26-Jan-13	4613	Partially submerged yacht.	Dicks Bay	• Sunken vessel refloated by members of the public.	RR
29-Jan-13	4611	Moorings too close.	Ōpua-Kawakawa River	• Further investigation required as vessel is too large for mooring.	FU

31-Jan-13	4616	Vessel collision.	Ōpua Fuel Jetty	• Advice given.	IR
22-Nov-12	4501	Diesel slick.	Mangōnui	• Source of slick was not identified. • Slick was left to disperse.	1N
12-Dec-12	4525	Diesel slick.	Town Basin marina	• Source of slick was found to be a vessel in the marina. • Repairs undertaken.	RR
16-Dec-12	4530	Diesel spill.	Kissing Point	• Minor diesel spill left to disperse naturally.	1N
27-Dec-12	4543	Diesel slick.	Tutukaka Harbour	• Slick left to disperse naturally.	NR
01-Jan-13	4560	Oil slick.	West of Mill Island	• Slick left to disperse naturally.	NR
02-Jan-13	4561	Diesel spill.	Orokawa Bay	• Minor spill left to disperse naturally.	NR
03-Jan-13	4562	Oil spill.	Roberton Island	• Small diesel spill left to disperse naturally.	0N
24-Jan-13	4610	Oil slick.	Oturu Bay	• Slick was not visible following a site visit and may have dispersed naturally.	NR

Legal compliance and significance assessment:

The receiving of this report is provided for in the council's 2012-22 Long Term Plan, meets the council's obligations under section 35 of the Resource Management Act 1991, and is in line with the council's decision making process and sections 76-82 of the Local Government Act 2002.

Recommendation:

That the Environmental Monitoring report for the period 19 November 2012 – 31 January 2013 from Colin Dall, Consents/Monitoring Senior Programme Manager, be received.

ISSUE: River Management Update

ID: A295764

To: Environmental Management Committee, 19 February 2013

From: Joseph Camuso, Rivers Programme Manager

Date: 4 February 2013

Summary The purpose of this report is to provide an update on progress with the council's river management activities.

Normal Operations ☒

Presentation:

A short presentation highlighting aspects of the works programmes will be presented to the Committee.

Report on River Management Works:

Awanui

The Tarawhataroa stop bank slip repair work has commenced and the contractor is making good progress. Completion of works is anticipated by mid February 2013.

Yearly scheduled river maintenance work, specifically the long-reach digger work is expected to start mid-February. Yearly maintenance spraying is approximately 50% completed, yearly mulching is 100% complete and the yearly floodgate inspection and maintenance programme is approximately 20% complete.

Staff are working with FNDC regarding the slip and road repair along Gills Road, specifically where NRC will fund the slip repair and FNDC will fund the lifting of the road crest. Staff await confirmation from FNDC that funding is available for the works.

Staff are currently assessing the effects of the Waihoe flood gate upgrade proposal.

A programme for a comprehensive assessment of the condition of stopbank and channel assets of the scheme is being compiled. Staff intend to undertake the survey during March, and will utilise the information to refine forecasts of expenditure for maintenance and replacement of assets.

The Awanui River computer model calibration is complete and design storm runs (from which to produce flood maps) are 60% complete.

Kaeo-Whangaroa Rivers

Resource consent was granted for the flood scheme work at Kaeo. Land use agreements have not been secured for all required land, so construction has been postponed until next work season. Steps for taking the remaining land have been undertaken via the Public Works Act, and it is anticipated that the outstanding land will be acquired in advance of the 2013/14 works season.

The Stage 1 flood scheme works were tendered in anticipation of having secured all land use agreements. Staff are in negotiation with the preferred tender, with a view to holding the tender current to the 2013/14 works season.

Work has started on the annual river maintenance programme, which focuses on minor channel works and removal of floodplain restrictions on the Kaeo River.

Flood model extension and recalibration has been completed. Design storm runs have also been completed but have not yet been received by NRC. Scheme simulations with the updated model will then be run for scheme stages 1 and 2 combined.

Kaeo – Funding Assistance for Vulnerable Homes

In November 2011 the Department of Internal Affairs confirmed funding assistance of \$257,000 for assisting the mitigation of flood risk to the 14 most vulnerable homes in Kaeo. FNDC also contributed \$275,000, which provides a total of \$532,000 funding. NRC was not a cash contributor to the funding assistance, as up to July 2010 NRC had already spent a total of \$885,000 on the flood mitigation strategy development, flood modelling, flood warning system and river clearance works.

At the March 2012 meeting of the Kaeo River – Whangaroa Catchment Liaison Committee, it was agreed that the funding would be shared evenly amongst the 14 properties. On this basis, funding of up to a maximum of \$38,000 is available for each home owner.

To date funding agreements have been signed for two properties. Signing of agreements for another six property owners is likely within the coming months. Further discussion is required with two home owners in an upper valley tributary, to determine an appropriate solution. One home owner appears reluctant to make use of the funding, whilst a further two home owners have advised that they cannot see that anything can be done to benefit their property; in one case due to the limited amount of funding assistance available.

It is acknowledged that in many cases the uptake of the funding is not a straightforward matter for home owners. There are a number of issues that need to be worked through, such as disposing of land (following removal of dwelling), relocation of tenants and confirming design and engineering. In addition to this, the limited amount of funding available means that some home owners are not in a position to complete the necessary works to adequately flood-proof their properties.

It is noted that the DIA funding is available for use up until November 2016. Staff intend to write to the property owners that are not subject to an agreement, requesting that they sign an agreement by 1 July 2013. This will enable staff to reassess the potential amount of funding remaining, and work with funding partners and the Liaison Committee to determine if the remaining funding should be reallocated to property owners on a higher basis if this would enable the property owner to undertake works to reduce risk. However, care would need to be taken with this approach, to ensure that those home owners that have already agreed to funding agreements are not unfairly disadvantaged.

Kerikeri-Waipapa River

Work on the maintenance programme is scheduled to begin mid-February.

The Kerikeri flood model has been calibrated and design storm runs have been completed. Checks have been undertaken on the design storm results. The flood model is ready for scheme simulations. These simulations will allow for a comparison of modelled flood levels before and after proposed changes to the river system.

Kaihu River

The 2012/13 maintenance contract is underway and cleaning work is progressing in the lower reaches. Follow-up rice grass spraying is scheduled for mid-March and the Biosecurity team is monitoring the kill-rate and will adjust the scope if needed. The spraying to date appears to have been very effective.

The Kaihu River Liaison Committee meeting was held on 30 January 2013, minutes are attached.

Whangarei Urban Rivers

Resource consent and notice of requirement for the Kotuku detention dam were lodged and public notification is scheduled for 5 February 2013. Final geotechnical site investigations for the detailed design were completed. Work on acquiring necessary land is ongoing.

The maintenance works programme is approximately 15% complete, with gravel extraction work commencing in the lower reaches of the Waiarohia River downstream of Woods Road.

The Whangarei catchment flood model upgrade is still underway. Flows and levels through the model have been calibrated and staff have identified a number of further improvements. Once improvements have been completed, design storms will be run.

Waitangi River

The flood model is currently being re-calibrated based on new flood records from the recently installed additional river gauges.

Kawakawa River

Staff met with the Hundertwasser Trust representatives to ensure that the planned wetlands will fit in to the longer term flood protection works for the Kawakawa Town Stopbank option.

Minor River Works

Staff are progressing the minor river works listed in the LTP as per the table below.

Staff have been liaising with FNDC to carry out significant gravel management in Pawarenga in order to limit bank erosion and protect the bridge over the Rotokakahi River, this work is likely to proceed over the next few months. Gravel management at Waima, Panguru and Otiria is planned to be undertaken by the end of March along with Willow control in the Otaika Stream, with channel maintenance in the Waiharakeke River and maintenance in the Whirinaki River.

River	Work Programmed for this Work Season	Proposed date for Physical Works
Rotokakahi @ Pawarenga	Gravel/Shingle Management with FNDC	Feb-March 2013
Panguru and Lower Waihou	Gravel management around bridges	Feb 2013
Whirinaki	Maintenance Assistance for Whirinaki Toiora Project	Ongoing
Waima	Clear gravel under SH Bridge	Jan 2013
Waihou	Lower earth mounds/berm along Rahiri Rd with FNDC	Feb 2013
Waitangi River	Haruru Falls RC application to allow removal of shingle island build up in CMA	Feb 2013
Otiria Stream, Turntable Hill	Shingle extraction and willow spraying SH1 Bridge	Feb 2013
Otiria and Morewa	Clearance around spillway and Waiharakeke Bridge	Feb-March 2013.
Waiharakeke (Willowbank, kawakawa)	Remove tree affecting NRC Gauging Station	Complete
Kawakawa	Resource Consent for Township Stopbanks	N/A
Maungahuru (Piano Hill)	Remove tree/island blocking flow up stream SH1	Feb 2013
Otaika Stream	Willow spraying/removal	Feb 2013
Whangarei Heads Road	Remove flame tree (Waikaraka) with WDC	Feb 2013
Ngunguru River	Remove shingle island	Feb 2013
Ahuroa River (Waipu)	Willow spraying/removal	Complete
Paparoa	Removal of Tree with KDC	Feb 2013

Legal compliance and significance assessment:

The activities detailed in this report are provided for in activities described in the council's Long Term Plan and as such are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002.

