# AGENDA

# ENVIRONMENTAL MANAGEMENT COMMITTEE

Monday 8 December 2014 9.30 am

#### NORTHLAND REGIONAL COUNCIL ENVIRONMENTAL MANAGEMENT COMMITTEE

# Agenda

Meeting to be held in the Council Chambers, 36 Water Street, Whangarei on Monday, 8 December 2014 commencing at 9:30am

#### MEMBERSHIP OF THE ENVIRONMENTAL MANAGEMENT COMMITTEE

Cr J Carr, Chairman

Cr C Brown (Deputy Chairman)	Cr B Shepherd (ex officio)	Cr P Dimery
Mr R Booth (KDC)	Cr A Court (FNDC)	Mr A Clarkson
Ms Sue Reed-Thomas (DOC) Mr K Volkerling	Cr T Cutforth (WDC)	Mr G Gover

#### **OPEN MEETING**

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### **ISSUE:** Confirmation of Minutes – 13 October 2014

To: Environmental Management Committee, 8 December 2014

From: Tony Phipps, Operations Director

Date: 28 November 2014

Report Type:	Normal operations		Decision
Purpose:		Public service	Regulatory function
	Legislative function	Annual\Long Term Plan	Other
Significance:		✓ Not Triggered	

#### Executive summary:

The purpose of this report is to present the minutes of the Environmental Management Committee meeting held on 13 October 2014 **(attached)** for confirmation.

#### Legal compliance:

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

#### **Recommendations:**

That the minutes of the Environmental Management Committee meeting held on 13 October 2014 be received.

#### NORTHLAND REGIONAL COUNCIL ENVIRONMENTAL MANAGEMENT COMMITTEE

Minutes of the Environmental Management Committee Meeting held in the Council Chamber, Northland Regional Council, 36 Water Street, Whāngārei, on Monday 13 October 2014, commencing at 9.30 am

### Present:

#### **Northland Regional Council**

Cr Joe Carr (Chairman) Cr Craig Brown (Deputy Chairman) (from 9.45 am) Cr Bill Shepherd (ex officio) Cr Paul Dimery (from 9.45 am)

Far North District Council Cr Ann Court (left meeting 11.27 am)

Kaipara District Council Commissioner Richard Booth

Whangarei District Council Cr Tricia Cutforth

Department of Conservation Ms Sue Reed-Thomas

Farming Community Mr Alan Clarkson

Forest Industry Mr Geoff Gover

Māori Interests Mr Keir Volkerling

### In Attendance:



Chief Executive Officer Operations Director Consents/Monitoring Senior Programme Manager Land/Rivers Senior Programme Manager Biosecurity Senior Programme Manager Policy Specialist - Water Council Secretary

#### NRC Staff - Part Meeting:

Environmental Monitoring Programme Manager Natural Hazards/Rivers Officer Biosecurity Officer Manchurian Wild Rice Project Officer Land Management Officer Land Management Advisors (x4) Biodiversity Specialist Monitoring Team Administrator

The Chairman declared the meeting open at 9.32 am.

# Apologies

#### Moved (Reed-Thomas/Cutforth)

That the apologies from Deputy Chairman, Craig Brown, and Councillor Paul Dimery for delayed arrival and also the apologies from the newly appointed representative of Environmental Interest Groups, Martin Hunt, for nonattendance be received.

#### Carried

### **Declaration of Conflict of Interest**

There were no declarations of conflict of interest made at any stage of the meeting.

## Confirmation of Minutes: Environmental Management Committee Meeting – 25 August 2014 (Item 1.0)

Report from Peternel McLean, Committee Secretary. ID: A692287

#### Moved (Clarkson/Gover)

That the minutes of the Environmental Management Committee meeting held on 25 August 2014 be confirmed as a true and correct record.

#### Carried

#### Matters arising from 1.0:

It was confirmed that an update or report (depending on the information available) on "Go Slow", the disease of working dogs which induced fatigue and muscle wastage, would be provided at the 8 December 2014 meeting of the Environmental Management Committee.

Secretarial Note: The committee sustained a moments silence in respect of the recent passing of committee member, Councillor Dennis Bowman.

#### Waiora Northland Water Progress (Item 2.0) Report from Natalie Glover, Policy Specialist - Water A667289

#### Moved (Carr/Brown)

- 1. That the report "Waiora Northland Water Progress" by Natalie Glover, Water Policy Specialist, and dated 13 September 2014, be received.
- 2. That Hone Tiatoa be appointed as Tauwhara marae representative on the Waitangi Catchment Group.
- 3. That Maurice Williamson be appointed as a public representative on the Waitangi Catchment Group.

#### Carried

#### Matters arising from 2.0:

The Forestry Industry was commended for sponsoring a presentation/field trip focussing on "The science behind forestry as a land use" on 17 November 2014; to which all committee members were invited to attend.

It was generally agreed there would be merit in the committee being provided a presentation regarding water allocation, and the security of supply, for the farming industry.

Mr K Volkering undertook to try and source the predictive methodology for sediment deposits undertaken by Auckland Regional Council.

The Chairman reaffirmed that Hone Tiatoa was appointed as the Tauwhara marae representative on the Waitangi Catchment Group; as opposed to a representative of the Lake Omapere Trust.

### Environment Fund and Farm Water Quality Improvement Plan Update (Item 3.0)

Report from Bruce Howse, Land/Rivers Senior Programme Manager. A674850

#### Moved (Clarkson/Court)

- 1. That the report 'Environment Fund and Farm Water Quality Improvement Plan Update' by Bruce Howse, Land/Rivers Senior Programme Manager, and dated 17 September 2014, be received.
- 2. That the Environmental Management Committee supports in principle the proposed changes to the Environment Fund criteria, with any changes to be confirmed by the committee following the outcomes of the council Long Term Plan 2015–2025 workshops, and with any changes not to commence until after 1 July 2015.

Carried

### **River Management Update (Item 4.0)**

Report from Joseph Camuso, Rivers Programme Manager. A676349

#### Moved (Court/Booth)

- 1. That the report "Rivers Management Update" by Joseph Camuso, Rivers Programme Manager, and dated 11 September 2014, be received.
- 2. That the minutes of the Whāngārei Urban Rivers Liaison Committee held on 18 August 2014 be received.

#### Carried

#### Matters arising from 4.0:

Land/Rivers Senior Programme Manager, Bruce Howse, undertook to investigate whether there were synergies between the Otiria Flood Mitigation project and the work being undertaken by the New Zealand Transport Agency, in conjunction with

OPUS, to review Northland's 'resilience' and how it affected communities (based on floods and slips).

It was advised that KiwiRail had provided a written commentary on the proposed Otiria Flood Mitigation Works; raising concern regarding the flooding impact on Rail Bridge 236 (North Auckland Line) which was already subject to scour issues at times of flooding. Chairman Joe Carr requested that the Land/Rivers SPM, Bruce Howse, contact Wiremu Wiremu (also known as Bill Williams) from the Otiria Marae to clarify the issues surrounding this matter.

#### It was further moved (Brown/Gover)

That as permitted under section 46A(7) of the Local Government Official Information and Meetings Act 1987, the tabled item "Appointment to the Kerikeri-Waipapa River Liaison Committee" be received.

#### Carried

#### It was further moved (Carr/Brown)

- 1. That the report 'Appointment to the Kerikeri-Waipapa Liaison Committee' by Bruce Howse, Land/Rivers Senior Programme Manager, and dated 10 October 2014, be received.
- 2. That Mr Bill Hunter, representing the Kerikeri Irrigation Company Ltd, be appointed as a representative of the Kerikeri-Waipapa River Liaison Committee.

#### Carried

#### Review of Regional Pest Management Strategies (Item 5.0) Report from Don Mckenzie, Biosecurity Senior Programme Manager. A667504

#### Moved (Carr/Booth)

That the report 'Review of Regional Pest Management Strategies' from Don Mckenzie, Biosecurity Senior Programme Manager, and dated 11 September 2014, be received.

#### Carried

#### Matters arising from 5.0:

A map was presented which detailed the regionally significant areas for Northland (including high value forests, lakes and marine areas) overlaid with areas where intervention was taking place. This exercise highlighted that there are a number of high value assets in Northland lacking attention. The proposed Regional Pest Management Plan (RPMP) provided options and initiatives to address this 'disconnect'.

Confirmation was provided that the proposed RPMP would be notified for public consultation as part of the 2015–2025 Long Term Plan process and feedback would be sought through a series of stakeholder workshops.

#### Kai Iwi Lakes and Marine Pests (Item 6.0) Report from Don Mckenzie, Biosecurity Senior Programme Manager. A675976

#### Moved (Gover/Carr)

That the report 'Kai lwi Lakes and Marine Pests' by Don Mckenzie, Biosecurity Senior Programme Manager, and dated 17 September 2014, be received.

#### Carried

#### Manchurian Wild Rice Programme Update (Item 7.0) Report from Curtis Harris, Manchurian Wild Rice Project Officer. A676205

#### Moved (Clarkson/Cutforth)

- 1. That the report 'Manchurian Wild Rice Programme Update' by Curtis Harris, Manchurian Wild Rice Project Officer, and dated 18 September 2014, be received.
- 2. That the Environmental Management Committee extends appreciation to the Ministry for Primary Industries for its continued support for the Manchurian Wild Rice Programme. The committee also commends council officers for the progress made in the containment and eradication of Manchurian Wild Rice.

#### Carried

# Environmental Monitoring for the period 1–24 September 2014 (Item 8.0)

Report from Colin Dall, Consents/Monitoring Senior Programme Manager. A678889

#### Moved (Brown/Reed-Thomas)

That the Environmental Monitoring report for the period 1–24 September 2014 from Colin Dall, Consents/Monitoring Senior Programme Manager, be received.

Carried

#### **Recreational Swimming Water Quality Programme (Item 9.0)** Report by John Ballinger, Environmental Monitoring Programme Manager. A676293

#### Moved (Dimery/Carr)

- 1. That the report 'Recreational Swimming Water Quality Programme' from John Ballinger, Environmental Monitoring Programme Manager, and dated 16 September 2014, be received.
- 2. That the report programme for 2014/15, as outlined in Item 9.0 of the 13 October 2014 Environmental Management Committee agenda, be supported.

#### Carried

#### Matters arising from 9.0:

It was confirmed that the number of sampling sites had been reduced as a result of the 2012–2022 Long Term Plan process. However, it was the intention to retain a core set of sampling sites for the long term.

Operations Director, Tony Phipps, undertook to circulate to the committee members a list of sites that were no longer sampled.

#### Agenda items for next Environmental Management Committee meeting – 8 December 2014 (Item 10.0) Report from Committee Secretary, Peternel McLean. A692853

Suggested topics included:

- Progress on the Regional Plans Review;
- Presentation: "Go Slow" (as per Item 2.0); and
- Presentation from the Department of Conservation regarding the new Conservation Strategy (Sue Reed-Thomas to follow up this request).

Secretarial Note: A video titled 'Dune Lakes and Values' was screened for the committee's interest following the conclusion of the meeting (this related to Item 2.0 of the agenda).

## Conclusion

The meeting closed at 11.52 am.

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## ISSUE: Waiora Northland Water Progress

To: Environmental Management Committee, 8 December 2014

From: Natalie Glover, Waiora Northland Water Project Manager

Date: 11 November 2014

Report Type:	✓ Normal operations	✓ Information	Decision
Purpose:		Public service	Regulatory function
	Legislative function	Annual\Long Term Plan	Other
Significance:		✓ Not Triggered	

#### **Executive Summary:**

The purpose of this report is to provide an update on progress with Waiora Northland Water and contributing programmes between 13 September and 7 November 2014.

#### Legal compliance and significance assessment:

The activities detailed in this report are part of the council's day to day operations and as such are provided for in the council's 2012-2022 Long Term Plan, and are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002. The report is therefore of low significance in terms of council's significance policy.

#### **Recommendations:**

1. That the report Waiora Northland Water progress by Natalie Glover, Waiora Northland Water Project Manager and dated 11 November 2014, be received.



#### **Report:**

# NATIONAL POLICY STATEMENT FOR FRESHWATER (NPS FM) IMPLEMENTATION

#### **Regional Plans Review**

The review of the three regional plans is the first step in the development of a new regional plan(s). The new plan(s) will deliver a significant part of the council's implementation of the NPS FM. A separate agenda item 'Regional plans review update' provides detail on progress to date and an indicative timeline for this project.

#### Freshwater Management Units

The NPSFM directs regional councils to define freshwater management units<sup>1</sup> for the purposes of setting water quality and quantity objectives and limits. The nature and scale of the freshwater management units depends on the purpose for which water quality is to be managed. For example, if the focus is managing sediment loads to an estuary then the management unit would be the entire contributing catchment. Staff presented initial thoughts on potential freshwater management units for Northland to stakeholders as part of the regional plan review project. The freshwater management units will be developed further over the coming months with the assistance of stakeholder feedback and support from external experts. Staff intend to have the management units defined by May 2015. Progress will be reported to the next committee meeting.

#### Water Allocation

Progress continues on improving our understanding of water allocation to inform decisions on water quantity limits including:

- A study of the relationship between suitable habitat for fish species and actual river flow to inform decisions on how much water is required in streams to maintain ecological values. This work is focussed on the Waitangi, Mangere and Hatea catchments and is being undertaken in conjunction with NIWA.
- Assessment of how water takes (consented and estimated permitted) within the Waitangi and Mangere catchments change the flows and instream habitats available throughout the catchments. The work will inform decisions on catchment specific limits, and also where mitigation measures could be focused.
- Hydrogeological assessments to provide a conceptual cross section and water balance model for each high priority lake in the Kai Iwi and Pouto areas.
- A review of the Aupouri aquifer to investigate how much water can be allocated and what levels may be required to be maintained in the sub aquifers.

#### **MPI Joint Venture**

A series of projects are being progressed in a joint venture between council and the Ministry for Primary Industries. These include:

 Identifying the potential economic costs and environmental outcomes of meeting sediment objectives and limits in freshwater and estuarine environments.

<sup>&</sup>lt;sup>1</sup> A freshwater management unit can be a water body, multiple water bodies or any part of a water body.



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- Assessment / identification of tangata whenua values and interests regarding freshwater in Northland and an associated suite of cultural indicators (attributes)
- Assessment of the economic impacts and environmental outcomes associated with setting nutrient limits in lakes.

#### Liaison with the Ministry for the Environment

Council continues to work closely with MfE across a range of topics relating to implementation of the NPS FM. These include:

- Development of implementation guidance
- Assessment of collaborative planning tools / processes
- Values and economic assessment for limit setting.

Staff will also host a meeting with members of the MfE NPS FM implementation team on 20 November.

#### Ministry for the Environment Community Environment Fund (CEF)

#### **Round 6 CEF**

As reported previously, round 6 of the CEF was targeted at freshwater management projects led by regional councils that will assist implementation of the NPS FM 2014 and have benefits transferable across multiple regions. Regional council representatives are meeting 11 November 2014 with MfE to discuss progress with each of the projects awarded funding<sup>2</sup>. A full list of regional council CEF projects is available at: <u>http://www.mfe.govt.nz/more/funding/community-environment-fund/cef-projects-funded-date/cef-freshwater-management-projects-</u>

#### Round 7 CEF

The \$1 million fund<sup>3</sup> announced by the Environment Minister in March 2014 to enable more representative reporting on the state of New Zealand's freshwater has led to Round 7 CEF funding, which closes Friday 21 November 2014. The fund is available to a single provider to carry out one year of monthly monitoring across 80 additional national sites. With monitoring being handed over to regional councils, unitary authorities, Crown Research Institutes, universities and/or community interest groups upon completion, Council may face additional monitoring burden (although applicants must demonstrate in their application how the monitoring will continue and become self-sustaining after funding ends).

#### PRIORITY CATCHMENTS Waiora Northland Water web pages <u>http://www.nrc.govt.nz/waiora</u>

During the reporting period, all five catchment groups received a presentation on water quantity and quality issues as they relate to their priority catchment and had the opportunity to provide feedback.

<sup>&</sup>lt;sup>2</sup> Northland Regional Council is collaborating on a sediment prediction model project with Auckland and Waikato Regional Councils that has been awarded \$115,000 under the CEF. The project will produce a sediment yield predictive model responsive to land use/cover, hydrology, geology, soil type, erosion processes and the identification of sediment sources. <sup>3</sup> <u>http://www.beehive.govt.nz/release/govt-invests-further-21-million-community-freshwater-action</u>



#### Whangārei Harbour

The catchment group met 23 September 2014 for their regional plan review workshop.