In relation to section 79 of the Local Government Act 2002, this issue is considered to be of low significance under council policy because the report does not seek a decision other than that information be received.

Recommendation:

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1. That the report River Management Update by Joseph Camuso, Rivers Programme Manager and dated 4 February 2013, be received.
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ATTACHMENT:

Minutes of the Kaihu River Management Liaison Committee meeting 30 January 2013.

DRAFT Minutes of the meeting of the Kaihu River Liaison Committee
held on Wednesday, 30 January 2013 at
The Town Hall, Dargaville commencing at 10.00am

Present – Committee Members:

Cr John Bain	Committee Chair
Tom Newlove	Ratepayer representative Area 1 (Floodplain - Confluence of Whatoro and Mangatu Streams to Rotu Bottleneck)
Graham Fox	Balance of Kaihu River Catchment Ratepayer representative
Des Subritzky	Te Houhanga Marae representative
Sharon Murray	Te Roroa Iwi Representative
Ian Lupton	Ratepayer Representative Area 2 (Floodplain – Rotu Bottleneck to Dargaville)

In Attendance:

Bruce Howse	NRC Senior Programme Manager – Land/Rivers
Gary Treadgold	NRC Area Manager, Dargaville
Joseph Camuso	NRC Rivers Programme Manager
Malcolm Nicolson	NRC Chief Executive Officer
Mark Woodcock	Ratepayer
Jim Curac	Ratepayer
John Murray	Ratepayer

1. APOLOGIES

Wayne Crump	Kaipara District Council
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MOVED: Apologies be accepted.

Moved:	Tom Newlove
Seconder:	Des Subritzky (c)

2. MINUTES OF PREVIOUS MEETING

MOVED: That the minutes of the previous meeting held 3 July 2012 are accepted as correct.

Moved:	Tom Newlove
Seconder:	Des Subritzky (c)

3. MATTERS ARISING

Nil.

4. WORKS PROGRAMME UPDATE

Report given by Mr Camuso and Mr Treadgold. Contract work commenced approximately two weeks ago at the lower end of the Kaihu River. A query by Mr Newlove regarding the machine specifications was tabled, with discussion around the suitability of the long reach machine.

Mr Lupton has noticed some slips on the banks opposite his property, and suggests that some selective cleaning may be appropriate for his area of the river. Mr Treadgold has visited the site also. It was agreed that Mr Treadgold will liaise with the contractor before they reach Mr Lupton's property.

Ricegrass spray work on the lower section of the Kaihu River has been very effective so far.

5. REPORT ON STOPBANKS AND STATE HIGHWAY FLOODING AT ROTU

Mr Howse summarised the content of the draft report *'Effect Of Rotu Stream Stopbanks On SH12 Flooding At Two Locations Adjacent To The Kaihu River'*.

Mr Newlove raised some questions relating to the accuracy of the river model. Mr Howse advised that the Stage 3A results that were presented in the draft report on SH12 flooding were undertaken utilising an earlier version of the model, and that further refinement had been undertaken to the model during the Stage 3C work. The verification results from the Stage 3C work will be re-circulated to the Committee. The differences in comparing the return periods of the design storms and actual storm events were also briefly discussed.

It was noted that the report is a draft, and further discussion on the content will be considered at the next meeting of the Liaison Committee before finalising the report.

6. UNAUTHORISED STOPBANKS – ISSUES AND APPROACH

Discussion was held on the issues and approach for addressing unauthorised stopbanks. It was noted that only one unauthorised stop bank (downstream of the Rotu Reserve) had been consistently raised as an issue by various parties since 2005, and that it was timely to now address this issue.

A resolution was made:

MOVED: Staff to follow up with the landowners of the Maxted bank to address issues the bank is causing, and look to formalise this through formal enforcement to ensure that clear timeframes for actions are established.

Moved: Tom Newlove
Seconder: Des Subritzky (c)

7. GENERAL BUSINESS

WILLOW WORK ON THE RIVER BANKS

Mr Newlove queried the continued Willow work on the river this coming season. To liaise with Carl Cooper, Dargaville Area Officer on any future works to be carried out. Mr Newlove thought the focus area should be between Rotu and Mamaranui.

Also, areas of blockages noted were: Mr Newlove – between Rotu and Mamaranui; Mr Wyatt – along his property; Mrs Murray – Waiparataniwha. Mrs Murray says the blockages could be pine trees from the surrounding forest nearby, and a gum tree. NRC staff to liaise with Mr Tony Dwane of Hancock Forest Management regarding the pine trees.

GRAVEL PIT ON DOUG STEWART PROPERTY

With the success of the recent gravel extraction contract carried out, it was suggested that Mr Stewart's property would be an ideal site for a pit to be placed for any future gravel build-up extractions. A suggestion was put forward to call for expressions of interest to extract any future gravel build-up from an appropriate location. This will be dependent on Mr Stewart's consent.

SIMILAR PROBLEMS NOTED ON THE AWAKINO RIVER TO THOSE OF THE KAIHU

Mr Camuso relayed Mr Crump's observations on the Awakino River, concerning bank instability associated with rice grass removal.

MEETING CLOSED

11.15am

POST MEETING SITE VISIT

A site visit was undertaken to view the stopbank configuration at Site 1 of the draft report '*Effect Of Rotu Stream Stopbanks On SH12 Flooding At Two Locations Adjacent To The Kaihu River*'.

Mr Woodcock produced a works approval document from the Northland Catchment Commission (dated 20 September 1983) relating to the area of Site 1.

ISSUE: Update on Biosecurity responses: Kiwifruit Psa-V, Mediterranean fanworm, Kauri dieback

ID: A279676

To: Environmental Management Committee, 19 February 2013

From: Don Mckenzie, Biosecurity Senior Programme Manager

Date: 4 February 2013

Summary The purpose of this report is to update the committee on Kauri dieback, Mediterranean fanworm and the kiwifruit vine disease Psa-V. The report concludes that the committee note the recommendations and in the case of Kauri dieback, write to the Minister of Primary Industries outlining concern over the uncertainty of funding beyond 2014.

Normal Operations



Biosecurity responses involving the kiwifruit vine killing disease Psa-V, the marine pest Mediterranean fanworm and Kauri dieback follow.

Kiwifruit Psa-V: removal of vines from abandoned orchards

Due to the potentially high economic impact the disease is likely to have on the regional economy, the Environmental Management Committee agreed last July to work with Kiwifruit Vine Health (KVH) on the response to Psa-V. The agreement is to share the costs of removing wild kiwifruit and kiwifruit vines from abandoned orchards, as these unmonitored vines pose a potential source of Psa-V inoculum. This is part of the vector control component of the response.

Ten abandoned orchards have now been treated and forty five other locations of wild kiwifruit have been mapped and the vines removed by cutting and poisoning the stumps. Kiwifruit is a difficult plant to kill with herbicide and follow up work to spray regrowth on some plants has been necessary. Approximately \$17,000 has been spent thus far on vine removal of which half will be claimed back from Kiwifruit Vine Health.

Mediterranean fanworm

Mediterranean fanworm (*Sabella spallanzanii*) was first discovered on two fishing vessels in Whangarei harbour in April 2012. It was then found on another fishing vessel in Marsden Cove in May. Since this discovery, more than 1500 fanworm have been removed by dive teams working at Marsden Cove and Port Nikau.

Within the Marsden Cove marina, fanworm densities have ranged from 0–5 per m², with the highest densities found directly under the berth which was occupied by the vessel Naussica Star. It was the hull of this vessel on which fanworm were first discovered.

Although the number of fanworm discovered within Marsden Cove is concerning, Auckland harbour now has areas where fanworm densities reach 200 m², forty times that found in Marsden Cove.

At Port Nikau approximately 150 piles were inspected as well as five channel markers and five vessels moored off Onerahi. Fanworm was found on 23 piles and one channel marker with sizes ranging from 30-200mm.

Very low visibility has restricted diving at Port Nikau and further survey to complete a full check of the piles and other structures will be undertaken once the diving conditions improve.

Follow up work every six months will be required to eradicate juvenile fanworm which have remained undetected within Marsden Cove and Port Nikau. Fanworm can grow at a rate of 15mm per month and within six months could be as large as 90mm and capable of reproduction. It is estimated a similar amount of time and effort would be needed to carry out follow up inspections.

As part of the response, six other vessels have also been inspected in Whangarei Harbour and Marsden Cove. Vessels which have fanworm on their hulls are directed to have their hull cleaned immediately or instructed to leave the region. A regular survey and heightened publicity warning stakeholders and the public of the risks of transferring fanworm is also underway.

The diver cost of the response thus far is \$75,000 and it is estimated that a full resurvey of all sites during April and May will cost an additional \$100,000. The costs of the unbudgeted portion of this work (\$50,000 of that already spent and \$100,000 for ongoing survey and eradication) is proposed to be funded from unspent and unassigned site-led (community pest control areas) budget. This will mean that other than the five new CPCAs started this year, there will be no budget for any new CPCAs.

The likelihood of a successful eradication of fanworm in Whangarei harbour remains high and there is now a much lower risk of further incursions as a result of a better informed marine industry and prompt reporting of potential "risk" vessels.

Kauri Dieback: joint agency response

Work continues on raising awareness to kauri dieback and research into ways of reducing its spread and controlling the disease. Over the past four years scientists at the University of Auckland, Landcare research, Scion and Plant and Food have been working to understand the basic biology of the kauri dieback disease PTA. Enough is now known to guide protection of healthy areas of kauri and stop the spread of the disease. The joint agency response has placed emphasis on ensuring research which can benefit the management of PTA is funded as a priority. As a consequence we know a lot more about how the disease spreads and what we can do to contain it. Introduction of disease spores to an area of kauri lead to new infections and even minute amounts of soil with tiny amounts of spores can result in a new area of disease. Various chemicals have been trialled to test their effectiveness as disinfectants and a 2% concentration of Trigene Advance has been found to inhibit and kill PTA propagules as well as reducing the infective capacity of soil.

The disease is not widespread in Northland, however the risk of kauri being infected from spores from elsewhere is still a possibility and stopping the spread will rely on forest users making sure that shoes, tyres and equipment are cleaned to remove all visible soil and plant material- before and after visiting kauri forests. It is also critical to stay on tracks provided and avoid walking on kauri roots

ITEM: 12

Page 3 of 4

Kauri Dieback Response: workplan for 2012-2014

A detailed workplan covering research, surveillance, operations, logistics and Maori engagement has been agreed to by the joint agency leadership team. This workplan is expected to cost \$1.6 million over the next two years to implement and just over \$1.0 million expenditure is already underway. The total cash and staff contribution from each joint agency member over six years is described below and the annual share paid by the Northland Regional Council is \$21,000.

Agency	Total over 6 years 2009-2014 (from Charter document)	Indicative in kind staff contribution per annum
Auckland Regional Council	\$200,000	4.30
Northland Regional Council	\$130,000	1.30
Environment Waikato	\$105,000	0.55
Environment Bay of Plenty	\$35,000	0.35
Ministry of Primary Industries	\$4,400,000	0.80
Dept of Conservation	\$630,000	2.75
Total cost over 6 years	\$5,500,000	

Key research themes expected to be completed by 2014 include the development of control tools, understanding the biology of PTA, development of alternative management tools, understanding the distribution of PTA within an infected tree, developing better decontamination techniques, and understanding the genetic makeup of kauri.

Surveillance will include further ground and aerial survey and soil testing on Great Barrier and Coromandel. Operations will involve producing GIS maps showing where survey has taken place and the results of PTA analysis of soil samples.

Kauri Dieback Response: future government funding uncertainty

The programme began in 2009 with a business case valued at over 5 million dollars agreed to by the Crown and other agencies. Part of the work over the next year will be the completion of a new response business case, which presents the cost of work beyond 2014, with the expectation that MPI will consider funding a share along with other stakeholders. MPI are a major financial stakeholder in the joint response and will have contributed over 4 million dollars over the term of the current plan, however they are unable to confirm any funding beyond 2014. In the event that MPI provides no further funding it is unlikely the key research and future operational needs will be met. It is therefore proposed that a joint letter outlining these concerns and signed by the affected regions be written to the newly appointed Ministers of Conservation and Biosecurity.

Further information on the kauri dieback response can be found via the website <http://www.ac.govt.nz/environment/biosecurity/kauri-dieback/>

Legal compliance and significance assessment:

The activities detailed in this report are provided for in activities described in the council's Long Term Plan and as such are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002.

Recommendations:

1. That the report, Update on Biosecurity Responses: Kiwifruit Psu-V, Mediterranean fanworm, Kauri dieback, by Don McKenzie, Biosecurity Senior Programme Manager and dated 4 February 2013, be received.
 2. That the committee supports the use of \$150,000 from unspent and unassigned site-led pest control budget on the ongoing survey and eradication of Mediterranean fanworm.
 3. That the Committee Chairperson liaise with Auckland Council and other regional council stakeholders with the aim of preparing a joint letter to the Minister of Primary Industries, emphasising the importance of the joint agency response to Kauri Dieback and the need for continued government funding of essential research and response operations on DOC administered land.
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ISSUE: Climate and Water Resources – update

ID: A296731

To: Environmental Management Committee Meeting, 19 February 2013

From: Dale Hansen, Water Resources/Hydrology Programme Manager

Date: 7 February 2013

Summary The purpose of this report is to provide an update on Northland's rainfall patterns, soil moisture deficits, groundwater levels and river flows. It concludes with the recommendation that the council receives the report and supports the response and monitoring plan.

Normal Operations ☒

Report:

A Climate and Water Resources Update report submitted to the committee 5 December 2012 indicated that Northland may experience a normal summer with a mixture of wet and dry spells. However, given the current low rainfall and the climate predictions at that time, some of Northland's water resources would be under pressure during early summer without adequate rainfall.

Since the previous report two rain events have occurred; one moderate event over five days in late December and one minor event over one day in early February. Both were easterly events and as a result more rain fell over the eastern areas of Northland while the western areas remained sheltered.

This report provides an additional update of Northland's current climate conditions and water resources including a seasonal climate outlook for the period February to April.

Figures 1-16 (**attached**) show rainfall, soil moisture, ground water and river flow trends. Accumulative rainfall trends and probabilities, soil moisture graphs are supplied by the NIWA Climate Centre.

Background

Dry, windy conditions continued throughout November and December 2012. It was particularly dry for central and southern parts of Northland. During early to mid December, Northland was again relatively dry, particularly in the western and southern Kaipara areas.

On 23 December 2012, the remnants of ex tropical Cyclone Evan brought heavy rain to Northland, over three days and mainly to the far north and eastern areas. Rainfall amounts varied from 60mm to 150 mm along the eastern areas from Kaero to Whangarei. Central and southern areas received 30mm to 60mm while Dargaville, Ruawai and the Pouto Peninsular received less than 20mm.

Consequently, rainfall was above average for December in the Far North, eastern and central areas, but below average rainfall in western and southern areas of the Kaipara districts. The MetService climate station at Dargaville had recorded below average monthly rainfall since September 2012; as a result, soil moisture deficits and river

flows were significantly lower than usual in areas south of Kaihu to the Pouto Peninsular and around Ruawai.

During January 2013, high pressure systems were predominant over the North Island resulting in extremely sunny, dry conditions and very little rainfall. January rainfall across Northland totalled less than 10 percent of the expected rainfall. By late January soil moisture deficits were extreme, particularly in the western areas of Kaipara district. Dargaville recorded 140 mm soil moisture deficit where the average for this time of year is 115 mm.

Rain during early February had given some relief to eastern and central areas but western areas missed out on the bulk of the rain and are likely to return to increased dry conditions throughout early February.

Current Rainfall, Soil Moisture, Ground Water Levels and River Flows

- Accumulated rainfall amounts from July 2012 to 7 February show Kaitia, Kaikohe and Kerikeri to slightly above average, Whangarei is average and Dargaville significantly below average.
- Soil moisture deficits have decreased to near average at Kaikohe and Kerikeri due to the rainfall in early February. Minor decreases were recorded at Kaitia, Whangarei and Dargaville.
- Groundwater levels at the end of January were above average at Taipa, Russell, and Kaikohe and below average at Whangarei and Mangawhai.
- River flows are above their mean annual low flows and still receding from the rainfall in early February.
- The weather forecast for early to mid February is for continued fine weather. During this period, river flows in western and southern Kaipara areas are predicted to drop below their mean annual flows. This is also likely to occur in the Hokianga and southern Whangarei areas towards mid to late February.

NIWA Climate Centre - Climate Models Predictions and Outlook: February to April 2013

There will be a return to near normal conditions over this period. The equatorial Pacific Ocean is still in a neutral state (neither El Niño nor La Niña). Global guidance indicates that these neutral conditions are very likely to persist throughout the Southern Hemisphere autumn. For the New Zealand region over the coming three months (February-April 2013), slightly higher than normal pressures are expected to the south of the country and southeast of the Chatham Islands.