At the workshop held 28 October 2014, the group was provided with a presentation on coastal monitoring. The group has been asked to provide advice on a list of 15 possible projects that could be supported through the WDC Wastewater Capital Strategy Fund worth \$275K in the current financial year.

A forestry field trip is planned for 22 November 2014 and a meeting for the year is scheduled for 2 December 2014.

#### Mangere

The catchment group met 14 October 2014 for their regional plan review workshop.

The next workshop is scheduled for 25 November, followed by a fieldtrip to the Pukenui Forest on Monday 15 December.

The Mangere River came 4<sup>th</sup> in the Morgan Foundation NZ River Awards (referred to later in report).

#### **Doubtless Bay**

The catchment group met 24 September 2014 for their regional plan review workshop. There, the group opted to schedule an additional workshop for 22 October 2014 to cover the water quality and quantity topics in more depth.

Funding from Council's Environment Fund to the tune of \$5,000 has been secured for Doubtless Bay catchment group's next riparian planting project. The project has good community support and will be carried out in association with the landowners (Department of Conservation) at the interface between farmland and mangroves in the lower Taipa-Oruru subcatchment of Doubtless Bay. Planting will be undertaken early in the next planting season, around May 2015.

The next Doubtless Bay catchment group workshop is scheduled for Wednesday 26 November 2014.

#### Waitangi

The catchment group met 9 October 2014 for their regional plan review workshop. Soil specialist Bob Cathcart and catchment lead Duncan Kervell jointly presented a virtual fly-through of the Waitangi catchment's soils, geology and landscape at the catchment group workshop held 30 October 2014. The presentation generated lively discussion about options for landowners to control erosion or runoff of fine versus coarse sediments.

Catchment group members will learn about "water quality attributes in the Waitangi catchment" at the next workshop scheduled for Thursday 13 November 2014. This will be followed by a fieldtrip planned for 11 December 2014.

#### Sediment Investigations in Waitangi Catchment

Initial findings of a project to identify the movement and land use source of Waitangi catchment sediment is expected early 2015.



#### Pouto

The catchment group met 13 October 2014 for their regional plan review workshop.

A draft report on the Lake Rototuna catchment hydrogeology has been completed. The report assesses possible causes for the declining lake water level trend that has continued from 2005. Catchment afforestation appears to be one of the main possible causes for the declining lake water level. The report will be circulated to the Pouto Catchment Group.

During September and October 2014, Council, DoC, Forest and Bird, and local businesses all provided funding to plant lake margins at Rototuna, Humuhumu, Kahuparere and Pouto Point. In all 7000 trees were planted this spring with DoC and the Pouto Catchment Group planning to release these trees over the next few months to maximise their survival rate.

A local farmer Colin Taurua also provided funding to start planting around Lake Waingata and several Pouto Catchment Group members helped with the physical planting at this location and in association with IKHMG along the Pukemiro Stream banks.

The next catchment group meeting is scheduled for Monday 10 November 2014, followed by a fieldtrip to the Pouto lakes on Monday 1 December to discuss planning mechanisms and actions that could be used to support improvements in lake water quality.

#### **CONTRIBUTING PROGRAMMES**

#### Kaipara Catchment Integrated Kaipara Harbour Management Group (IKHMG)

The IKHMG met 17 September and discussed the 2014 - 2017 business plan, the 2014 - 2015 work plan. And logistics around their upcoming hui: the Kaipara Harbour Symposium *Looking Back- Thinking Forward*<sup>4</sup>, which is scheduled for Saturday 15 and Sunday 16 November 2014.

Council is making a number of presentations at the symposium, including from Councillor Ramsey on the Council's involvement with the IKHMG. Council staff will be presenting on the topics of Kaipara Harbour marine monitoring, Community Pest Control Areas within the catchment, and Enviroschools Wai Restoration and Wai Fencing.

Other presenters covering projects with NRC involvement include DairyNZ representatives Helen Moodie and Tom Stephens on the Mangere catchment, Allan Halliday from Ngati Hau on the Wairua River, and Diane Papworth from Dargaville Intermediate on the school's native plant nursery and Enviroschools involvement.

A number of other IKHMG partners will also be presenting to the symposium.

The next quarterly IKHMG hui is scheduled for Tuesday 3 March 2015 at Whangarei District Council.



<sup>&</sup>lt;sup>4</sup> <u>http://www.kaiparaharbour.net.nz/</u>

#### Flagship sites

The final two planting days of the season were held on JV Farms and the Avoca site. The JV Farms day was attended by agricultural students from Kamo High School who helped with the planting and then were given a farm tour. The planting at Avoca was carried out as a community planting day on a Saturday. Several flagship site farmers will be giving presentations at the Kaipara Harbour Symposium.

#### Kai lwi Lakes

The Kai Iwi Lakes Open Day will be held Sunday 1 February 2015 to tie in with World Wetlands Day. As with the event held in February 2014, the day aims to engage people through fun activities that give them a sense of ownership and inspire them to help protect the lakes and the wider ecosystem/catchment. A wide range of organisations are collaboratively planning the event, led by The Whitebait Connection.

#### Taharoa Domain Reserve Management Plan (RMP) Review

The Taharoa Domain RMP Review Steering Group met 29 September 2014 to progress the review. Kaipara District Council (KDC) staff advised at the meeting that KDC has been reviewing the day to day operational management of Taharoa Domain and investigating alternative operational models for the Domain. The review will be valuable to the development of the draft RMP.

The consultant preparing the Taharoa Domain draft RMP hopes to have an early draft of the plan ready in time for the RMP Review Steering Group meeting scheduled for Monday 8 December 2014. KDC's operational review of Kai Iwi lakes will also be discussed at the meeting.

Kaipara District Council staff expect the final RMP draft will be ready to commence the consultation phase by the end of December 2014.

#### **Community Wastewater**

A separate item in this agenda reports on the programmes that manage community wastewater and dairy effluent point source discharges.

#### **FNDC Consent Compliance**

A meeting was held between council and Far North District Council (FNDC) staff 23 September 2014 to discuss issues associated with waste water treatment plant compliance, projects underway, priorities for possible improvement measures that could be implemented within existing FNDC budgets, and Long Term Plan budgets.

The need to update Drought Management Plans before the upcoming summer dry period was also discussed.

#### Land Management

A separate item in this agenda details land management, Environment Fund and Farm Water Quality Improvement Plan progress.

#### **Industry liaison**

#### Collaboration with DairyNZ

Two years ago, staff reported on Council's new collaboration with DairyNZ, in which DairyNZ agreed to apply and contribute substantial resources to Waiora Northland Water, including giving priority to improved effluent management and developing good management practice. Good progress has been made, including:



- Producing updated and more consistent effluent management guidance for farmers and advisors, including guidance on optimisation of hybrid (pond+irrigation) effluent treatment systems for Northland: *now in the final stage of preparation*.
- Developing good management practice guidance for Northland for farmers, advisors and council staff: A Land Management Booklet developed for dairy farmers is also in the final editing stages. This will provide Northland dairy farmers with relevant information, examples and case studies.
- Develop, promote and implement the good management regime as part of the Mangere catchment project, with DairyNZ providing technical support and advice to farmers and contributing to investigations and research that may be needed into specific water quality issues:

**Sustainable Milk Plans** are being completed on all Mangere and Waitangi catchment dairy farms. The plans address water use, nutrient management and effluent management issues in addition to land and riparian management. Where significant erosion or soil management issues are identified, farmers are encouraged to work with NRC Land Management officers.

**Fish data:** DairyNZ contracted an assessment to collate and review existing fish data for the Mangere River catchment, undertake surveys of in-stream and riparian habitat, dissolved oxygen, benthic invertebrates, fish and fish barriers in Summer and Spring 2013, assess and describe the current fish population and identify potential catchment actions for improving native fish diversity and density. The results help to set water quality and quantity limits for the river.

*Water Quality States and Trends* An analysis of Water Quality for the Mangere Catchment has also been prepared by Dairy $NZ^5$  Priorities and opportunities for action on farm were identified.

Both of these reports have been presented to the Mangere Catchment Group, and are available on the Council website.

In addition to the above, DairyNZ has contributed consistently to all five priority catchment groups and recently highlighted the opportunity for a Technical Advisory Group (TAG) to provide specialist catchment input. During December 2014, meetings will be arranged with other primary production industry partners to determine their resourcing capacity to contribute to the TAG. DairyNZ intends to present on their offer of support for a TAG as part of the February 2015 agenda.

#### Living Waters DoC/Fonterra partnership

Staff provided information and advice at a Living Waters public open day on Friday 17 October 2014 at Jordan Valley Farm, Hikurangi. The day included interactive activities led by The Whitebait Connection, live fish displays, and stands by

<sup>&</sup>lt;sup>5</sup> The analysis found a typical pattern of accumulated catchment nutrient, suspended sediment and bacterial loading from headwaters downstream. Long term trend analysis identified a statistically significant and ecologically meaningful reduction in NH4, TP, TRP and E.coli in the catchment. In terms of grading under the proposed National Objectives Framework, the catchment has shifted from a lower grade C/upper grade D (unacceptable) to a lower grade B/upper grade C for "human health" and consistently scored grades A and B for "ecosystem health" toxicants (NO3-N, NH4-N). However, there is clear indication that reductions in minimum oxygenation are increasingly threatening "ecosystem health" with that catchment shifting from lower grade B/upper grade C (2007) to lower grade C/upper grade D (2012) which would place the catchment below the national bottom-line for 1-day DO.

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stakeholders including regional council and Fish and Game. Along with hosts Fonterra and Department of Conservation, the day was attended by local hapu, primary and secondary aged school children, farmers, DairyNZ and other stakeholders with an interest in improving water quality in the Hikurangi catchment.



Participants of all ages at the Living Waters Hikurangi open day learn interactively about the importance of stream habitat

#### Dairy Industry Liaison Group (DILG)

Council freshwater policy staff presented to the DILG on 6 November, on the plan review's water quantity and quality topics as they relate to dairy farming. Feedback provided by the group will help finalise the regional plan review summary documents.

#### Forestry

#### Northland Forestry Liaison Group

The group met on 16 September 2014 to discuss the review of the regional plans, Forestry Earthworks and Harvesting Guidelines, Northland Kiwi Working Group activities, and the June/July extreme weather events.

A seminar and fieldtrip will be held 17 November 2014, to provide information on Northland's geological challenges in regard to forestry. It will also cover industry good practice such as tools for erosion and sediment control appropriate to Northland.

#### Fish spawning and migration times

MPI has contracted NIWA to develop fish spawning and migration calendars to be used by forestry management and council staff to help minimise potential effects of forestry operations on freshwater fish. Foresters and others looking for information on the best time to undertake work in or around waterways in order to minimise harm to fish species will have access to an online tool by early 2015.



#### South Hokianga Community Water Supplies

Cr Carr and the Consents/Monitoring Manager attended a hui 30 September 2014 at Tuhirangi Marae, Waima, to discuss South Hokianga community water supplies. The outcome of the meeting was that the Far North District Council agreed to set up a taskforce to further address the issue.

#### **NZ River Awards**

The Mangere catchment is Northland's entry at the 2014 New Zealand River Awards, being held 27 November 2014 at Rydges Hotel in Wellington and attended by the Chairman, CEO and Council's Operations Director.

The Awards – run by the Morgan Foundation - are based on an examination of the data to find the most improved rivers and waterways in each region and nationally based on a single indicator. In contrast to Riverprize (below), an application is not required for the NZ River Awards – every officially monitored waterway<sup>6</sup> is automatically evaluated by the Award's judging panel.

The basis for this year's awards is the trend in dissolved reactive phosphates (DRP) data. Phosphates, in combination with nitrogen can trigger excessive plant growth including toxic algae, reduced oxygen and the death of fish and invertebrates in waterways. The main sources of phosphorous entering waterways include: human waste (sewerage); the runoff of fertiliser applied by farmers; and soil erosion. A Supreme Award will be presented for the most improved river in the country based on trend data for phosphate levels. There will also be awards for the second and third most improved rivers.

#### Riverprize

Waiora Northland Water priority catchment groups have the opportunity to mobilise their catchment to improve water management in their catchment via their diverse hapu and stakeholder representation and have their achievements recognised internationally.

The Morgan Foundation is putting up \$20,000 for the winner of the 2015 Morgan Foundation New Zealand Riverprize to reward and recognise those undertaking river, wetland, lake, or estuary restoration or protection. The winner and finalists will each receive a trophy and a cash prize. A grant will be made available to the winner to facilitate their knowledge and expertise to be shared. The winner will be announced at the 18th International River Symposium in Brisbane, scheduled for 21 - 23 September 2015, and will automatically qualify for the second stage of the prestigious Thiess International Riverprize<sup>7</sup>. Applications close 31 March 2015.

 <sup>6</sup> See <u>www.lawa.org.nz</u> for details of rivers monitored in each region.
 <sup>7</sup> More information is available on the International RiverFoundation website: http://www.riverfoundation.org.au/riverprize new zealand.php



#### **Environmental Education**

#### Gifted Kids Environmental Education spring workshop series

Students from three Bream Bay primary schools took part in a Northland Regional Council spring workshop series aimed at boosting the health of Whangarei Harbour and its catchment. The gifted and talented students were selected from One Tree Point, Ruakaka and Waipu schools for their particular environmental education interest. Among student action plans developed during the visits was one from two students who decided on having a cake stall selling cupcakes, chocolate cake and more to raise money for materials for farmers to use to fence off their waterways. Students wrote letters to thank harbour catchment farmers who've already fenced off their waterways. Examples of their efforts are available on Council's website: http://www.nrc.govt.nz/WHD

#### 2014 Youth Summit

feeding it.

The 19<sup>th</sup> annual Youth Summit was held Thursday 23 October at Onerahi Yacht Club. Thirty two Year Seven and Eight students from 11 Northland schools, from Kaingaroa to Ruawai explored ways in which they could play an active role in the future sustainable management of Northland's coast and the catchments

The students developed action plans to help sort local sustainable management issues. These included beach access in Opononi, controlling Kaipara Harbour fish pests to improve water quality, fish dumping on Tokerau Beach, rubbish cleanups on the Tutukaka coast and managing wastewater, stormwater and runoff issues in Whangarei Harbour.

Council's website: www.nrc.govt.nz/youthsummit showcases action plans and event

photos. Students' efforts will contribute to the health of Northland harbours including Bay of Islands, Hokianga, Whangarei and Kaipara along Ngunguru Estuary and the Doubtless Bay and Tutukaka coast catchments. .





Manaia Butler thanks Council for their



**Exploring Hokianga Harbour Catchment** 



#### Enviroschools

#### School caretaker workshop – WaiNurseries focus

Cr Shepherd opened the Enviroschools caretaker workshop hosted at Dargaville Intermediate School on 25 September 2014. The workshop provided an opportunity for school caretakers from the areas of Bay of Islands, Bream Bay, Dargaville, Kaeo, Ohaeawai, Oromahoe and Whangarei to learn horticultural best practice from Dargaville Intermediate, which is leading the way in growing, planting and maintaining riparian plants in partnership with the Integrated Kaipara Harbour Management Group.



#### 'On the Water' Expos

All rivers lead to the sea and this year's Enviroschools Expos were themed on the marine environment. The Expos saw more than 230 primary and intermediate students, teachers, family and community members gather at Waitangi and Marsden Cove on 4 and 6 November respectively, to learn more about our precious marine environment. Cr Brown was a part of 'On the Water' at Marsden Cove.

Participants rotated between four 'action stations': 'marine invader science experiments' (a working laboratory where students donned lab coats to examine and identify a variety of marine pests), 'whale rescue training', (led by the Department of Conservation, using inflatable whales), 'water craft safety' (how to safely take to the water on kayaks, paddleboards, jet skis and other vessels) and 'paddling waka' (a broader cultural experience with traditional and modern waka). The Expos also saw the deployment of 'Baby Blue' the smaller of council's vessel containment facilities.







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## ISSUE: Regional Plans Review Update

To: Environmental Management Committee, 8 December 2014

From: Ben Lee, Programme Manager – Policy Development

Date: 11 November 2014

Report Type:	✓ Normal operations	☑ Information	Decision
Purpose:		Public service	Regulatory function
	Legislative function	Annual\Long Term Plan	Other
Significance:		✓ Not Triggered	

#### **Executive Summary:**

The regional plans review is the first step to developing the new regional plan. As part of the review a series of 10 workshops was held with key stakeholders in October. Also four hui are being / were held in November targeted at tangata whenua. The regional plans review reports will be finalised by the end of the year. The next step will be to prepare the draft new regional plan, which is expected to take until mid 2016.

Refer to attached report for more details.

#### Legal compliance and significance assessment:

The activities detailed in this report are part of the council's day to day operations, are provided for in the council's 2012-2022 Long Term Plan, and are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002. The matters are not significant under council policy and are in accordance with the above legislation.

#### **Recommendation:**

1. That the report "Regional plans review update" by Ben Lee, Programme Manager – Policy Development and dated 11 November 2014, be received.

#### Attachment

#### Report

#### Background

The council administers three Resource Management Act (RMA) regional plans:

- Regional Air Quality Plan for Northland operative March 2003
- Regional Coastal Plan for Northland operative 1 July 2004
- Regional Water and Soil Plan for Northland operative 28 August 2004

The RMA requires regional plans to be reviewed every 10 years.

The review is the first step in the development of a new regional plan. The review includes a stocktake of:

- What we know about our resources and their use.
- Lessons learnt from administering the regional plans.
- Current legal and policy drivers.

The review will conclude with recommendations for the future direction of the new regional plan(s).

Proposed milestones and timeframes for developing the new regional plan(s):



#### Key stakeholder workshops

A workshop was held with the Environmental Management Committee in June to get feedback on the key preliminary findings of the draft review of the regional plans. Since then, the draft review reports were publically released, and a series of 10 workshops with key stakeholders was held over three weeks in October.

Overall the workshops were a success with:

- generally good attendance from a wide variety of interests,
- many positive reports from attendees, and
- good feedback to assist us with our review reports and the next step of preparing a draft new regional plan.

The presentations and notes from the workshop are on council's website – <u>http://www.nrc.govt.nz/Your-Council/Council-Projects/New-Regional-Plan/</u>

The water quality workshop attracted the most people with about 60. Most of the other workshops had between 25-35 attendees. Hazardous substances, air quality and natural hazards attracted less than 20.

Some highlights from the workshops:

- The subject of dams and how we are going to cater/provide for these into the future was raised as a significant issue. There was general consensus that water storage was going to become more of an issue for Northland in light of climate change and intensified farming practices, and in providing a level of security of supply.
- There was general consensus that tighter rules and intervention should only occur in those catchments deemed to have significant issues, e.g.. the requirement/practicalities for metering, which could otherwise be burdensome on smaller operators.
- Stakeholders generally agreed with the identified issues with the state and management of Northland's water quality. However, it was recognised that the regional council needs to improve its information base for some of the water quality issues, particularly regarding sediment in rivers and estuaries and nutrients in lakes.
- There were consistent calls for a stronger planning framework for the management of diffuse discharges, particularly by promoting, incentivising and where necessary requiring good management practices to prevent and minimise contaminant losses from the use of land. The key recognised challenge was coming up with a way to embed (require, monitor and enforce) good management practices in a regulatory framework.
- In relation to mangroves, there was some support for greater flexibility around the rules on removal by relating to the effects of removal to the value of the site. Mangroves, where they constitute part of the character of an area designated for protection (for example outstanding natural character areas), could be subject to stricter rules than mangroves in areas that are zoned for use and development.

#### Environmental hui

The tangata whenua engagement process for the regional plans review included commissioning Keir Volkerling to prepare a report on tangata whenua issues and options, and running a series of four hui across the region targeted at tangata whenua.

The hui will be / are a joint effort with the district councils. The hui are / were pitched as an opportunity for tangata whenua to share their concerns, ideas etc about Northland's environment and the way it's managed. The hui will help inform Keir Volkerling's report.

#### Finalising the review reports

Staff are finishing off their reports including incorporating the feedback from the workshops and hui. The final reports will be presented to the Regional Policy Committee at the 15 December 2014 meeting, along with Keir Volkerling's tangata whenua issues and options report.

#### Next steps

Once the regional plans review reports are finalised, the next step will be to start preparing the draft new regional plan(s). The Regional Policy Committee has yet to confirm the process for this, but it is expected they will do so early in the new year.

#### ITEM: 3

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Key decisions / recommendations the Regional Policy Committee will need to make include:

- The extent they'll be involved in directing the content of the draft new regional plan(s)
- Whether additional members representing outside organisations and interests are included on the committee
- Layout of the draft new regional plan(s)
- What elements are included in the plan(s) e.g. whether to include discretionary elements like issues and methods (other than rules)
- The section 32 report 'template' (the section 32 report summarises the justification for the objectives, policies etc).

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

ID: A668068

To: Environmental Management Committee, 8 December 2014

From: Tess Dacre, Compliance Monitoring Senior Programme Manager

Date: 10 November 2014

Report Type:	V	Normal operations	$\mathbf{\nabla}$	Information		Decision
Purpose:		Infrastructure		Public service	Q	Regulatory function
	$\square$	Legislative function	V	Annual\Long Term Plan		Other
Significance:		Triggered	V	Not Triggered		

#### **Executive Summary:**

The purpose of this report is to give an update on the resource consent compliance status of Northland's 29 community wastewater treatment plants and the actions being taken to remedy any non-compliance. Good progress is being made by all three district councils in bringing their treatment plants into consistent compliance.

#### Legal compliance and significance assessment:

The activities detailed in this report are provided for in the council's 2012-22 LongTerm 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 Community wastewater treatment plant discharges – current compliance status (updated) from Tess Dacre, Monitoring Programme Manager – Water and Wastes and dated 10 November 2014 be received.

#### Background

This report and the attached table provide a status update on the 29 community wastewater treatment plants (WWTP) operated by the region's three territorial authorities: Far North, Kaipara and Whāngārei District Councils (FNDC, KDC and WDC). FNDC has the most with 15 different WWTP across its district. WDC has nine and KDC has five. Also included in the table is the Hātea pump station and storage tank operated by WDC (this is also covered by a resource consent).

The majority of Northland's community wastewater treatment plants have up-to-date consents and routinely meet their required discharge and water quality standards. Good progress continues to be made by all three councils to improve wastewater treatment and bring all plants into consistent compliance.

FNDC now has only the Taipā wastewater treatment plant replacement discharge consent in process. A new consent for



Paihia was issued in August 2014. FNDC have several plants which have had ongoing non-compliance issues, including: Kaikohe, Paihia and Ompononi/ Omāpere. While these breaches have been on-going, they are however intermittent. FNDC have been working actively towards rectifying these issues. UV plants have recently been commissioned at the Whatuwhiwhi and Kaeo WWTPs. Recent monitoring results indicate that both discharges were fully compliant with water quality conditions of consent. An ecological study which FNDC commissioned for Kaikohe will be invaluable in driving future decisions on the best options for plant upgrades to achieve the best outcome for downstream ecosystem. An ecological assessment of the immediate receiving environment for the Taipā WWTP discharge is also being undertaken which will help determine appropriate options for improvement.



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Location/Consent	Page 1 of 6			
Status	Plant Description	Status & Issues	Update as at November 2014	
Ahipara (FNDC) Consent issued 2013, expiry 2033.	<ul> <li>Oxidation pond, surface flow wetland, overland flow to drain.</li> <li>Discharges to a tributary of Wairoa Stream.</li> </ul>	<ul> <li>No major operational issues.</li> </ul>	<ul> <li>Resource consent application lodged with NRC to allow for desludging.</li> <li>Desluding work scheduled for early summer 2014.</li> </ul>	
Hihi (FNDC) Consent issued 2011, expiry 2022.	<ul> <li>Extended aeration treatment system with flow equalisation and UV disinfection followed by surface flow wetland.</li> <li>Discharges to the Hihi Stream.</li> </ul>	<ul> <li>There is significant stormwater infiltration to the reticulation system, however, some improvements have been made. 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.</li> <li>Treatment quality now fully compliant with RC requirements.</li> </ul>	Nothing new to report.	
Kaeo (FNDC) Consent issued 2007, expiry 2022. Changed consent issued October 2011.	<ul> <li>Settlement and oxidation ponds</li> <li>Packed bed reactor incorporating vermiculture.</li> <li>Wetland.</li> <li>Discharges to the Kaeo River.</li> </ul>	Consent requires 4-log reduction of viral indicators to protect downstream oyster farms.	<ul> <li>The UV filter from Awanui WWTP has been installed at Kaeo and commissioning commenced on 7 August 2014.</li> <li>The last two samples show 4-log consent requirement is now being achieved.</li> </ul>	
Kaikohe (FNDC) Consent issued 2005, expiry 2021. Changed consent issued 19 April 2011.	<ul> <li>Anaerobic pond, large facultative pond, three surface flow wetlands.</li> <li>Discharges to a tributary of the Wairoro stream.</li> </ul>	<ul> <li>The Kaikohe ponds often suffer from blue green algae blooms in summer.</li> <li>Problems with compliance during low flows (ammoniacal nitrogen exceeds consent limit).</li> </ul>	<ul> <li>FNDC commissioned the Cawthron Institute to undertake a detailed assessment on the effects of the intermittent ammonia exceedances on stream life.</li> <li>The report was completed in September 2014 and suggests that downstream habitat is being affected by the wastewater treatment plant discharge but these affects were due to eutrophication as opposed to ammonia toxicity.</li> <li>In other words, complying with the ammonia standard won't necessarily improve conditions downstream of the discharge.</li> <li>FNDC will be working with NRC staff to work towards developing an appropriate means of managing the effects of the discharge.</li> </ul>	
Kaitāia (FNDC) Consent issued 2005, expiry 2021.	<ul> <li>Two ponds plus floating wetland cells.</li> <li>Discharges to the Awanui River.</li> </ul>	<ul> <li>Main issue is blue green algae and discharge during summer.</li> <li>Upgrade condition requiring installation of a disinfection unit by August 2008 – this has not been done. However, monitoring results indicate that &gt;5 log reduction in phages</li> </ul>	<ul> <li>Nothing new to report with regard to the WWTP.</li> <li>NRC and FNDC are undertaking additional monitoring to establish the</li> </ul>	

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Location/Consent Status	Plant Description	Status & Issues	Update as at November 2014
		<ul> <li>(virus indicators) is being achieved.</li> <li>Consent routinely meets all discharge standards. However technically the consent is being breached because the WWTP does not include a "disinfection system".</li> <li>FNDC will apply in early 2015 to change the consent to resolve the technical non-compliance.</li> <li>No exceedances of the consent limits for algae occurred during summer 2013/14.</li> <li>Significant issues with the Kaitaia reticulation network have been raised. FNDC are currently assessing options for remediation.</li> </ul>	<ul> <li>effects of the reticulation overflows on the environment. The monitoring sites are shown on attached map.</li> <li>Flow monitoring equipment has been installed at Bank Street and Pukepoto Road Bridge.</li> <li>These investigations will help determine what works will be required to remedy the situation. FNDC will provide a progress report to NRC at the end of March 2015.</li> </ul>
Kawakawa (FNDC) Consent issued 2012, expiry 2036.	<ul> <li>Aeration tank, a secondary clarifier, a disc filter, UV treatment and then to constructed wetlands.</li> <li>Discharges to Kawakawa River.</li> </ul>	<ul> <li>System usually working well since upgrade.</li> <li>Upper Kawakawa shellfish monitoring site for viruses once one of the worst sites now one of the best.</li> <li>May 2014 compliance visit found significant non-compliance. An infringement notice was issued.</li> <li>Operational changes have since been made to stop the problem and site has been fully compliant since June.</li> </ul>	Nothing new to report.
Kerikeri (FNDC) Consent issued 2005, expiry 2015.	<ul> <li>Aerated treatment system (solids separation, RCBs, and clarifiers).</li> <li>System has UV unit (operates poorly).</li> <li>Discharges to the Waitangi forest natural wetland (a tributary of the Kerikeri Inlet).</li> </ul>	<ul> <li>Historically, the system has had significant odour problems.</li> <li>Ongoing issues with performance of disinfection unit due to poor quality effluent.</li> <li>FNDC has decided to build a new treatment plant at the current Kerikeri WWTP site and reticulate the rest of central Kerikeri.</li> <li>Resource consents will be lodged for the activity in December 2014.</li> <li>Community liaison meeting outstanding. FNDC staff have confirmed that meetings will be established by the end of 2014.</li> </ul>	<ul> <li>FNDC are still assessing options for a new treatment plant at Kerikeri.</li> <li>Community and landowner consultation has commenced.</li> <li>Iwi consultation has also commenced.</li> </ul>
Kohukohu (FNDC) Consent issued 2002, expiry 2016.	<ul> <li>Septic tanks followed by oxidation pond and surface flow wetland.</li> <li>Discharges to Hokianga Hbr.</li> </ul>	<ul> <li>Consistently complies with water quality conditions of consent.</li> <li>No outstanding issues.</li> </ul>	Nothing new to report.
Opononi and Omāpere (FNDC) Consent issued 2009, expiry 2019.	<ul> <li>Primary screen, aerated pond, facultative pond, surface flow wetland.</li> <li>Discharges to Hokianga Harbour (on outgoing tide).</li> </ul>	<ul> <li>Stormwater infiltration is an issue.</li> <li>During significant rainfall events the discharge will at times occur outside of the tidal flow condition to prevent overtopping of the wetland.</li> <li>Issue complying with Ecoli condition of consent.</li> <li>FNDC intends to carry out a district wide investigation of inflow</li> </ul>	<ul> <li>The wetlands are in the process of being dewatered in preparation for desluding.</li> </ul>

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Location/Consent	Plant Description	Status & Issues	Update as at November 2014
Status		<ul> <li>&amp; infiltration and will include Opononi as part of a prioritised programme.</li> <li>Improvements in hydraulic retention and discharge pumping have been made to alleviate necessity to discharge outside of consented timeframes.</li> </ul>	
Paihia (FNDC) Consent issued 2004, expiry 2014.	<ul> <li>Two pond system.</li> <li>Discharges to the Waitangi forest natural wetland (a tributary of the Kerikeri Inlet).</li> </ul>	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.	<ul> <li>A new resource consent for the Paihia Scheme was granted in August 2014.</li> <li>That consent requires that the treatment plant is upgraded to reduce ammonia from the discharge by the end of April 2015.</li> <li>Design of the upgrade and preparation of contract documents in progress and LINZ approval for the upgrade was obtained on 6 November 2014.</li> <li>However, due to the escalating cost of the upgrade, a formal tender process is now required, which will add to timescale and it is unlikely the April 2015 deadline will be met.</li> <li>A full report on progress will be provided to NRC on 5 December 2014 as per the requirements of the new resource consent.</li> </ul>
Rangiputa (FNDC) Consent issued 2008, expiry 2032.	<ul> <li>Oxidation ponds.</li> <li>Discharges to ground via the base of a third pond.</li> </ul>	<ul> <li>No current performance issues with this treatment system.</li> </ul>	<ul> <li>Nothing new to report.</li> </ul>
Rāwene (FNDC) consent issued May 2013, expiry 2023.	<ul> <li>Anaerobic pond, facultative pond &amp; surface flow wetland.</li> <li>Discharges to Omanaia River.</li> </ul>	<ul> <li>No current performance issues with this treatment system.</li> </ul>	<ul> <li>Nothing new to report.</li> </ul>
Russell (FNDC) Consent issued September 2013, expiry 2024.	<ul> <li>Aerated treatment system, surface flow wetland, filtration and UV disinfection.</li> <li>Discharges to deep bores.</li> </ul>	<ul> <li>No significant issues at this point.</li> <li>Usually consistently complies with water quality conditions of consent.</li> <li>Mechanical failures in May 2014 resulted in significant non-compliance. An infringement notice was issued.</li> </ul>	<ul> <li>Nothing new to report.</li> </ul>
Taipā (East Coast Bays) (FNDC) Consent expired 2008. Replacement consent		<ul> <li>Problems with blue green algae in the discharge at times.</li> <li>High ammonia and suspended solids from the marsh discharge at times.</li> <li>Application is still in process.</li> </ul>	• FNDC has commissioned an ecological assessment of the receiving environment to gain a better understanding of the effects of the current discharge. This