February to April temperatures are likely to be in the near average or above average range. Rainfall is likely to be in the near normal or above normal range. Soil moisture levels and river flows are likely to be in the near normal range for the season as a whole.

The full probability breakdown is:

	Temperature	Rainfall	Soil Moisture	River Flows
Above Average	40	35	25	20
Average	40	40	45	45
Below Average	20	25	30	35

Response to Prolonged Dry Period January 2013

- General media release indicating the region was at risk of potential water shortages and restrictions.
- Over 450 letters sent to consented water users taking water from ground water bores and surface water sources requesting that efforts are made to conserve water, closely monitor water usage and water resources, make plans for possible water shortages and ensure compliance with resource consent requirements.
- Council monitoring officers were in regular contact with consent holders, assisting with water use management in areas where river flows were potentially reaching critical levels. In late January some major pasture irrigation water user were warned of possible cessations if river flows receded further.
- Updated information on rainfall, soil moisture deficits and river flows regularly forwarded to the territorial authorities and the Rural Support Trust, Northland.

Response and Monitoring Plan

The response and monitoring plan is the same approach taken during similar dry periods. These include the following;

- Continue to monitor the regions rainfall, ground water levels and river flows incorporating the council's hydrometric network and rainfall and water level station operated by NIWA. The focus of this monitoring will be in the Kaipara area.
- Review water resources during mid February and if dry conditions persist instigate further media releases
- Provide regular climate and water resources updates to council, territorial authorities, Rural Support Trust, Northland and major industrial/agricultural water users.
- If water shortages are likely, then contact will be initiated with the key water users to work with them to develop contingency plans.
- Work closely with NIWA scientists to determine rainfall probabilities and low flow predictions.

Compliance with decision making processes:

The activities detailed in this report are part of the Council's day to day operations, they are provided for in Section 7.1.1(b) in the Council's 2012-2022 Long Term Plan and in the Council's 2012-2013 annual plan, and are therefore in accordance with the Council's decision making process and sections 76-82 of the Local Government Act.

The programme (along with other State of Environment programmes) also fulfils the Council's statutory obligations under section 35 (2)(a) of the Resource Management Act 1991.

Recommendations:

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1. That the report Climate and Water Resources – update by Dale Hansen, Water Resources/Hydrology Programmer Manager dated 7 February 2013 be received.
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Fig 1: Rainfall Patterns (% of average) October 2012 to February 2013