# Attachment to Item 4 Page 4 of 6

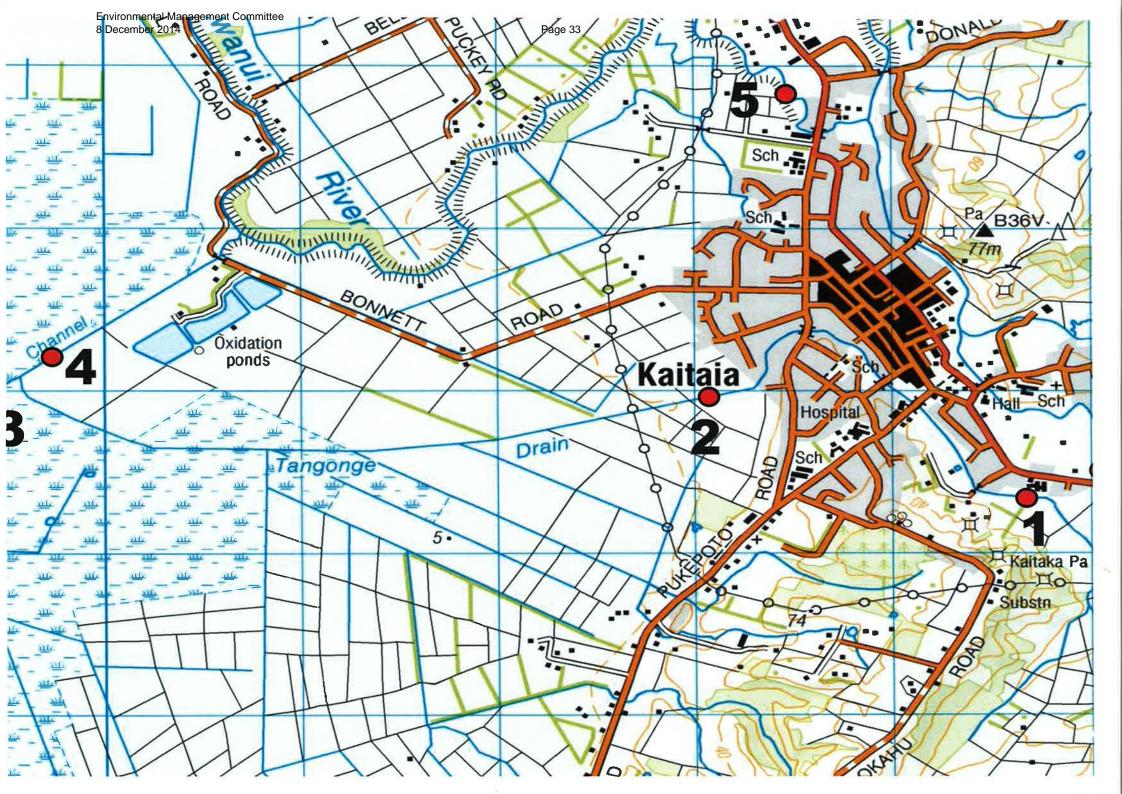
Location/Consent		Page 4 c	
Status	Plant Description	Status & Issues	Update as at November 2014
in process – on hold to allow assessment of land disposal option. Significant opposition to WWTP operation.	the Parapara Stream.		technical work will be used to support the consent process, which FNDC would like to reconvene in early 2015.
Whatuwhiwhi (FNDC) Consent issued 2007, expiry 2025.	<ul> <li>Two aerated ponds equipped with biological growth media.</li> <li>Discharges to natural wetland which extends down to Karikari Bay.</li> </ul>	<ul> <li>Consistently does not comply with faecal coliform discharge condition of consent.</li> <li>An abatement notice was issued in July 2014 for ongoing non-compliance.</li> </ul>	• The newly installed UV plant has been commissioned, with the latest results indicating full compliance with the water quality conditions of consent.
Dargaville (KDC) Consent issued 2007, expiry 2022.	<ul> <li>Facultative pond and wetland/maturation pond.</li> <li>Discharges to the Northern Wairoa River.</li> </ul>	<ul> <li>CCTV investigations to identify areas of inflow and infiltration to the wastewater reticulation network have been undertaken</li> <li>Consistently complies with water quality conditions of consent.</li> <li>Wastewater reticulation repairs are ongoing to further reduce inflow and infiltration to the network.</li> <li>KDC are looking into current exceedances regarding monthly discharge volumes during winter.</li> </ul>	<ul> <li>Nothing new to report.</li> </ul>
Kaiwaka (KDC) Consent issued 2010, expiry 2022.	<ul> <li>Aerated pond and constructed wetland.</li> <li>Discharge to Pukekaroro Stream</li> </ul>	<ul> <li>Issues with complying with water quality conditions of consent.</li> <li>De-sludging of the oxidation pond has been completed.</li> <li>Hoping to see improvements in water quality now that the pond has been renovated.</li> <li>KDC often late with submission of reports and monitoring data.</li> <li>KDC are going to replace the ultrasonic flow meter with a Magflow meter at the discharge point this financial year.</li> <li>KDC investigating operation of an aerator.</li> <li>KDC working on setting up system to send data in appropriate excel format and on time.</li> </ul>	Nothing new to report.
Maungaturoto (KDC) Consent issued 2008, expiry 2032.	<ul> <li>Aerated pond, membrane filtration plant, storage pond, discharge to rock filter.</li> <li>Discharges to the Wairau River.</li> </ul>	<ul> <li>No current issues with plant operation.</li> <li>KDC often late with submission of reports and monitoring data.</li> <li>KDC working on setting up system to send data in appropriate excel format and on time.</li> <li>Discharge at 'extreme wet weather' rate during last storm event to prevent overflow of untreated WW from oxidation pond.</li> </ul>	Nothing new to report.
Mangawhai – Ecocare (KDC)	<ul> <li>Screening, CASS tanks, chlorination and then</li> </ul>	<ul> <li>Consistently complies with water quality conditions of RC.</li> <li>KDC are investigating additional wastewater disposal options.</li> </ul>	Nothing new to report.

# Attachment to Item 4 Page 5 of 6

Page 5 of Location/Consent Description			
Status	Plant Description	Status & Issues	Update as at November 2014
Consent issued 2007, expiry 2042.	<ul><li>pumped to storage dam.</li><li>Irrigated to farmland.</li></ul>		
Te Kopuru (KDC) Consent issued 2010, expiry 2044.	<ul> <li>Oxidation ponds and constructed wetland.</li> <li>Discharges to Northern Wairoa River.</li> </ul>	<ul> <li>Ongoing non-compliance for suspended solids and Ecoli.</li> <li>De-sludging of oxidation pond has been completed.</li> </ul>	<ul> <li>Ongoing non-compliance with the bacteriological condition of consent. However, improvements in suspended solids concentration have been achieved.</li> <li>KDC are undertaking detailed wetland monitoring to determine the cause in elevated Ecoli concentrations.</li> <li>Wastewater meter to measure discharge volumes is planned to be installed.</li> </ul>
Hātea Pump Station & Storage Tank (WDC) Consent issued July 2013.	<ul> <li>Storage tank, UV unit and chemical treatment.</li> </ul>	<ul> <li>Plant commissioned in July 2013 and has generally performed well.</li> <li>Additional connections to the storage station and UV treatment are planned. The connections are intended to decrease untreated overflows downstream of the Hatea during storm events. Works are looking to be completed by the end of October 2014.</li> </ul>	<ul> <li>Nothing new to report.</li> </ul>
Hikurangi (WDC) Consent issued 2007 (re-issued 2010), expiry 2025.	<ul> <li>Settling pond, aerated pond, wetland and membrane filter for disinfection.</li> <li>Discharges to Mangawhero stream.</li> </ul>	<ul> <li>Plant has been operating well.</li> <li>Plant is now running again after wetland de-sludging and upgrade works have, for the most part, been completed.</li> <li>Upgrade has resulted in better wastewater volume management.</li> <li>A floating wetland system has been installed and the plants are becoming established.</li> </ul>	• There were high waste water levels in the plant over winter, however the plant is currently complying with discharge standards.
Ngunguru (WDC) Consent issued 2010, expiry 2035.	<ul> <li>Aerated pond, settling pond, constructed wetland and UV unit.</li> <li>Discharges to tributary of the Waitoi creek.</li> </ul>	<ul> <li>Phone line installed in August 2013 to address alarm issue.</li> </ul>	<ul> <li>Recent non-compliances with water quality conditions of consent (including suspended solids, TKN, NH4).</li> <li>Awaiting investigation results from WDC.</li> <li>Telemetry still not fully operational.</li> </ul>
Oakura (WDC) Consent issued 2006, expiry 2025.	<ul> <li>Screening, sedimentation tanks, biological contactor unit, disc filter and UV unit.</li> <li>Discharges to forest land via dripper lines.</li> </ul>	<ul> <li>No issues with operation of plant.</li> </ul>	<ul> <li>Nothing new to report.</li> </ul>
Portland (WDC) Consent issued 2004, expiry 2024.	<ul> <li>Oxidation pond and constructed wetland.</li> <li>Discharges to Tokitoki Creek.</li> </ul>	<ul> <li>Consistently complies with water quality conditions of consent.</li> </ul>	<ul> <li>Nothing new to report.</li> </ul>
Ruakaka (WDC)	<ul> <li>Aerated pond and</li> </ul>	Irrigation area on Rama Road has been fully commissioned.	Nothing new to report.

# Attachment to Item 4 Page 6 of 6

Location/Consent Status	Plant Description	Status & Issues	Update as at November 2014
Consent issued 2008, expires 2018.	<ul> <li>constructed wetlands.</li> <li>Discharges to Bream Bay sand dunes.</li> </ul>	<ul> <li>WDC working to manage increased inflows into the plant. They are on-track to comply with annual volume limits in RC.</li> <li>Variation to consent issued June 2014 – the number of bores to be sampled reduced from 20 to 8 and quarterly sampling rather than monthly.</li> </ul>	
Tutukaka (WDC) Consent issued 2004, expiry 2024	<ul> <li>Screening, primary treatment, denitrification recirculation tanks, sand filters, UV unit and constructed wetland.</li> <li>Discharges to a tributary of Tutukaka Harbour.</li> </ul>	<ul> <li>Have had issues with the reliability of alarms.</li> <li>UV data now being received into SCADA and reports available.</li> <li>Phone line installed to improve reliability of coms and reduce operating costs.</li> <li>Plant is operating well and no compliance issues.</li> <li>Investigations are being undertaken to ensure UV lamps reach sufficient intensity prior to discharge of wastewater to ensure initial discharge receives required disinfection.</li> </ul>	Nothing new to report.
Waiōtira (WDC) Consent issued 2008, expiry 2030.	<ul> <li>Septic tank and constructed wetland.</li> <li>Discharges to Waiōtira Stream.</li> </ul>	Consistently complies with water quality conditions of consent.	<ul> <li>Nothing new to report.</li> </ul>
Waipū (WDC) Consent issued 2007, expiry 2015.	<ul> <li>Aerated pond, constructed wetland with discharge to rapid in-fill basins.</li> <li>Discharges to the Bream Bay coast via subsurface flow.</li> </ul>	Consistently complies with conditions of consent.	<ul> <li>De-sluging of Waipu's oxidation pond has been delayed until planned works such as a new screen, inlet flow meter, aerator and telemetry back to Kioreroa Road have been completed.</li> </ul>
Whāngārei Main WWTP (WDC) Consent issued 2004, expiry 2022. Change to consent applied for – currently in process.	<ul> <li>Screening, primary clarifiers, 1st and 2nd stage trickling filters, activated sludge basin and clarifiers, effluent filter, UV unit and normal to high flows go through wetlands.</li> <li>Discharges to Limeburners Creek.</li> </ul>	<ul> <li>Plan to upgrade Kioreroa Road wetland in summer 2014 and direct all flows to it once upgrade complete.</li> <li>Diversion to wetland will need the consent to be reviewed.</li> <li>WDC are currently installing a new line from the UV unit to the wetland.</li> <li>The last quarter saw elevated suspended solids and BOD in the UV discharge due to operational adjustments. This has now been rectified.</li> <li>The disc filters are presently non-operational, the possibility of seeking a change to the consented suspended solids in the final effluent is being considered.</li> </ul>	<ul> <li>Desludging of the wetland has recommenced after works were suspended for the winter.</li> <li>Suspended solids and BOD concentrations are currently non- compliant with RC conditions. Solutions are being investigated by WDC.</li> </ul>



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# ISSUE: Stock in Streams Update

ID:	A702388

To: Environmental Management Committee, 8 December 2014

From: Tess Dacre, Compliance Senior Programme Manager

Date: 5 November 2014

Report Type:	$\mathbf{\nabla}$	Normal operations	$\mathbf{\Lambda}$	Information		Decision
Purpose:		Infrastructure		Public service	V	Regulatory function
	V	Legislative function		Annual\Long Term Plan		Other
Significance:		Triggered	V	Not Triggered		

# Executive Summary:

- Council does not have a specific active monitoring programme for stock in streams but responds to complaints and reports.
- The number of "stock in water" incidents reported to the council's Environmental Hotline is increasing indicating reduced public acceptance of this activity.
- Currently staff rely mainly on the co-operation of landowners to prevent stock access to waterways. The council's Environment Fund is used as an incentive to fence water bodies to prevent stock access.
- Some farms do not have reticulated stock water supply systems.
- There are no national environmental standards or regulations that directly prohibit or restrict stock access to water bodies.
- The current rules in the *Regional Water & Soil Plan for Northland* do not stipulate that stock must be excluded from water bodies.
- Enforcement is therefore not straight forward and has been used sparingly to date.

# Legal compliance and significance assessment:

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.

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(s):

- 1. That the report Stock in Streams Update by Tess Dacre, Compliance Senior Programme Manager, dated 5 November 2014, be received.
- 2. That we undertake the following actions in response to stock in stream incidents:
  - Take enforcement action where it is clear cut;
  - Continue with Farm Water Quality Improvement Plans and E-Fund grants to encourage stock exclusion; and

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 Continue to develop policies and rules through the Regional Plan reviews.

# Stock in water incidents

For the five years up to 31 December 2010 there were 7 stock in water incidents reported to the Environmental Hotline. Since 1 January 2010 there have been 90 stock in water incidents reported to the environmental hotline (an average of 18 per year for the last 5 years). For 2014, to date, there have been 24 stock in water incidents reported to the hotline. Seventeen of these related to beef stock (71%), three to dairy cows (12%) and four were not specified or related to pigs/other stock.

Since 1 January 2011, Environmental River Patrol (ERP) has reported 22 stock in water incidents to the hotline (this is 44% of the total received during that period).

The incidents reported to the hotline include:

- A few animals grazing riparian margins;
- Beef stock which have access to streams and have no alternate water supply; and
- Dairy herds grazing riparian margins with access to waterways.

The reports from ERP generally include maps and photos. These reports often relate to several kilometres of stream/river (or as much as 7 kilometres).

Figure 1 (attached) shows the approximate location of all stock in water incidents across Northland since 1 January 2010.

Some of these incidents have attracted media attention.

# Existing relevant legislation/policies/accords

Section 13(2) of the Resource Management Act 1991 (RMA) provides for the control of access to, and the disturbance of plants / animals / habitats in, on, or under the beds lakes and rivers. Section 13(2) RMA essentially allows this activity unless it *contravenes a national environmental standard or a regional rule.* 

There are no national environmental standards or regulations that prohibit or restrict stock access to water bodies.

The Regional Water and Soil Plan for Northland (RWSP) was written on the presumption that stock access to freshwater bodies is a section 13(2) RMA activity. It is silent on the matter except in relation to significant indigenous wetlands, and therefore does not restrict stock access to other freshwater bodies.

Discharges directly to water by stock (urine and dung) are controlled under section 15(1) RMA and, in contrast to section 13(2), such discharges are not expressly allowed unless permitted by *a* national environmental standard or other regulations, regional rule or resource consent.

There are no national environmental standards or regulations that expressly allow such discharges and the RWSP is again silent, therefore there are no rules allowing such discharges and so strictly speaking resource consent is required for discharges by stock to freshwater (a discretionary activity). Council only takes enforcement

Page 3 of 5

action where adverse effects are more than *de minimis*<sup>1</sup>. Proving adverse effects can be very difficult. This is particularly the case with many stock in water incidents, where individually the environmental effects are minor. However, this fails to take into account the cumulative effects of such activities.

There are also industry initiatives relating to stock in waterways – the most advanced is the *Sustainable Dairying: Water Accord* which replaced the *Clean Streams Accord*. This came into effect on 1 August 2013. Northland Regional Council is a "Friend of the Accord", but not an Accountable or Supporting Partner. The key aspect of the new accord in relation to riparian management is that:

Dairy cattle will be excluded from waterways and drains greater than one metre in width and deeper than 30cm and significant wetlands on dairy farms according to the following phase-in timetable:

For waterways and drains

- 90% exclusion of the length present on dairy farms by 31 May 2014; and
- 100% of the length present on dairy farms by 31 May 2017.

For significant wetlands

- 100% exclusion of all wetlands identified by a regional council as at 31 May 2012 by 31 May 2014; and
- 100% exclusion of any additional regionally significant wetlands present on dairy farms within three years of them being identified by the regional council.

The Accord also has targets for regular stock crossing points. Obviously the Accord does not apply to any non-dairy stock/land. Fonterra reports that in Northland more than 90% of accord waterways have now been fenced. However, they note that this figure has not yet been confirmed on the ground.

# Current response to stock in water incidents

The current protocol for responding to stock in water incidents (including the reports from ERP) is as follows:

- An acknowledgement email is sent to the incident reporter.
- The incident is raised in the council's "IRIS" electronic database.
- The NRC land management team will be advised of the incident to check if they have any existing customer interactions (e.g. E-Fund applications and/or Farm Water Quality Improvement Plan)<sup>2</sup>.
- The land management team will contact the landowner(s) directly or a standard "stock in water" letter will be sent out.
- The land management team advise incident reporter of outcome.

In a few cases enforcement action has been taken. Abatement notices and/or infringement notices have been issued for cases of extremely heavy grazing (sacrifice grazing) which had caused (or were very likely to cause) sediment discharges to

<sup>&</sup>lt;sup>1</sup> An effect of no or trifling consequence in law

<sup>&</sup>lt;sup>2</sup> There have now been over 280 Farm Water Quality Improvement Plans developed, plus over 130 km of fencing has been funded by the E-Fund since 1 July 2014. Refer to the update item in this agenda.

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water. Where abatement notices are issued, these cannot require fencing. To be legally sound, they can only require that the adverse effects cease (e.g. any discharge or river bed disturbance). The lack of a specific rule in the RWSP requiring stock exclusion makes it more difficult to address these types of incidents – especially where landowners refuse to exclude their stock from waterways.

# **Future options**

The operational options for responding to stock in water incidents include:

- i. Continue with the current regime which is largely reliant on the voluntary cooperation of landowners and the provision of assistance through the Environment Fund.
- ii. Increase resources to undertake more advisory work.
- iii. Increase resources to undertake more enforcement work.

There are also other options available under council's RMA planning documents. Council notified decisions on the Proposed Regional Policy Statement (PRPS) in September 2013. The PRPS includes a policy<sup>3</sup> to improve overall quality of Northland's water resources by (among other things) reducing sediment and faecal pollution. An associated method<sup>4</sup> requires the exclusion of livestock from the beds and margins of streams, rivers, lakes wetlands in intensively grazed areas and encourages livestock exclusion in all other areas. These provisions are under appeal to the Environment Court and currently in mediation.

Once the PRPS provisions are finalised, the review and re-drafting of the regional plans (including the RWSP) will provide for implementation of these policies and methods. We anticipate that the details of the stock exclusion provisions (i.e. the rules and the circumstances where they apply) will be developed in close consultation with the relevant industries, stakeholders and other interested parties.

<sup>&</sup>lt;sup>3</sup> Policy 4.2.1

<sup>&</sup>lt;sup>4</sup> Method 4.2.2

# ITEM: 5 Page 5 of 5

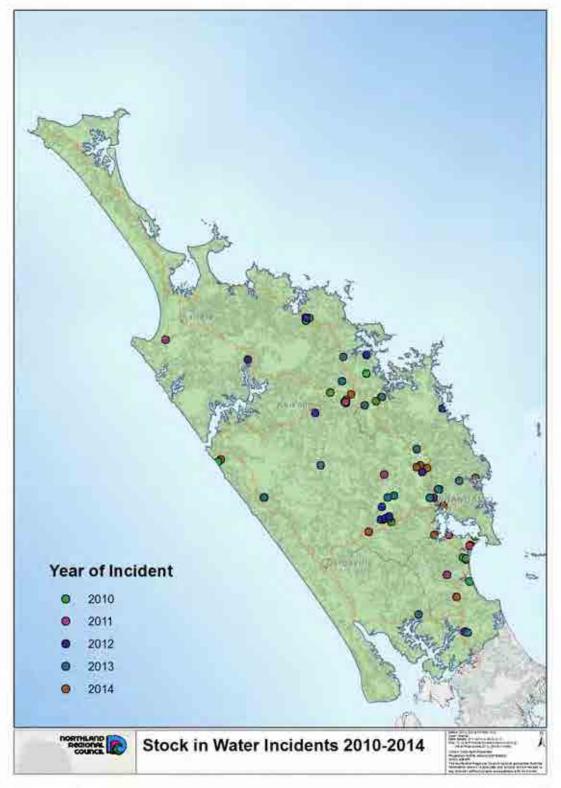


Figure 1. Locations of stock in water incidents reported to Environmental Hotline.

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ITEM: 6 Page 1 of 4

# ISSUE: Environment Fund & Farm Water Quality Improvement Plan Update

ID: A704123

To: Environmental Management Committee, 8 December 2014

From: Bruce Howse, Land/Rivers Senior Programme Manager

Date: 12 November 2014

Report Type:	Normal operations		Information	Decision
Purpose:	Infrastructure		Public service	Regulatory function
	Legislative function	✓	Annual\Long Term Plan	Other
Significance:	Triggered	✓	Not Triggered	

# **Executive Summary:**

Year to date 83% (\$643,030.25) of the Environment Fund budget has been allocated (to a total of 148 projects), leaving \$49,519.75 of uncommitted budget remaining for allocation.

The Whangarei Native Bird Recovery Centre (<u>www.nbr.org.nz</u>) has requested funding of \$5,000 plus GST to assist with seabird rescue and recovery.

Year to date a total of 20 FWQIP have been completed, with a further 38 in progress.

# Legal Compliance and Significance Assessment:

The activities detailed in this report are provided for in the council's 2012-2022 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.

# **Recommendations:**

- 1. That the report Environment Fund & Farm Water Quality Improvement Plan Update by Bruce Howse, Land/Rivers Senior Programme Manager and dated 12 November 2014 be received.
- 2. That the Committee approves the Whangarei Native Bird Recovery Centre funding request for \$5,000 plus GST, providing that the funding be used by the Centre for Kiwi recovery work.

# Report

#### **Environment Fund Update**

The funding allocations for year to date are provided in Table 1.

Year to date 93% (\$643,030.20) of the Environment Fund budget has been allocated (to a total of 148 projects), leaving \$49,519.75 of budget remaining for allocation.

Table 1. Environment Fund funding allocation to date.								
Delegated	Land/	Number Of	Allocation	Budget				
Authority	Biosecurity	Projects						
1 – July 2014	Land	19	\$ 58,883.90					
2 – Aug 2014	Land	45	\$166,083.25					
3 – Aug 2014	Land <sup>1</sup>	1	\$ 16,900.00					
3 – Aug 2014	Biosecurity	42	\$ 92,550.00					
4 – Sept 2014	Land	21	\$ 80,251.90					
5 - Oct 2014	Land	15	\$ 81,804.50					
6 - Nov 2014	Land	20	\$ 76,556.70					
Committed	Coastcare		\$ 45,000.00					
Funds	Soil Con		\$ 25,000.00					
Allocation to			\$643,030.25					
date								
Budget	Land			\$600,000				
	Biosecurity			\$ 75,000				
	Biosecurity –			\$ 17,550				
	approved from Land							
	Management Reserve							
Total Budget				\$692,550				
Less Allocation			\$643,030.25					
To Date								
Unallocated				\$49,519.75				
Budget Year								
To Date								

#### Table 1. Environment Fund funding allocation to date.

The delegated authority list of approved funding allocations for October 2014 is provided as **Attachment 1**.

The delegated authority list of approved funding allocations for October 2014 is provided as **Attachment 2.** 

# **Exceptional Project Application**

The Whangarei Native Bird Recovery Centre (<u>www.nbr.org.nz</u>) has requested funding of \$5,000 plus GST to assist with seabird rescue and recovery. The request is based on injured seabirds that are rescued from boat ramps and the sea and taken to the Centre where they receive treatment and released back to the wild after successful treatment.

The Centre has previously received \$5,000 funding from the Environment Fund to assist with the costs of operating the Centre following a submission to an Annual Plan.

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The recovery and rehabilitation of seabirds is not closely aligned with Councils core functions and is not considered a high priority project. Nevertheless, the Centre runs an incubation unit and recovery pens for kiwi, which is used to incubate eggs found in the wild and also as a recovery area for injured kiwi. Provision of funding on the basis of this being used to support the Centre' Kiwi recovery endeavor's is considered a closer alignment with Council priorities, particularly in respect of Council biosecurity and biodiversity work programmes.

It is recommended that the requested funding be granted on the provision that the funding sought be put toward Kiwi recovery work.

# Farm Water Quality Improvement Plans (FWQIP)

Year to date a total of 20 FWQIP have been completed, with a further 38 in progress as per Table 2.

The progress of 58 FWQIP for 2014/15 is predominantly drystock in the Far North and Whangarei – see table 2 below and figure.

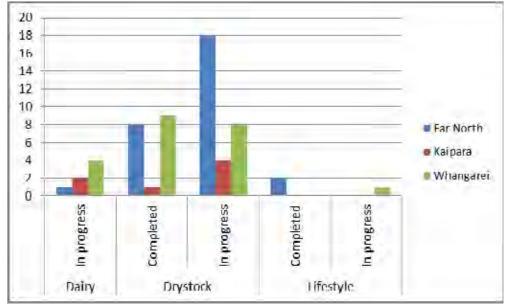
- Nearly 35% of 2014/15 Environment Fund allocations to date have been for projects which already have a FWQIP.
- A few Environment Fund allocations have been provided to small properties which will not benefit from a formal FWQIP.
- Many of the properties that have received funding this current financial year (since 1 July 2014) had farm visits in autumn, with the FWQIP number assigned in the 2013/14 year.
- Priority has been progressing Efund applications and 93% of the fund has been allocated. This will allow progress on FWQIPs later in the year.

ITEM:	6
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			uge
e 2.	Farm Water	Quality Improvement Plans (FWQIP) from 1 July to 12	
emb	er 2014		

Table 2. Farm Water Quality Improvement Plans (FWQIP) from 1 July to 12           November 2014								
FARM TYPE	STATUS OF FWQIP	FAR NORTH	KAIPARA	WHANGAREI	TOTAL			
DAIRY	In Progress	1	2	4	7			
DRYSTOCK	Completed	8	1	9	18			
	In Progress	18	4	8	30			
LIFESTYLE	Completed	2			2			
	In Progress			1	1			
TOTAL		29	7	22	58			

Figure 1. FWQIPs 2014/15 year



EFD No.	FWQIP	NRC STAFF MEMBER	Applicant	Previous Funding Year(s)	Previous Funding Amount(s)	Farm Type	Funding Stream	Priority Catchment	District	Brief Project Description		ount mended
APP 036975	24	ROM	Gumtown Holdings Limited	N/A		Drystock	Water Quality	Mangere	Whangarei	Fencing	\$	3,930 00
APP.036167.02.01	148	ROM	DB Douglas Limited	2013/14	\$ 2,840.00	Dairy	Water Quality		Whangarei	Fencing	\$	1 250 00
APP 037168	279	DUK	Oromahoe 18 R2B2B2 Trust	2012/13 2013/14	\$ 9,778.96 \$ 2.375.00	Drystock	Water Quality	Waitangi	Far North	Fencing	s	5,860.00
APP 037161	100	DUK	Landcorp Farming Limited (Kapiro Station Ltd)	N/A		Drystock	Water Quality		Far North	Fencing	\$	6,565,00
APP 037162	101	DUK	Landcorp Farming Limited (Takou Bay Ltd)	N/A		Dairy	Water Quality		Far North	Fencing	\$	4,895.00
APP.036451	99	DUK	Landcorp Farming Limited (Omamari Station)	N/A		Drystock	Top Wetland	_	Far North	Fencing	\$	11,223.00
APP.037143	274	ASE	RL & G Shepherd	N/A		Drystock	Water Quality		Far North	Fencing	\$	987 00
APP.037181	151	ASE	Matthew Jordan	2013/14	\$ 1,340.00	Drystock	Water Quality		Far North	Fencing	\$	1,424.00
APP 037175	277	BRG	Taharoa Flats Limited	N/A	\$ 6,411.50	Drystock	Water Quality		Whangarei	Fencing	\$	6,411.50
APP 036854	276	BRG	Totara Creek Ltd (Nathan & Sharleen Gardner)	N/A		Drystock	Water Quality	-	Kaipara	Fencing	\$	1,170.00
APP 037140	N/A	LAS	Whangarei District Council	N/A		-	Coastal-Coastcare		Whangarei	Dune Restoration	\$	15 140.00
APP.037018 02.01	N/A	LAS	Margaret Hughes	2014/15	\$ 2,868.00		Coastal-Coastcare	1	Whangarei	Dune Restoration	\$	1,355.00
APP 037141	N/A	LAS	Whangarei District Council	N/A			Coastal-Coastcare		Whangarei	Dune Restoration	\$	3,750.00
APP.037167	275	KWE	John Ferguson	N/A		Drystock	Water Quality		Kaipara	Fencing	s	6.050.00
APP.037166	244	KWE	Leslie Ralph Kenworthy-Thompson	N/A		Drystock	Water Quality		Kaipara	Fencing & Planting	\$	3,876.00
APP.037137	97	KWE	James Robert Parsons	143 11/14	\$ 3,940.00	Drystock	Water Quality		Kaipara	Fencing	\$	6,918.00

Approved Under Delegated Authority

Bruce Howse Land & Rivers Senior Programme Manager

Date: 16 October 2014

Summary Sighted by Councillor

Chairman - Northland Regional Council

Date:

												1
EFD No.	FWQIP	NRC STAFF MEMBER	Applicant	Previous Funding Year(s)	Previous Funding Amount(s)	Farm Type	Funding Stream	Priority Catchment	District	Brief Project Description	Amount Recommended	
APP 037136	272	DUK	Richard Mark and Susan Beverley Pinny	N/A		Drystock	Water Quality		Far North	Fencing	\$ 5,040.00	3
APP 036163 02 01	142	ROM	Opuawhanga Farms Limited (Amblers)	2013	\$ 5,000.00	Dairy	Water Quality		Whangarei	Fencing	\$ 4,199.00	
APP.036164.02.01	143	ROM	Lea Rig Farms Limited (Julls)	2013	\$ 5,000.00	) Dairy	Water Quality		Whangarei	Fencina	\$ 2 490 00	
APP.036165.02.01	144	ROM	Lea Rig Farms Limited (Home Farm)	2013	\$ 5,000.00	Dairy	Water Quality		Whangarei	Fencina	\$ 637.00	1
APP 036255	173	ROM	Landcorp Farming Limited (Titoki Station)	N/A	\$ 7,000.00	Drystock	Water Quality		Whangarei	Fencing	\$ 7,000.00	<u>.</u>
APP.037242	174	KWE	Donelley Farms Limited	N/A	(	Drystock	Water Quality	201	Whangarei	Fencing	\$ 3,320,00	2
APP 037212	132	DEJ	Crowebar Farms Ltd (Anthony Hall & Michelle Crowe)	N/A	()'	Dairy	Water Quality		Whangarei	Fencing & Planting	\$ 3,267.00	٤
APP 037216	271	DEJ	Windy Ridge Farmers Limited	N/A	('	Drystock	Water Quality		Whangarei	Fencino	\$ 24.715.00	\$3930
APP 037256	285	DEJ	W & S Pepper Limited	N/A		Dairy	Water Quality		Whangarei	Fencing	\$ 5,000.00	L
		-		-2044	£ 12,546.00		1					
APP 037232	147	DEJ	Craig and Greta Louise Harman	2011	\$ 12,616.00	Drystock	Water Quality		Whangarei	Fencing	\$ 7,000.00	2
APP 037249	284	LOD	Jeanne Cole	N/A		Drystock	Water Quality		Whangarei	Fencina	\$ 5,096.70	<u>.</u>
APP 037139	273	LOD	Adam Blackwell	N/A	()	Drystock	Water Quality		Whangarei	Fencing	\$ 2,506.00	2
APP 037207	278	LOD	AJ & JM Bradlev	N/A		Drystock	Water Quality		Kaipara	Fencing	\$ 3 297 50	<u>.</u>
APP 037236	283	LOD	Eventing Northland Incorporated	N/A	('	Drystock	Water Quality		Whangarei	Fencing	\$ 2,574.00	1
APP 037258	56	ASE	Campbell Farms Maromaku Limited (Oetzman Road)	N/A	· · · · · · · · · · · · · · · · · · ·	Drystock	Water Quality		Far North	Fencing	\$ 1.772.00	
APP.037259	57	ASE	Campbell Farms Maromaku Limited (Callaghan Road)	N/A	()	Drystock	Water Quality		Far North	Fencing	s -5:284:00"	- \$4,75
APP 036119.02.01	156	ASE	Rvan and Dernelsa Lilly	N/A	( '	Drystock	Water Quality		Far North	Fencing	\$ 3 220 00	2
		-	Larry Matthews	2011	\$ 9.610.00		(					4
]			Larry Matthews	2013	\$ 12,303.00		(		()	4	1	_
			Larry Matthews	2014	\$ 1,989.00					4 /		-
APP 037251	238	ASE	Larry Matthews	2014	\$ 4,993.00		Water Quality	Doubtless Bav	Far North	Fencing	\$ 4,993.00	
APP 037251	281	ASE	Waimamaku Beach Company Limited	2014	\$ 2,058 90		Water Quality		Far North	Fencing & Planting		
APP.037023.02.01	262	BRG	Allister McCahon, Upson Downs Limited	2014	\$ 1,300.00	Drystock	Water Quality		Kaipara	Fencina	\$4.700.00	= \$440

Approved Under Delegated Authority Bruce Howse

Land & Rivers Senior Programme Manager

Data: [2/11/2014

nmary Sighted by Councillor BitSnepherd

Chairman - Northland Regional Council

Date: 12/11/2014

78.231.10 -\$

TOTAL

\$76,556.70

# ISSUE: River Management Update

A702257

To: Environmental Management Committee, 8 December 2014

From: Joseph Camuso, Rivers Programme Manager

Date: 11 November 2014

Report Type:	Normal operations	☑ Information	Decision
Purpose:	☑ Infrastructure	Public service	Regulatory function
	Legislative function	Annual\Long Term Plan	Other
Significance:	Triggered	✓ Not Triggered	

# **Executive Summary:**

Investigation, design works, stakeholder liaison and resource consenting activities continue to be progressed through a number of the priority river work areas, with good progress recently made in these work stream areas in the Awanui River scheme area and Kerikeri-Waipapa area.