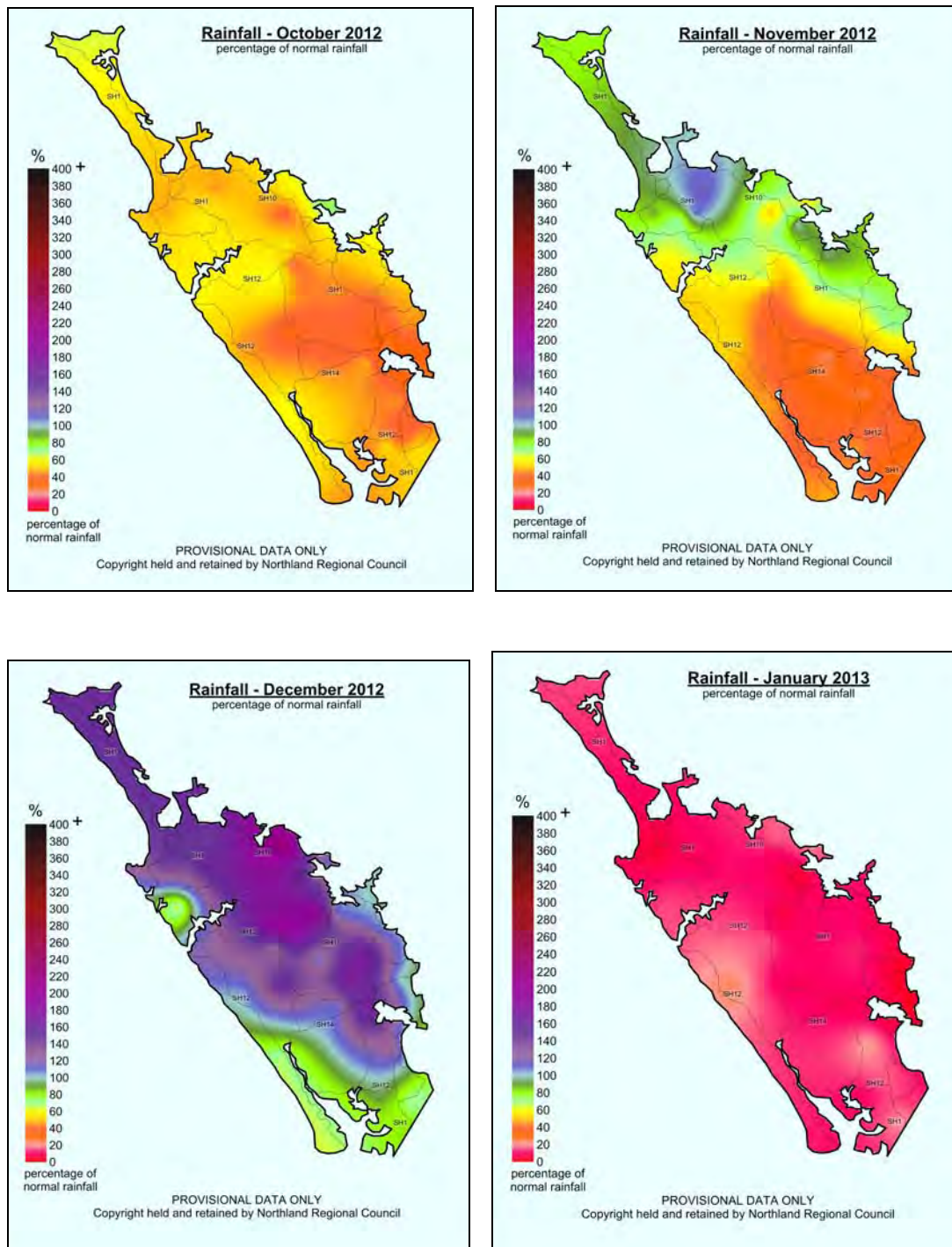


Fig 2: New Zealand Soil Moisture Deficit at 6 February 2013

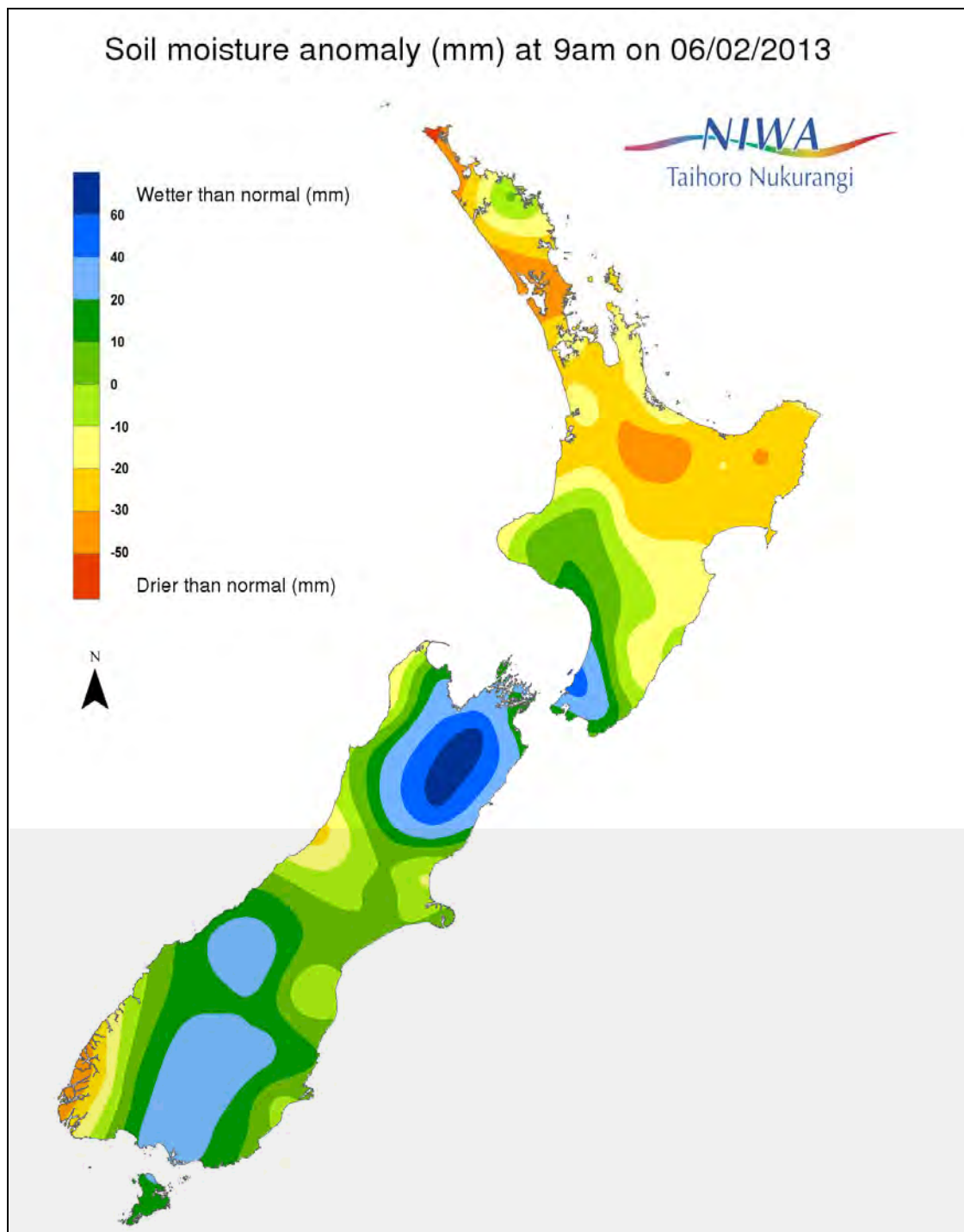


Fig 3: February 2013 Rainfall Amounts

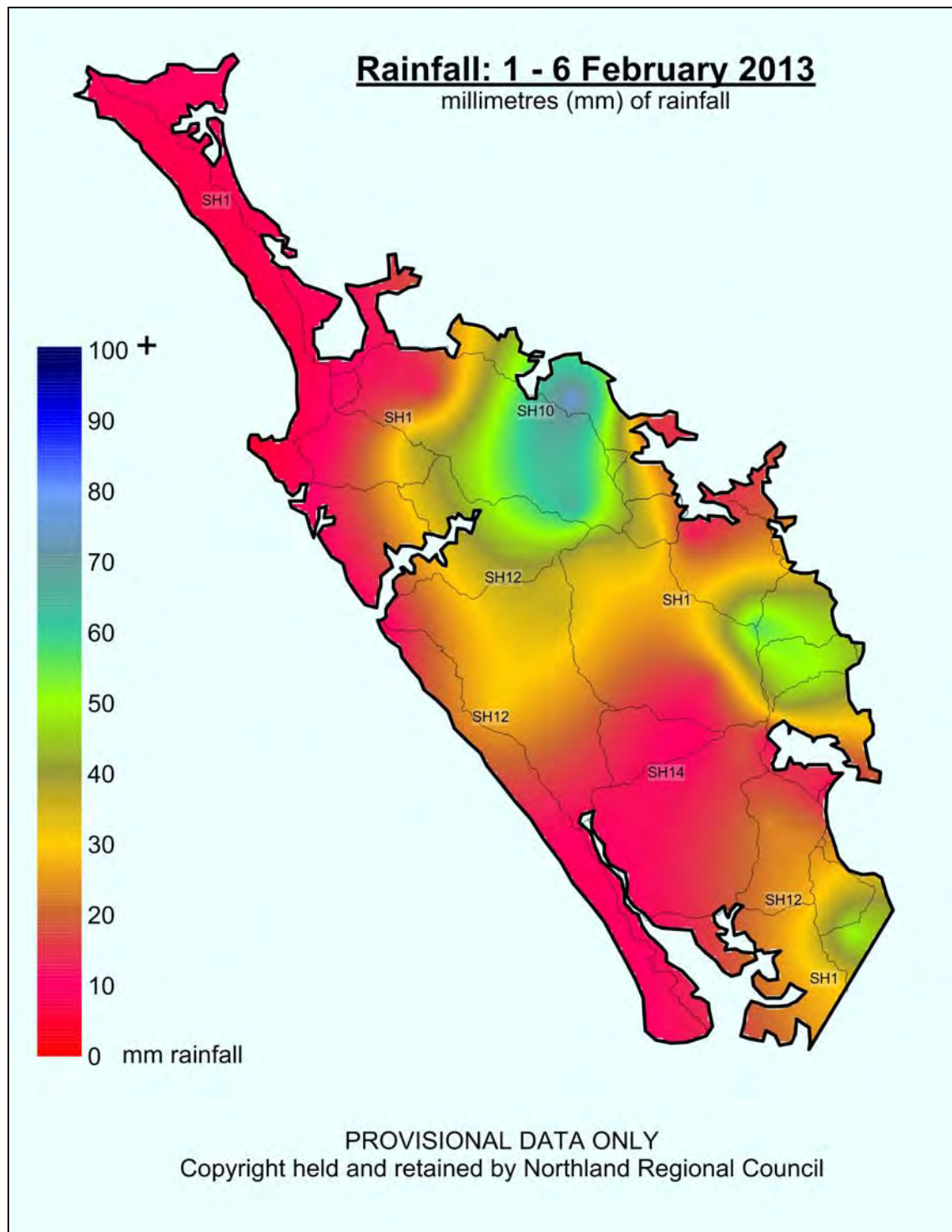


Fig 4: Kaitaia - Accumulative Rainfall Trends and Probabilities

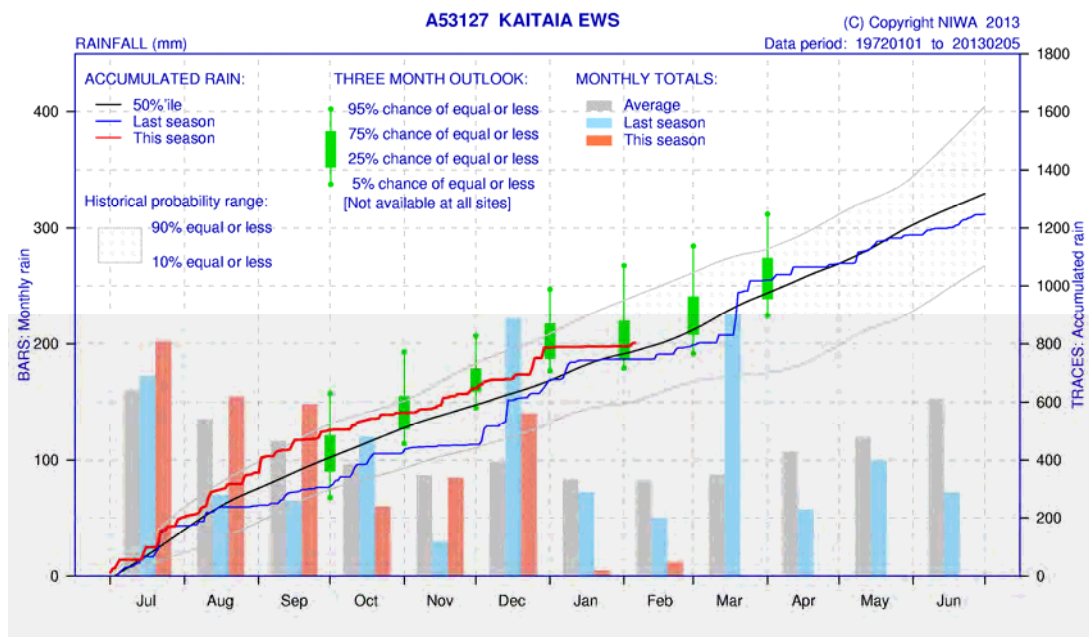


Fig 5: Kaitaia - Soil Moisture Deficits

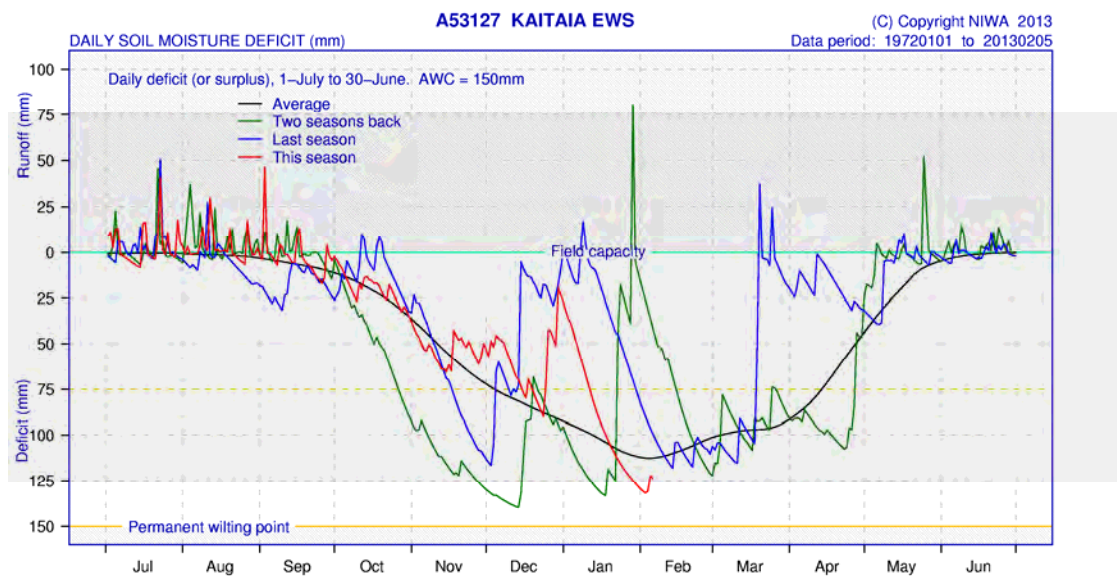


Fig 6: Kerikeri - Accumulative Rainfall Trends and Probabilities

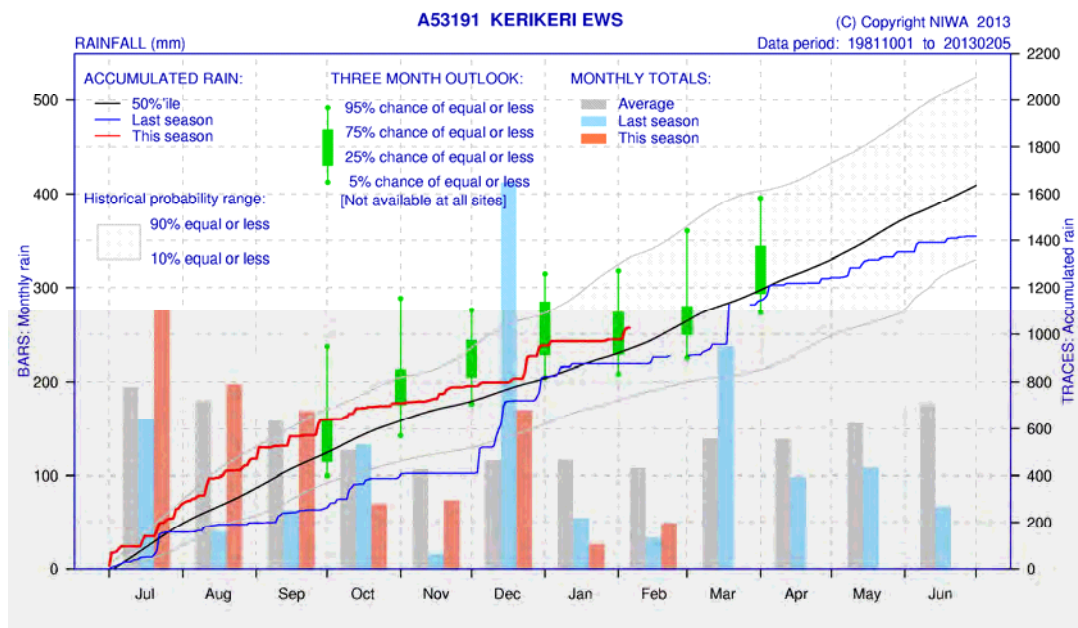


Fig 7: Kerikeri - Soil Moisture Deficits

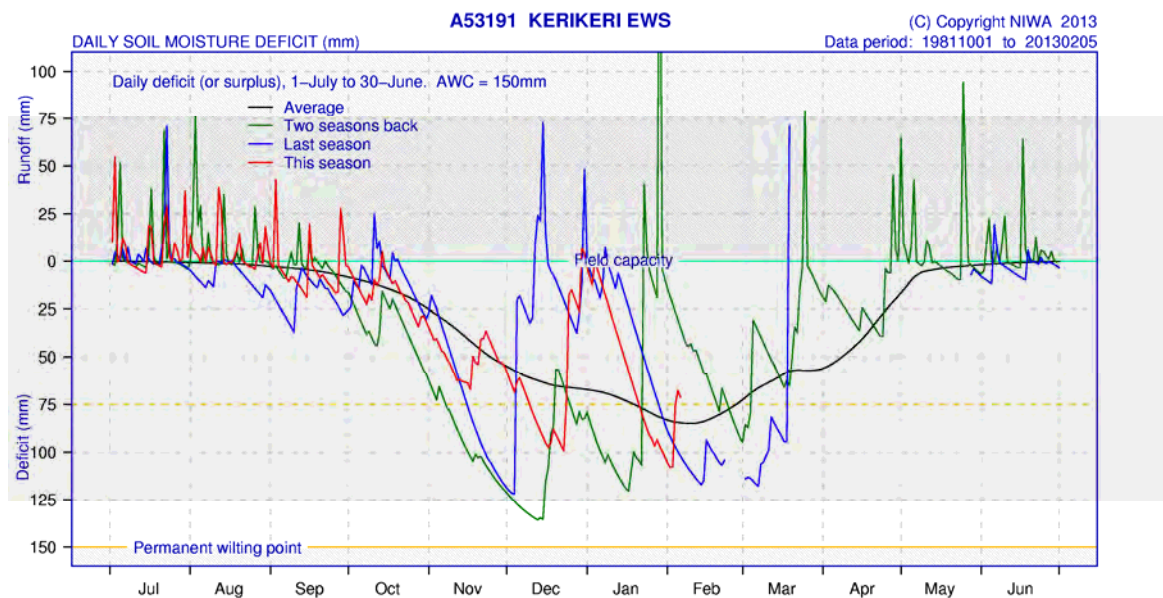


Fig 8: Kaikohe – Accumulative Rainfall Trends and Probabilities

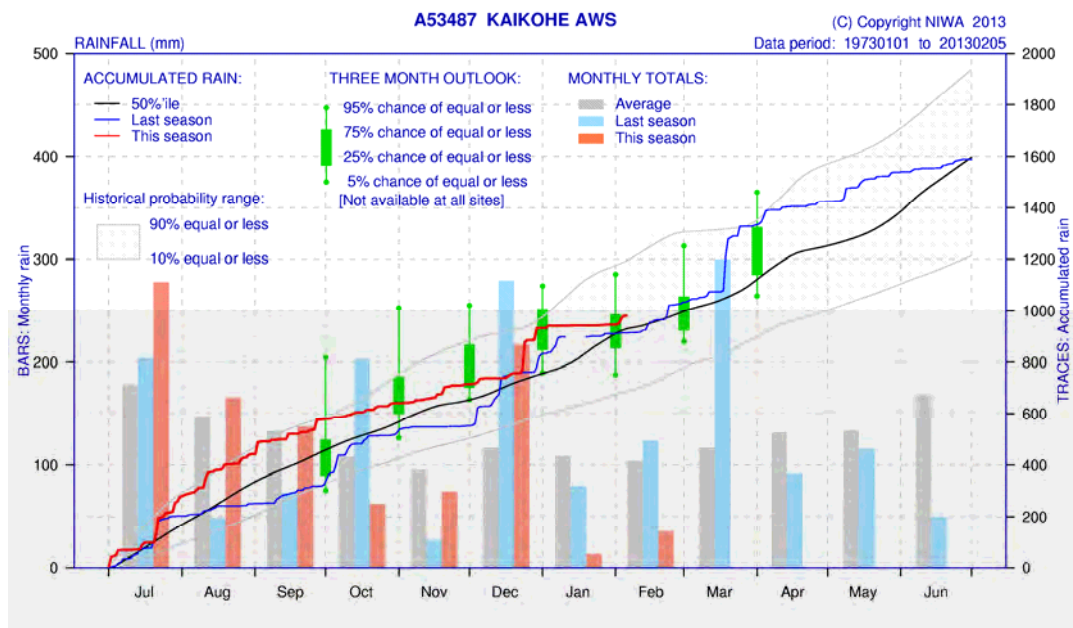