Works programmes are underway for the Awanui, Kaihu, Kaeo-Whangaroa and Whangarei river catchments and minor river works are scheduled and progressing.

# Legal compliance and significance assessment:

The council 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. This matter is considered to be of low significance, as the report is only provided to be received for information.

# **Recommendation:**

- 1. That the report Rivers Management Update by Joseph Camuso, Rivers Programme Manager and dated 11 November 2014 be received.
- 2. That the minutes of the following liaison committee meetings be received:
  - a. Kerikeri-Waipapa River Liaison Committee, 17 October 2014
  - b. Awanui River Liaison Committee, 31 October 2014 and 14 November 2014.
- 3. That Mike Lyford and Boyd Parker be appointed to the Kaihu River Liaison Committee as representatives of ratepayer Area 2 Class B floodplain and ratepayer Area 3 Class F catchment respectively.

#### Awanui

Options for lowering of the Whangatane Spillway weir intake were presented to the Liaison Committee and landowners adjoining the Whangatane Spillway at a joint meeting held on 31 October. The design basis for lowering the spillway weir is to better utilise the Whangatane Spillway to allow early and late flood flows to enter the spillway while not significantly increasing the peak flow in the spillway. Three alternative weir configurations were simulated using the calibrated catchment model. The modelling results indicate a 6% increase of peak flow down the Whangatane Spillway above the status quo. The benefits include lower flood levels in parts of urban Kaitaia and improved drainage of Lake Tangonge and the lower Awanui River. The potential adverse effects include minor increases in Whangatane Spillway peak flood levels (generally less than 0.1 meters), reduced drainage efficiency of Whangatane Spillway flood gates and reduced stock crossing access due to longer duration flows. The committee resolved to proceed with resource consent lodgement for the weir lowering, with an application scheduled for submission before the New Year.

Independent of the spillway simulations, preliminary model simulations for the proposed drainage improvement of Lake Tangonge show an improvement using two flood gates and an increased entrance channel width. The internal review of results is currently underway with intentions to refine the initial model simulations.

The tender for the 2014-2015 maintenance works programme has been awarded and scheme maintenance work is underway.

#### Kaeo-Whangaroa

Site visits to the Whangaroa Streams catchments to identify and prioritise the summer works programme for Taupo Bay, Totara North, Pupuke, Te Ngaere, Wainui, Mahnepua and Taruanga Bay was completed in October. Work is underway in Te Ngaere, utilising a contractor that was already established in the area.

#### Kerikeri-Waipapa

A meeting of the Kerikeri-Waipapa River Liaison Committee was held on 17 October. The committee resolved to progress with lodgement of resource consent and acquisition of land use rights for the Kerikeri River spillway scheme.

The committee requested a pre-feasibility study for the proposed multipurpose dam site K3A. A site visit from a dam consultant was completed in late October. This pre-feasibility study along with hydraulic modelling, and rough order costing will be presented to the committee for a better understanding of the costs and benefits of the K3A dam proposal following completion of the dam study which is scheduled for completion in December.

In-house design of a high-level spillway downstream of the Cobham Road bridge is underway. This idea was initiated by local landowners. This proposal has merit and lodgement of resource consent is scheduled for early in the New Year.

#### Waitangi

Letters of support from landowners adjoining the Waiaruhe River between SH 1 and SH10 have been received for a resource consent application to enable them to undertake stream bank erosion protection works. An application is being drafted with lodgement anticipated before New Year.

# Kawakawa - Taumarere

NZTA has been contacted to investigate whether there are synergies between the Otiria-Moerewa flood mitigation investigations and the work being undertaken by NZTA. NZTA has confirmed that there is no specific study that NZTA is doing regarding the Otiria-Moerewa area and State Highway 1. The only aspect that has been mentioned is that the area is prone to flooding at the Otiria Bridge and is listed in the Draft Transport Agencies Network Resilience Study.

### Whangarei

Preliminaries and enabling works, stormwater relocation, excavation of the embankment foundation for service spillway, foundation dental concrete placement and true right embankment are substantially complete.

Service spillway pipe work preparation and placement and emergency spillway preparation are the current work activities. Placement of service spillway pipes is expected to commence early December. This activity is over one month behind the scheduled programme, which had pipe placement starting 22 October 2014.

NRC staff analysis of the programme, based on the programme and current progress, indicates that the service spillway and inlet/outlet works may be complete in February 2015. Whether the dam construction can still be completed in one season will become clearer during January 2015. Should the works not be able to be completed within one season, then the site would need to be shut down with works to recommence in the following season (i.e. October 2015).

#### Kaihu

The 2014-15 works tender has been awarded and work is scheduled to start in early December.

Nominations were received for the vacant ratepayer representative positions on the Kaihu River Liaison Committee. Nominations were received for Mike Lyford and Boyd Parker for ratepayer Area 2 Class B floodplain and ratepayer Area 3 Class F catchment respectively. It is recommended that Mr Lyford and Mr Parker be appointed.

#### Ngunguru

The Ngunguru River resource consent for gravel extraction has been granted, and discussions will recommence with parties that may be interested in extracting the gravel.

#### **Minor Rivers**

A priority list for the minor rivers works has been prepared. The majority of works will begin in summer or when site conditions allow.

River	Description of Work Programmed for Current Season	Proposed Start Date
Awanui - Bells Hill Drains	Clean Drains	May-15
	Reprofile cutoff drain	Completed
	Inclinometer read Sept 2014 and March 2015	Completed
Pawarenga Streams	Minor clean -up	Dec-14
	(vegetation/sediment removal)	

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		Page 4 of 1
River	<b>Description of Work Programmed</b>	Proposed
	for Current Season	Start Date
Rotokakahi @ Pawarenga	Follow up maintenance for Groynes	Dec-14
Bridge	if required (contingency)	
Mangonuiowae/Broadwood	Stream bank protection	Dec-14
Waihou/Rahiri-Rangiahua	Lower Berm Rahiri Settlement Rd	Dec-14
Panguru and Lower Waihou	Gravel management around bridges	Dec-14
Waitangi	Gravel management at Lily Pond	Jan-15
	Willow spraying/removal	Dec-14
Waima	Channel maintenance	Feb-15
	Lodgement for resource consent	Nov-14
Awapokonui/Pakanae	Follow up spraying of Arundo	Completed
	Donax	
Waimamaku	Gravel works at Wekaweka Road	Completed
	and Mason Dwelling	
Otiria	Test pit investigations	Oct-14
	Lodgement for resource consent	June-15
Helena Bay	Tree / Gravel management	Jan-15
Ngunguru	Gravel management resource consent	Completed
	Gravel extraction / Willow poison	Feb-15
Kawakawa	Tree felling at Tirihonga and willow drill and kill Waiomio	Feb-15
Otaika	Tree removal follow-up / poison	Feb-15
Mangaturoto	Tree poisoning / removal	Jan-15

#### Lake Omapere

The lake recession curve continues to follow that of the 1970's recession curve; ranging from 100 mm per week during high lake stage, to 50 mm per week after several months recession. The rock weir is now visible, and inspections confirm two breach sections through the wall with no head loss observed either side of the weir, with a significant weed build up apparent on the immediate downstream weir section. Cleaning the weed from the weir is not likely to be of any benefit to improving the lake recession rate, given the breach sections and no head loss. The very flat outlet grade and narrow outlet channel are the primary controls on lake recession.

# Lake Rototuna

A draft report on the Lake Rototuna catchment hydrogeology has been completed. The report assesses possible causes for the declining lake water level trend that has continued from 2005. Catchment afforestation appears to be one of the main possible causes for the declining lake water level. The report will be circulated to the Pouto Catchment Group in the coming weeks.

# ATTACHMENTS:

Attachment: Minutes of the Liaison Committee Meetings

- a. Kerikeri-Waipapa River Liaison Committee, 17 October 2014
- b. Awanui River Liaison Committee, 31 October 2014 and 14 November 2014.

#### ITEM: 7 Page 5 of 12

Report of the meeting of the Kerikeri-Waipapa River Liaison Committee, held on Friday 17 October 2014 Woodlands Motel and Conference Venue, 126 Kerikeri Road, Kerikeri commencing at 10.00 a.m.

#### **Present – Committee Members:**

Joe Carr	(Chairperson)
Dover Samuel	s NRC Councillor
Di Maxwell	FNDC Councillor
Fred Terry	Lower Puketotara and Kerikeri catchment
John Dawn	Living Waters Bay of Islands Wai Ora representative
Bill Hunter	Kerikeri Irrigation Company
Also in Atten	dance:
NRC staff:	Bruce Howse, Toby Kay, Nola Sooner
FNDC staff:	Jim Brooks, Sarah Robson, Steven Sanson
APOLOGIES	Hamish Sheard, Peter Kennedy and David Stewart-Jones
Resolved:	That the apologies from Hamish Sheard, Peter Kennedy and David Stewart-Jones be accepted.

Dover Samuels : Di Maxwell

#### WELCOME TO NEW COMMITTEE MEMBER

Bill Hunter was welcomed as a newly appointed member of the Kerikeri-Waipapa River Liaison Committee.

# MINUTES OF PREVIOUS MEETING

**<u>Resolved</u>**: That the Minutes of 6 August 2014 be accepted.

Fred Terry : Joe Carr

#### MATTERS ARISING

There were no matters arising.

# MULTIPURPOSE DAM INVESTIGATION UPDATE & IMPLICATIONS FOR SPILLWAY SCHEME DESIGN

Toby provided an update on the Multi-purpose dam investigation. He explained the Kerikeri Dam K3A Site Valley cross section concept embankment and Auxiliary Spillway options.

Concept for Dual Use Dam

• Dual use water supply/flood detention

#### Assumptions

• Approx 50% water supply/50% flood detention

- Emergency freeboard 3m for PMF
- Dam crest 105m OTP

# Dam Investigations in Progress

Toby advised Rileys have been contracted to undertake a preliminary design. The main elements as stated in the brief include:

- Service and auxiliary spillway concept design/sizing;
- Dam embankment concept design including type and fill volume;
- Outlet works concept design (i.e. water supply infrastructure within dam itself);
- Estimation of construction cost including investigations, engineering and contingency; and
- Preparation of report including concept drawings and sequencing of investigations.

Toby reported NRC proposes the following:

- Site inspection by two senior personnel Kerikeri-Waipapa River Liaison Committee members were invited to attend if they wish;
- Review of existing geological information (desktop study);
- Initial high level qualitative assessment of dam break effects and potential impact classification; and
- Consideration of flood diversion strategy during construction in conceptual terms.

Toby referred to a map that showed the impact of the detention dam option on 1:100 year CC flood extent (for the 12 hour design storm) shown in the 2d flood model. He summarised a designation plan of what is proposed and confirmed downstream effects are likely to be 0.1metre.

Toby concluded by advising:

- The detention dam option offers significant flood detention benefits to the Waipapa Industrial Estate
- The benefit to the river reach between State High 10 and Rainbow Falls is limited, and does not significantly affect design requirements for the spillway (10% reduction in spillway intake width).

Joe summarised discussions to date. Joe noted "we need this committee to confirm today that we go ahead with the acquisition of land and the use of the Public Works Act if necessary".

# PROPOSED FLOOD SCHEME UPDATE – ACQUIRING LAND USE RIGHTS

Bruce summarised the proposed flood scheme update and acquiring of land use rights.

**<u>Resolved</u>**: That the name of the affected land owner be kept confidential.

Joe Carr : Dover Samuels

**<u>Resolved</u>**: That the Kerikeri-Waipapa River Liaison Committee confirmed support for staff to commence negotiations with land owners to acquire the necessary interests in land required for the proposed works under the Public Works Act 1981.

Di Maxwell : Dover Samuels

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Di confirmed she is happy to support the above resolution as a member of the Kerikeri-Waipapa River Liaison Committee but not as a Far North District Councillor as she felt the matter should be referred to the Far North District Council's Infrastructure Committee to ensure the wider public benefit is assessed. Jim advised that an agenda item could be raised should Northland Regional Council staff wish to attend the next meeting.

During discussion on the dam concept it was stated there was an issue with water supply to Kerikeri. Jim clarified that Far North District Council had no immediate requirements to seek an alternative water source. It was noted that currently two sources are available - one from Kerikeri Irrigation and the other from the Puketotara stream. Jim advised that any issues that may arise from severe drought conditions would be around capacity of the treatment plant. Far North District Council will be looking at future requirements for additional treatment during the next 10 year LTP which could be influenced by growth, expansion or increased demand. He emphasized that any proposals would need to be fully investigated to research options and feasibility, and may look at alternative sources depending on a proposed solution. Jim queried if the dam study included for a detention only option. It was noted that the current proposal incorporates retention (water supply) and flood detention.

11.28 am Di Maxwell left the meeting.

Dover emphasised the importance of having political buy in from Far North District Council. He envisaged Far North District Council's Infrastructure Committee will make a recommendation back to the Far North District Council.

It was noted Far North District Council's Infrastructure Committee is not due to meet for another six weeks. Concern was expressed at the delay in future progress.

Toby advised Rileys have advised their report will be available in November.

# ANY OTHER BUSINESS

#### **Input of Insurance Companies**

Fred queried the input of insurance companies and what drives the requirement for water supplies e.g. fires.

Meeting closed at 11.45 a.m.

#### NRC Contacts

Local: Doug Foster, Land Management Officer Kaitaia Office 09 408 6600 / 027 476 7983

River Management Team: Joseph Camuso, River Management Engineer Whangarei Office 09 4701200 / 027 438 4639

#### ITEM: 7 Page 8 of 12

Minutes of the meeting of the Awanui River Liaison Committee, held on Friday 31 October 2014 at Te Ahu Centre, Church Road, Kaitaia, commencing at 10.00 a.m.

#### **Committee Members present:**

Joe Carr	(NRC - Councillor)
Fiona King	(Kaitaia Drainage Board)
Gary May	(Southern Area)
Joe King	(Eastern Area)
Michael Masters	(Western Area)
Mate Radich	(FNDC Councillor)
Marie Berghan	(Kaitaia Business Assn)
David Collard	(FNDC Councillor)
John Walsh	(Te Runanga O Te Rarawa)
Adele Gardner	(Te Hiku Community Board)
Fran Hokianga	(Te Runanga O Ngai Takoto)
Bruce Howse	(NRC)

AISU FIESEIIL.	
Joe Camuso	(NRC)
Toby Kay	(NRC)
Peter Wiessing	(NRC)
Wendy Jecentho	(NRC)
Amrit Lal	(Switzer Trust)
Ken Garton	(Farmer)
Ron Fenwick	(Supervisor)
David van Bysterneldt	(Farmer)

#### APOLOGIES

Also Present

Apologies were received from Ken Subritzky and John Kooge of NZTA.

#### **CONFIRMATION OF MINUTES**

Fiona King requested two changes to resolutions from the last meeting. The resolution approving the provisional 2014 /2015 annual budget needs to read:

**<u>Resolved</u>**: That the Committee approves the provisional 2014 /2015 annual *maintenance works* budget.

The resolution regarding the lowering of the bed of the spillway needs to read:

- **<u>Resolved</u>**: That staff initiate the process to allow for partial improvement to the Whangatane Spillway that would involve lowering the bed at the entrance by *a minimum of* 500mm and constructing one stock access bridge. Effects should be assessed by council staff to make sure that peak flows are not increased significantly.
- **<u>Resolved</u>**: That the amended minutes of the last Awanui Flood Management Liaison Group meeting held on 1 August 2014 be confirmed.

Mrs King : Mr Radich

ITEM: 7 Page 9 of 12

#### MATTERS ARISING

NRC Staff are to follow up with FNDC regarding the letter requesting their consent staff to consider the flood scheme when issuing consents or placing conditions within the scheme area. The Committee also wished NRC consent staff to be reminded of the same issue. A copy of the letter to FNDC is to be supplied to Councillors Collard and Radich.

#### UPDATE ON SCHEME IMPROVEMENT OPTIONS Scheme Upgrade Preliminary design

Joe Camuso presented on the scheme upgrade preliminary design as was circulated to the committee prior to the meeting. He gave an overview of the design drawings and slides of design hydrographs. Mr Camuso explained that the upgrade consisted of a series of spillways, some new sections of stopbank and some topping up of existing stopbanks.

**<u>Resolved</u>**: That the report 'Awanui Flood Scheme Preliminary Design' by Tonkin and Taylor is received.

Mrs King : Mr Masters

#### Whangatane Spillway Design

Toby Kay presented the options for the design of the Whangatane Spillway weir explaining flow comparisons, impact and areas of benefit for the three designs presented. Costings and timing were discussed with the Committee favouring scenario three as it had the greatest benefit although had a slightly greater cost.

Discussion on bridge design and costs followed. Staff were requested to investigate costings for a range of bridge designs.

Staff were requested to arrange a meeting with Whangatane stakeholders. Staff are also to meet with key landowners prior to the meeting.

**<u>Resolved</u>**: That the Committee supports staff to proceed with detailed design of option three and construction of a single bridge together with a rough order cost estimate of \$704,000.

Mr Radich : Mrs King

#### Lake Tangonge Drainage Improvements

Toby Kay presented on the Tangonge drainage improvements explaining that options were for an additional floodgate with possibly a second channel to the Awanui River, and an overflow cut through the stopbank to the Waipapakauri outfall.

Discussion followed on the above items with Mr Kay advising that further investigation was required along with consultation with affected landowners. He advised that he expected to have more information by next March.

# FLOOD MAP UPDATE

The 1 in 100 year and 1 in 10 year flood maps were displayed and discussed. Staff advised that these maps will be released towards the end of 2014. Discussion was

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also held on whether NRC should be producing 1 in 50 year flood maps given that this duration is the bench mark used by FNDC for building permits.

# LONG TERM PLAN

# Paparore banks

Bruce Howse advised that there was a need to adjust the rating area in the scheme to include the 115ha of class B2 Paparore Banks area. He advised that this will be included in the targeted rates to be consulted over in the LTP.

# Forecast Financials

Bruce Howse circulated the LTP draft rate calculation for funding additional capital expenditure.

Discussion followed with the committee suggesting that that the annual operational maintenance budget should be increased from \$120,000 to \$200,000 and that the rates calculation to fund the extra \$0.99 million capex should be recalculated at \$700,000 (cost of option three supported by the committee for the Whangatane spillway upgrade).

The committee also requested that Mr Howse present more options for loan terms for the \$8.4m scheme upgrade and these recalculations will be studied at the next meeting.

**<u>Resolved</u>**: That this year's capital budget will be used for progressing the Whangatane Spillway upgrade.

Mrs King : Mr Radich

# OTHER BUSINESS

- Discussion on other options to increase efficiency of the scheme such as debris removal, earthworks to clean the channel at the choke and height and design of floodgates.
- Joe King handed in a letter from Des Subritzky dated 30 October 2014 which suggested maintenance issues that needed to be addressed by staff. Staff to investigate.
- Discussion on the Oinu outflow and its impact on State Highway 10 during flood events.
- Staff to arrange survey / capacity assessment along Gills Road with a view to raising the level of Gills road so the road can act as the stopbank, if this proves to be required.
- Joe King requested staff investigate subsidence on Gills Road Bridge abutments with FNDC.

Meeting closed at 2.10pm

Page 11 of 12 Report of the meeting of the Awanui River Liaison Committee and Whangatane Spillway Stakeholders, held on Friday 14 November 2014 at the Far North District Council Te Ahu Centre, Cnr Church Road and Matthews Ave, Kaitaia, commencing at 10.00a.m.

#### Awanui River Liaison Committee Members present:

Joe Carr	(NRC – Councillor and Chairperson)
Bruce Howse	(NRC)
Fiona King	(Kaitaia Drainage Board)
Joe King	(Eastern Area)
John Walsh	(Te Runanga O Te Rarawa)
Ken Subritzky	(Northern Area)
Gary May	(Southern Area)

# Also Present:

Joseph Camuso	(NRC)
Peter Wiessing	(NRC)
Wendy Jecentho	(NRC)
Bruce Howse	(FNDC)
Garreth Oien	(FNDC)
Butch Oien	(Juken NZ)
Roger Matthews	(Farmer)
Malcolm Matthews	(Farmer)
Kevin Matthews	(Farmer)
Greg Yuretich	(Farmer)
Patrick Gleeson	(Farmer)
Colin Matthews	(Farmer)
Matt Hudson	(Farmer)
Robert McCarthny	(Zorima Holdings)
Lawrence Hutchins	(Land owner)
Peter Matthews	(Land Owner)

#### INTRODUCTION

Joe Carr welcomed those present and advised that the reason for calling the meeting was to commence consultation with landowners and stakeholders over the proposed Whangatane Spillway weir adjustment.

# **APOLOGIES**

**<u>Resolved</u>**: That the apologies from David Collard, Marie Berghan, Mike Masters, Amrit Lal, Logan King, Gwenneth Cossey and Adele Gardner be received.

Mr May : Mrs King

#### BACKGROUND

Options for achieving 100 year flood protection for Kaitaia have been identified and the Scheme Upgrade Preliminary Design prepared by Tonkin and Taylor has been received by the Awanui Liaison Committee.

Scheme improvements include stopbank upgrades, spillways on Awanui River south of Kaitaia, modification of Whangatane Spillway weir and Lake Tangonge drainage improvements.

# SPILLWAY IMPROVEMENTS

At the last meeting of the Liaison Committee on 31 October 2014 a resolution was passed to initiate the process to allow for partial improvement to the Whangatane Spillway that would involve lowering the bed at the entrance by a minimum of 500mm and constructing one stock access bridge. This modification would:

- Reduce flood risk to urban Kaitaia
- Operate the spillway earlier and later
- Maintain peak flow close to that of existing
- Reduce the duration of storage of floodwater in Lake Tangonge, which reduces the environmental impacts of stagnant water discharge to Rangaunu Harbour

Historic weir configuration, results and effects of the proposed weir adjustment and the proposed works programme were presented. The cost of the works is estimated to be \$700k and it is planned to submit the resource consent application before the end of 2014 with proposed works to be undertaken in 2015/2016.

# **ISSUES RAISED**

Discussion followed on the benefits and effects of the changes on flooding and Issues raised by Whangatane stakeholders for consideration were:

- Possible increased scouring of spillway bed due to increased duration and flow. Scour control will need to be included in annual maintenance.
- Floodgates will be closed for longer impounding water on pasture longer.
- Floodgates may need modification, possibly lowering in the lower spillway.
- Legal access for two Matthew's properties to the stock access bridge.
- Rates reduction to reflect inconvenience and cost of ponded water to farmers (both FNDC and Awanui River rates).
- Oinu catchment floodgates may need modification to prevent flooding. Staff to investigate.
- Possible requirement for topping up of some portions of stopbank in the lower spillway.
- Yuretich property disadvantaged as no stock access planned and no alternative stock route.
- Legality of stock access over Quarry Road Bridge during flood events. (Gareth Oien of FNDC advised this is a permitted activity).
- Reduced property values due to effects from spillway.
- Drainage district drain upgrades required.
- Requirement to re-run the analysis of time the spillway is active using 1.5m rather than the lowering of 1m presented and circulate the revised information to landowners. Staff to arrange.

Meeting closed 11:40am

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ISSUE:	Review of Regional Pest Management Strategies
	Update

**ID:** A702752

To: Environmental Management Committee, 8 December 2014

From: Don Mckenzie, Biosecurity Senior Programme Manager

Date: 7 November 2014

Report Type:	$\square$	Normal operations	$\square$	Information	Decision
Burbasai		Infrastructure		Public service	Regulatory function
Purpose:		Legislative function	$\mathbf{\nabla}$	Annual\Long Term Plan	Other
Significance:		Triggered	$\mathbf{\nabla}$	Not Triggered	

# **Executive Summary:**

Northland Regional Council's Regional Pest Management Strategies (RPMS) are currently under review and a new plan is expected to be confirmed during 2016.

The aims of the review are to:

- Identify options to improve pest management in Northland;
- Reflect recent Biosecurity Act changes; and
- Assess the rationale to include new pest species or remove others.

The RPMS will be replaced with a 10 year Regional Pest Management Plan (RPMP) and a proposed plan will be publically notified for consultation in July 2015.

On 16 October a workshop was held with key stakeholders to gain feedback on biosecurity issues facing Northland. Attendees included government agencies (MPI, NZTA and DOC<sup>1</sup>), Federated Farmers, district and regional councils, private landcare groups, forestry, Royal Forest and Bird, and the Northland Conservation Board. The workshop was very well received and particular successes include:

- A good attendance from a wide variety of interests;
- Many positive reports from attendees; and
- Valuable feedback to assist us with our review and preparing a draft plan.

Key messages to come out of the workshop were:

# Pest management (Under both Biosecurity Act and RMA provisions)

- Feedback suggested pest management as a whole should:
  - Operate with a greater level of resourcing both through extra funding; and working more with DOC, MPI, Auckland Council other organisations and community groups;
  - Have a greater focus on achieving outcomes not outputs i.e. demonstrating biodiversity maintenance / improvement not just trap numbers set;

<sup>&</sup>lt;sup>1</sup> Ministry of Primary Industries, New Zealand Transport Agency, Department of Conservation

- Improve prioritisation of pest management through recognising highly valued areas on private <u>and</u> public land;
- Pursue new technologies to assist both weed, insect and animal pest control both to make gains in labour efficiencies but also effectiveness;
- Investigate use of options such as targeted rates in order to achieve regional priorities and better pest control / biodiversity outcomes.

# • Feedback on Freshwater pests

- There is an urgent need to prevent further colonisation of waterways by pests which will undermine water quality and have damaging effects which may be largely be irretrievable.
- More surveillance and management action is needed (particularly in high value areas and rivers);
- There is currently a perceived lack of public awareness of freshwater pest issues;
- Opportunities to integrate with catchment management where the pests have implications for water quality need to be explored.

# Feedback on Site led programmes and Community Pest Control Areas (CPCA's)

- To achieve pest management outcomes throughout the region (such as high value forests, outstanding water bodies and significant marine areas), both site led and species led programmes are needed;
- Stakeholders recognise the importance of "special places"- these may require definition in the new plan and have specific site led rules which prevent pest damage to these sites - for example private land surrounding Kai iwi lakes.
- The lack of pest control on private land surrounding the most highly valued forest assets of northland was noted and a clear direction given that this must be addressed with new approaches and alternative policies to those currently described in the existing RPMS.
- There are benefits to developing criteria to help prioritise pest control and standards to recognise pest control work. Care is needed to not discourage voluntary effort and to allow for local priorities;
- o Pest management should be incentivised through a variety of measures;
- Consider land purchase (particularly lake margins) where viable to achieve biodiversity outcomes involving pest management (and water quality).

# • Feedback on Good neighbour rules

- There was consensus that overall more needs to be done particularly with some more recent pest arrivals that pose a high ecological threat, however there may need to be less priority on some species e.g. gorse in urban areas;
- Recognise regional variations in priority;
- Better manage crown land (including road and rail corridors) where biodiversity outcomes can be achieved;

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 Agencies are willing to work in partnerships where good neighbour rules may apply - control of weeds along roadway and rail corridors are examples, control of pests which cross crown forest and private land is another.

# • Feedback on Marine pests:

- Attendees thought more needed to be done by both regional council and MPI to safeguard Northland from new marine pest incursions;
- The council should make use of all the tools available under the biosecurity act (including pathways plans) and the RMA e.g. discharge rules for marine fouling organisms.

The workshop agenda, presentation and notes can be viewed on council's web site:

http://www.nrc.govt.nz/Resource-Library-Summary/Plans-and-Policies/Pestmanagement-strategy-review/

# Legal compliance and significance assessment:

The activities detailed in this report are part of the council's day to day operations, are provided for in the council's 2012-2022 Long Term Plan, and are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002. The matters are not significant under council policy and are in accordance with the above legislation and Biosecurity Act 1993.

# **Recommendation:**

That the report, Review of Regional Pest Management Strategies Update, by Don Mckenzie, Biosecurity Senior Programme Manager and dated 7 November 2014, be received.

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# ISSUE: Biosecurity Responses Update

To: Environmental Management Committee, 8 December 2014

From: Don Mckenzie, Biosecurity Senior Programme Manager

Date: 6 November 2014

Report Type:	Normal operations	V	Information		Decision
Durnasa	Infrastructure		Public service		Regulatory function
Purpose:	Legislative function	V	Annual\Long Term Plan	V	Other
Significance:		V	Not Triggered		

# **Executive Summary:**

The purpose of this report is to update the Committee on Kai iwi lakes, kauri dieback, and marine pests.

#### Kai iwi lakes

Pest control at Kai iwi lakes has been carried out over the winter months to reduce the environmental impacts of introduced pests.

Key actions over the last two months include:

- Control work has included the removal of wilding pines from behind Pine Beach campground and work is expected to begin again during Autumn 2015 when the fire risk is low and there are fewer campers. Aerial control of pampas has been undertaken behind the campground and results will become evident over the coming months. Wilding pine and pampas control has been extended along the eastern edge of Lake Taharoa.
- Twenty-nine feral pigs have been removed from Kai iwi lakes and surrounding private land by the response team and biosecurity staff. The feral pig response programme has proved successful and local landowners have been extremely supportive of the initiative. This work will be repeated next year and is aimed at reducing and maintaining wild pig numbers at zero.
- Spraying of research trial plots has been undertaken, with initial results looking positive and the final results will be available early in the New Year.
- Biosecurity staff are evaluating options to remove pest fish from a nearby freshwater pond. The fish are currently contained and owners are aware of the risks. Fish trap trials were completed during September; however these proved unsuccessful due to extreme weather events.
- Ground water sampling is underway to determine if introduced plants are adding nitrogen to the lake systems and to monitor what impact any control methods may have. This work is being carried out in conjunction with NIWA.
- Feral cat control is also being conducted around the reserve and possum trapping is planned to prevent damage to newly planted trees.
- Biodiversity monitoring, aimed at measuring changes due to pest control is also planned to be carried out over the summer months using university students.

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- Regular communication with adjoining landowners is being maintained and Kaipara District Council staff are part of the planning process. Kaipara staff also provide advice on operational issues.
- The Kai lwi "Big Day Out" is planned for February 2015. This is a community event focused on promoting the unique values of the Kai lwi lakes.

### Kauri dieback

Kane McElrea has been appointed to the role of Programme Manager Kauri dieback and Kai Iwi lakes. Kane will be working with joint agency teams to co-ordinate actions across the region aimed at reducing the risk of the disease spreading

In the short term and during December and January a survey of forest entrances where there are high numbers of forest visits will be conducted to confirm if signage warning visitors of the risks is present and where practical, footwear cleaning stations are available for users. Work is also planned with the joint agency operations team to conduct an aerial survey of Northland to assess areas in the far north which as yet have not been surveyed.