Fig 9: Kaikohe - Soil Moisture Deficits

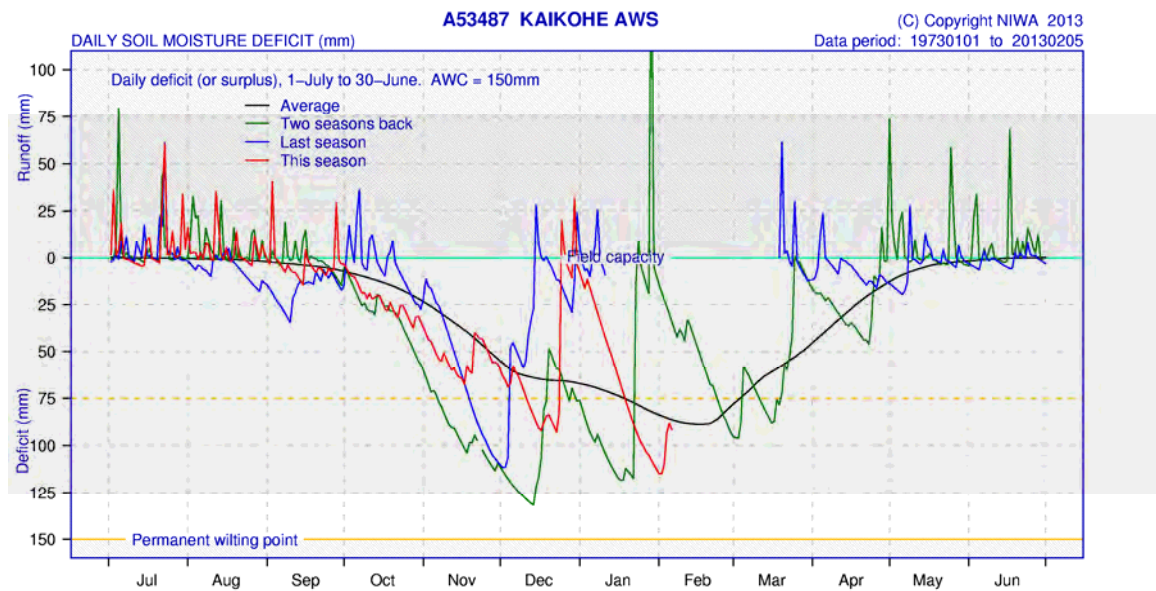


Fig 10: Dargaville – Accumulative Rainfall Trends and Probabilities

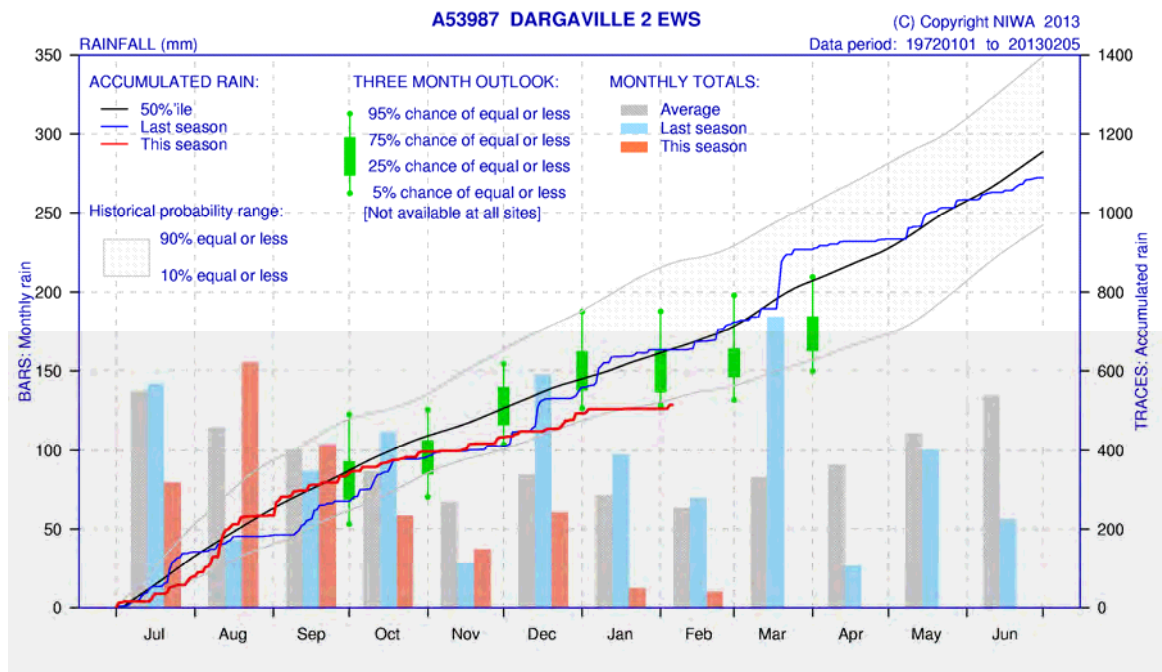


Fig 11: Dargaville - Soil Moisture Deficits

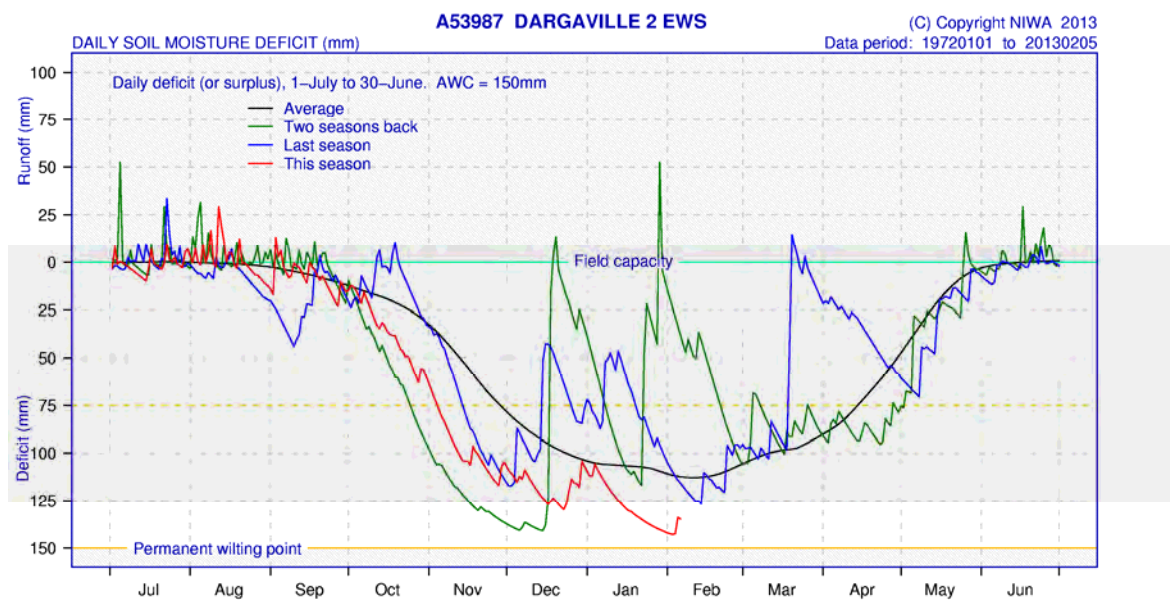


Fig 12: Whangarei Aero - Accumulative Rainfall Trends and Probabilities

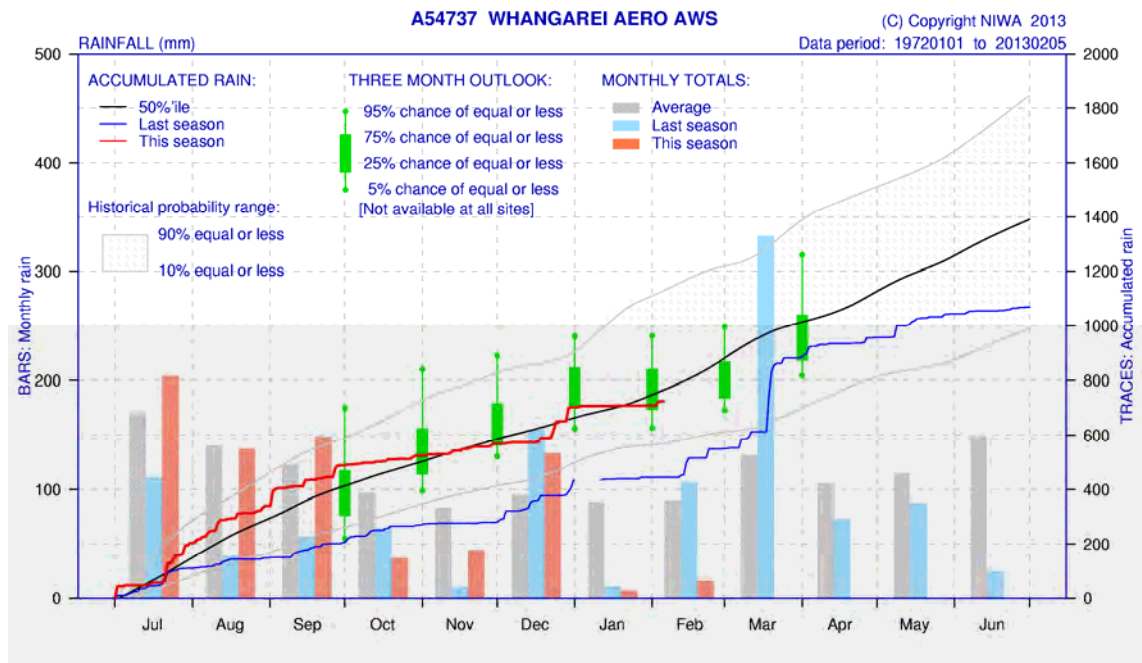


Fig 13: Whangarei Aero - Soil Moisture Deficits

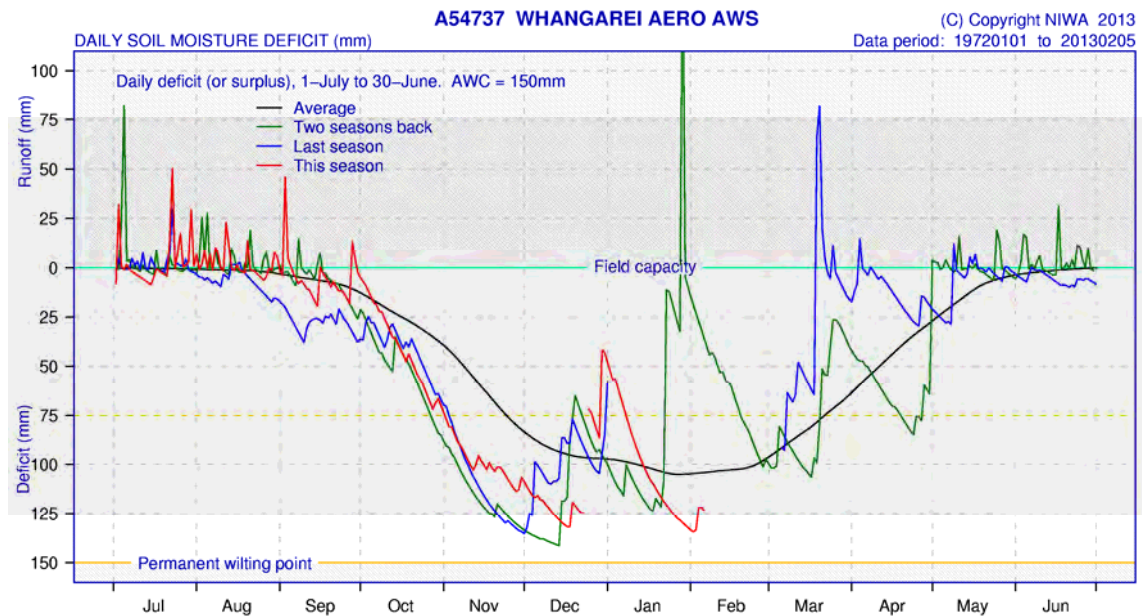


Fig 14: Poroti Ground Water Trends from 7 February 2009 to 7 February 2013
(red arrows indicate 7 February levels for each year)

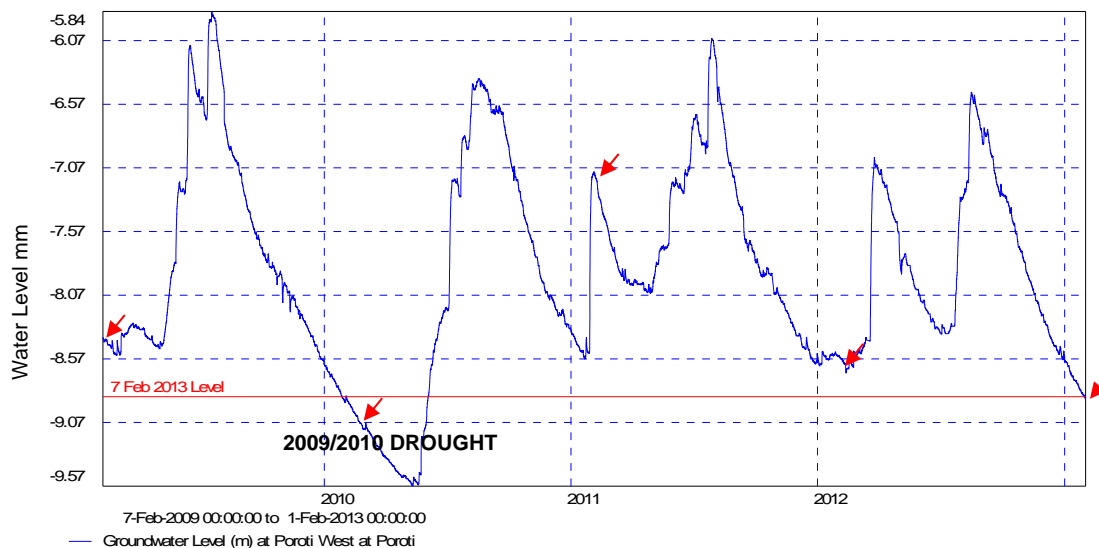


Fig 15: Kaihu at Kaihu Gorge Predicted flows to 1 March 2013 Relative to Current Base Flow Recession Rates.

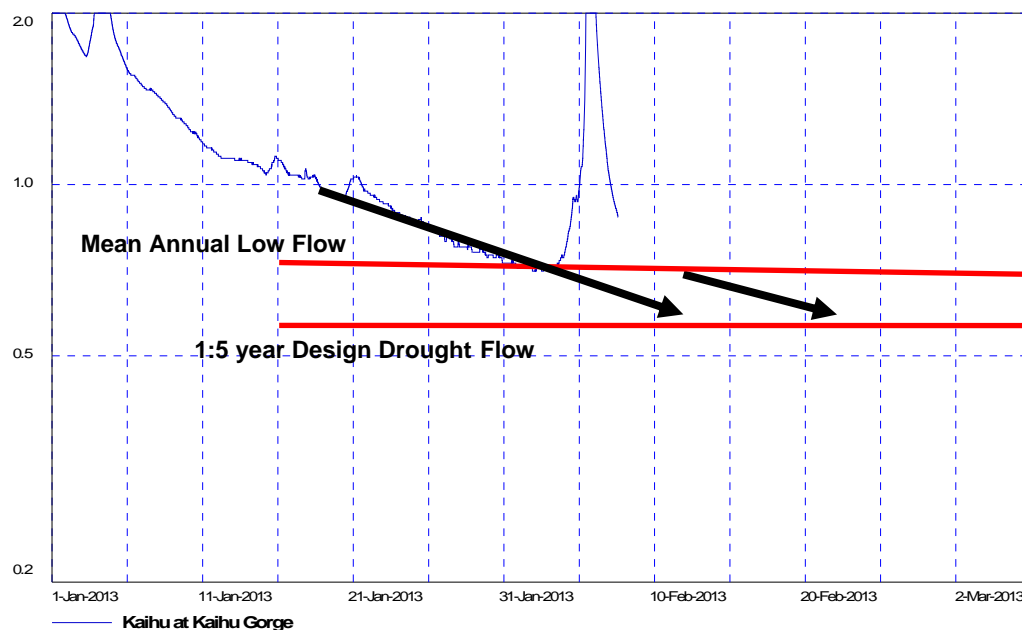


Fig 16: MALF (Mean Annual low Flows) and DDF (Design Minimum Flows) at various Northland Rivers compared to flow rates on 7 February 2013.

District	River	Flows at 7 Feb 2013 (l/s)	MALF (1 day average flow l/s)	1 in 5 yr DDF (7 day min flow l/s)
Far North	Selwyn Swamp	15	4	2.2
Far North	Awanui (Kaitaia)	963	557	460
Far North	Punakitere (Taheke)	1000	707	526
Far North	Waipapa (Puketi Forest)	853	709	559
Far North	Maungaparerua (upper Kerikeri)	73	33	23
Far North	Waitangi (Haruru Falls)	1610	966	552
Far North	Waiharakeke (Moerewa)	300	137	46
Whangarei	Ngunguru (Kaiatea)	120	79	61
Whangarei	Raumanga (CBD)	134	77	64
Whangarei	Waihihoi (Bream Bay)	135	85	57
Whangarei	Mangakahia (Titoki)	4253	3000	2455
Whangarei	Waiotu (SH1)	790	233	197
Whangarei	Whakapara (SH1)	1830	851	653
Whangarei	Wairua (Pipiwai Rd)	4800	1850	1450
Whangarei	Mangere (Knight Road)	139	119	102
Whangarei	Mangahahuru (Kauri)	140	105	78
Kaipara	Manganui(Sth Nthn Wairoa)	290	276	154
Kaipara	Kaihu (Kaihu)	795	718	609

ISSUE: Fonterra's Sustainability Roadshow - introduction

ID: A296963

To: Environmental Management Committee, 19 February 2013

From: Peternel McLean, Committee Secretary

Date: 11 February 2013

Report:

Philippa Barriball, the Manager of Local Government Relations at Fonterra Co-operative Group Ltd, has requested this opportunity to brief the committee on Fonterra's Sustainability Roadshow which commences in March.