#### Marine pests

The last removal of fanworm at Port Nikau and Ship repair has revealed a pleasing 97% decrease in populations. The latest round of diving and removal has been completed and a total number of fanworm collected from these structures was 11 compared to 350 last April. Sustained diver removal at these locations combined with high rainfall events during winter has resulted in fanworm at very low numbers and there is a good opportunity to eradicate fanworm from the upper Whangarei harbour.

However this trend has not been the same in Marsden Cove marina where several thousand fanworm have so far been harvested from Stage two within the last two weeks and staff have observed fanworm growing on 11 vessel hulls. Notices of direction will be issued to all infected vessels requiring owners to clean their hulls before moving and actions to require structure owners to reduce the risk to vessels is also being considered.

# Pyura sea squirt:

Pyura grows on the rocky shore forming dense mats and can displace green lipped mussel and MPI are co-founding a plan with Northland stakeholders to manage this pest. Past surveys in Northland have located Pyura populations in the far north and two teams of NRC staff assisted by MPI and DOC went back to three original Pyura treatment sites in the Te Hiku area to reassess infestations and report back to the Te Hiku fisheries forum.

The last check was more than two years ago following an MPI/NRC led removal and this time ten Pyura were found and removed at Parengarenga. No Pyura were found at Whareana and low densities were found at the Bluff on ninety mile beach. NRC biosecurity officers are reporting back to Te Hiku Fisheries forum in December, and there may be an opportunity of employing a student to coordinate removals at the Bluff and Ahipara along with assessments of the efficacy of the removals and some trial removal methods.

# Undaria:

Undaria is invasive kelp which is common in other parts of the South Island but until recently was not known to be established in Northland. It can affect aquaculture farms and forms a dense monoculture displacing other native kelp species.

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Undaria was located in Rangaunu Harbour earlier in the year and the team that assessed the Pyura at Whareana and Parengarenga also went back to reassess the extent of the infestation at Rangaunu. Unfortunately they found a significant increase in the size, density and spread of Undaria. It has become the dominant kelp species and has spread from Puweke to Houhora. NRC is putting forward an Envirolink science advice bid with Cawthron to assess the natural rate of spread from the infected site along with the vectors of spread for Undaria in the Far North. This work is aimed at producing a surveillance and removal plan for significant areas in the Far North.

# Legal compliance and significance assessment:

The council 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. This matter is considered to be of low significance, as the report is only provided to be received for information.

# **Recommendation:**

- 1. That the report Biosecurity Responses Update by Don Mckenzie, Biosecurity Senior Programme Manager and dated 6 November 2014, be received.
- 2. That the Environmental Management Committee notes the information.

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# ISSUE: Environmental Monitoring for the period 25 September – 31 October 2014

ID: A703719

To: Environmental Management Committee Meeting, 8 December 2014

From: Colin Dall, Consents/Monitoring Manager

Date: 17 November 2014

Report Type:	V	Normal operations	A	Information		Decision
Burbasa		Infrastructure		Public service	V	Regulatory function
Purpose:	$\mathbf{\nabla}$	Legislative function	V	Annual\Long Term Plan		Other
Significance:		Triggered	V	Not Triggered		

# **Executive Summary:**

The purpose of this report is to provide an update on council's monitoring and compliance work for the period 25 September -31 October 2014. It concludes with the recommendation that the report be received.

Attachment 1 shows a graph of the number and type of environmental incidents received during the reporting period compared with the 10 year mean for that period, and a graph of the number of compliance assessments made during the reporting period summarised by type and compliance grading.

**Attachment 2** contains tables giving details of activities which have been monitored and found to have more than minor environmental effects, and a table summarising the State of Environment monitoring undertaken during the reporting period.

# Legal Compliance and Significance Assessment:

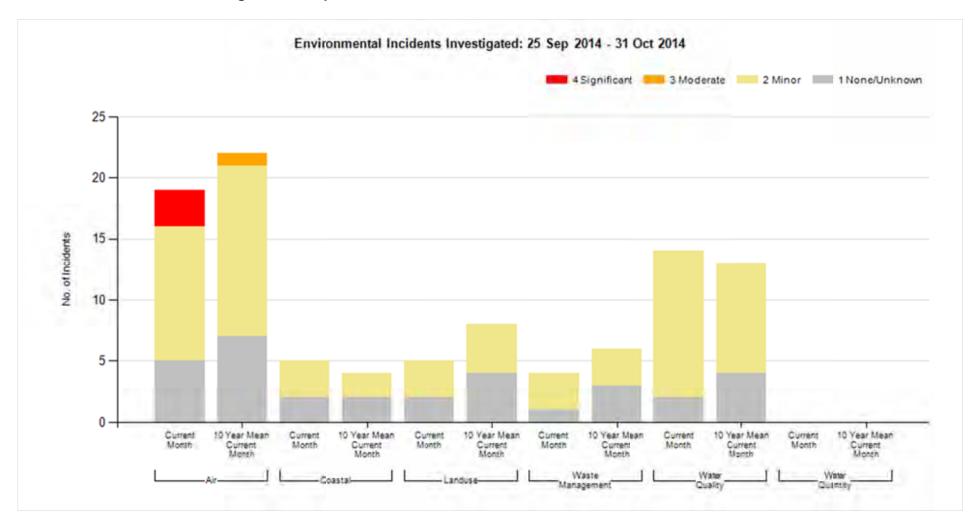
The receiving of this report is provided for in the council's 2012-22 Long Term Plan, meets the council's obligations under section 35 of the Resource Management Act 1991, and is in line with the council's decision making process and sections 76-82 of the Local Government Act 2002.

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:**

 That the Environmental Monitoring report for the period 25 September – 31 October 2014 from Colin Dall, Consents/Monitoring Manager, and dated 17 November 2014 be received. Page 68

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#### Environmental Incidents Investigated: 25 September – 31 October 2014

RMA Consent Compliance Monitoring: 25 Sep 2014 - 31 Oct 2014 Planned 3 Significant 2 Non Compliance I Full Compliance 1200-1000-800-Number of events 600 400-200 0 Planned For This Year Current Year To Date Planned For This Year Previous Year Year To Date Previous Year Current Pariod Planned For This Year Previous Year Current Period Current Year Current Period Current Year Planned For This Veat Previous Year Current Feriod To Date To Date Water Doestal Discharge Land use

consett

permit

#### Resource Consent Compliance Monitoring: 25 September – 31 October 2014

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permit

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#### Attachment 2 to Item 10

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#### 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
СН	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 Plar	n for North	hland
RC	Resource Consent	СМА	Coastal Marine Area	RCPN	Regional Coastal Plan for No	orthland	

**COASTAL ACTIVITIES** – No significant non-compliant events were recorded during the period 25 September – 31 October 2014.

**DISCHARGES TO AIR** – No significant non-compliant events were recorded during the period 25 September – 31 October 2014.

**DISCHARGES TO WATER OR LAND** – No significant non-compliant events were recorded during the period 25 September – 31 October 2014.

**LAND USE ACTIVITIES** – No significant non-compliant events were recorded during the period 25 September – 31 October 2014.

WATER TAKES – No significant non-compliant events were recorded during the period 25 September – 31 October 2014.

#### FARM DAIRY EFFLUENT DISCHARGES – CONSENTED

Date	Consent Reference No.	Name	Description	Notes Environment impact
09/09/2014	REG.009371.01	Wallace Farm Partnership	FDE 4213 at Te Kowhai Road, Ruāwai	<ul> <li>Water quality test results were outside RC limits.</li> <li>The required pond upgrade had not been completed.</li> </ul>
10/09/2014	REG.011613.01	Northash Ltd	FDE 4234 at State Highway 12, Ruāwai	Effluent from waste silage discharged Minor to water.
10/09/2014	REG.027033.01	Northash Ltd	FDE 4311 at Wallace Road, Ruāwai	Untreated effluent from a feedpad Significant discharged to land.
11/09/2014	REG.011534.01	Wood & Lawrie Ltd	FDE 4316 at Tramline Road, Ruāwai	Untreated effluent from a feed area Unknown discharged to land.
11/09/2014	REG.011743.01	Ball P L & S H Ltd	FDE 4420 at Tramline Road,	Water quality test results were outside     Moderate

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Date	Date Consent Reference No.		Description	Notes	Environmental impact
			Ruāwai	RC limits.	
12/09/2014	REG.012343.01	Bowergate Farms Ltd	FDE 4343 at State Highway 12, Ruāwai	<ul> <li>Untreated effluent from a feedpad discharged to land.</li> </ul>	Unknown
15/09/2014	REG.012178.01	Stanaway M A & K W	FDE 4432 at Molloy Road, Ruāwai	<ul> <li>Untreated effluent from a feedpad discharged to land.</li> </ul>	Moderate
15/09/2014	REG.010660.01	Bellamy M & S Family Trust	FDE 4448 at Simpkin Road, Tokatoka	<ul> <li>Untreated effluent from a feed area on a race discharged to water.</li> </ul>	Moderate
15/09/2014	REG.019949.01	Fonterra Ltd	FDE 7063 at Jordan Valley Road, Kauri	<ul> <li>Untreated effluent from a stand-off pad discharged to land and to water.</li> </ul>	Significant
16/09/2014	REG.012346.01	Bickers D C & A M	FDE 8627 at Mititai Road, Arapohue	<ul> <li>Untreated effluent overflowed from a sump to land.</li> <li>Effluent flowed over a pond embankment to water.</li> </ul>	Minor
16/09/2014	REG.012825.01	McDermott C J & L P Family Trust	FDE 8690 at Mititai Road, Mititai	<ul> <li>Effluent from entry/exit races discharged overland to water.</li> </ul>	Unknown
18/09/2014	REG.012446.01	Lawrence Brothers Limited	FDE 8444 at Te Wharau Road, Awakino	<ul> <li>Untreated effluent from a feedpad discharged to water.</li> </ul>	Unknown
19/09/2014	REG.008805.01	Harding T C & M J Family Trust	FDE 2753 at Cotton Road, Mata	<ul> <li>Maintenance inadequate.</li> <li>Effluent from pond discharged to water via subsurface drainage.</li> </ul>	Minor
22/09/2014	REG.009001.01	Schluter A J & E M	FDE 236 at Pekerau Road, Pekerau	<ul> <li>Upgrade required by RC (by 28 February 2013) not done.</li> </ul>	Minor
22/09/2014	REG.009152.01	Haumapu Family Trust	FDE 263 at Fernflat Road, Fern Flat	<ul> <li>Effluent flowed over a pond embankment to land.</li> <li>There was excessive ponding and overland flow.</li> </ul>	Unknown
22/09/2014	REG.009586.01	Garton Oruru Ltd	FDE 269 at Bariball Road, Oruru	<ul> <li>Untreated effluent from the milking pit discharged to water.</li> </ul>	Moderate

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Date	Consent Reference No.	Name	Description	Notes	Environmental impact
22/09/2014	REG.012303.01	Jurlina H R	FDE 227 at Pekerau Road, Lake Ohia	<ul> <li>Irrigation to wet soils caused excessive ponding and overland flow.</li> </ul>	Moderate
22/09/2014	REG.009584.01	Phillip Jecentho Farms Ltd	FDE 265 at Oruru Road, Oruru	<ul> <li>Water quality test results were outside RC limits.</li> </ul>	Moderate
24/09/2014	REG.013325.01	Travers G J	FDE 371 at Te Rore Road, Takahue	<ul> <li>Untreated effluent from a piggery discharged to water.</li> </ul>	Moderate
24/09/2014	REG.009153.01	Twin Ridge Farms Ltd	FDE 360 at Diggers Valley Road, Diggers Valley	<ul> <li>Untreated effluent from an entry/exit race discharged to water.</li> </ul>	Unknown
24/09/2014	REG.002652.01	Senn V G & K J	FDE 340 at Larmer Road, Kaitaia	<ul> <li>Water quality test results were outside RC limits.</li> </ul>	Moderate
25/09/2014	REG.011384.01	Morris R B & G J	FDE 593 at Pukemiro Road, Broadwood	<ul> <li>Untreated effluent from a feedpad discharged to water.</li> </ul>	Unknown
25/09/2014	REG.009298.01	Switzer Farms Ltd	FDE 112 at Quarry Road, Awanui	<ul> <li>Water quality test results were outside RC limits.</li> </ul>	Moderate
29/09/2014	REG.010550.01	Mataira D R C (Arona Farms Ltd)	FDE 3351 at Mangakahia Road, Pakotai	<ul> <li>Water quality test results were outside RC limits.</li> </ul>	Moderate
29/09/2014	REG.016054.01	Glen Mor Ltd	FDE 3317 at Wilson Road, Parakao	<ul> <li>Water quality test results were outside RC limits.</li> </ul>	Significant
30/09/2014	REG.009205.01	Hales G G & J	FDE 1533 at Taipuhu Settlement Road, Taipuha	<ul> <li>Water quality test results were outside RC limits.</li> </ul>	Moderate
30/09/2014	REG.012209.01	Croucher R & D M	FDE 1518 at Paparoa-Oakleigh Road, Paparoa	<ul> <li>There was a decomposing cow within 5 metres of a waterway.</li> </ul>	Minor
01/10/2014	REG.009625.01	Edwards J G & H A	FDE 1945 at Ararua Road, Waiotira	<ul> <li>Untreated effluent from an entry/exit race discharged to water.</li> </ul>	Unknown
01/10/2014	REG.008746.01	Crooks D J & P D	FDE 1912 at McConnell Road, Ruarangi	<ul> <li>Effluent from sprinklers caused excessive overland flow (for 85 metres).</li> </ul>	Unknown
02/10/2014	REG.009252.01	Totara Creek Ltd	FDE 1917 at Waikiekie North	Effluent from a silage storage bunker	Moderate

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Date Consent Reference No.		Name	Description	Notes	Environmental impact	
			Road, Waikiekie	discharged to water.		
06/10/2014	REG.009520.01	MTH Trust	FDE 7190 at Whananaki South Road, Whananaki	<ul> <li>Maintenance inadequate.</li> <li>Effluent discharged through a pond embankment to water.</li> </ul>	Unknown	
06/10/2014	REG.017117.01	Ogle I C & K E	FDE 7107 at Jubilee Road, Opuawhanga	<ul> <li>Effluent leaked through a pond embankment to water.</li> </ul>	Minor	
06/10/2014	REG.019360.01	Brown Bros Marua Ltd	FDE 7116 at Jubilee Road, Marua	<ul> <li>Untreated effluent from a feedpad discharged to water.</li> <li>Effluent from an irrigator caused excessive ponding and overland flow.</li> </ul>	Unknown	
06/10/2014	REG.009863.01	Low D W & A	FDE 7160 at Lowe Road, Hikurangi	• Effluent from irrigator caused gross excessive ponding and overland flow.	Moderate	
08/10/2014	REG.037086.01	Puketitoi Farm Ltd	FDE 3240 at Puketitoi Road, Titoki	• Effluent from an irrigator caused excessive ponding and overland flow.	Moderate	
09/10/2014	REG.011300.01	Douglas D B Ltd	FDE 3412 at McCardle Road, Titoki	<ul> <li>Effluent from an irrigator discharged via sub-surface drains to water.</li> </ul>	Moderate	
09/10/2014	REG.011710.01	Nichol J R	FDE 3031 at Kokopu Road, Kokopu	<ul> <li>Maintenance was inadequate.</li> <li>Treated effluent from a feedpad discharged without RC.</li> </ul>	Unknown	
10/10/2014	REG.009524.01	Lea Rig Farms Ltd	FDE 7148 at Whatmough Road, Opuawhanga	<ul> <li>Irrigation caused excessive ponding and overland flow to water.</li> </ul>	Moderate	
13/10/2014	REG.010536.01	Webb R R & S J	FDE 3040 at Kokopu Road, Kokopu	<ul> <li>Irrigation caused excessive overland flow to water.</li> </ul>	Moderate	
13/10/2014	REG.011881.01	Kokich R V & L H Farms Ltd	FDE 3041 at Kokopu Road, Kokopu	<ul> <li>There was dead stock unburied within 50 metres of a waterway.</li> </ul>	Unknown	
13/10/2014	REG.010679.01	Fraser A G & A F	FDE 3007 at Kara Road, Kara	<ul> <li>Untreated effluent from an entry/exit race discharged to water.</li> </ul>	Moderate	
13/10/2014	REG.009139.01	Nutmeg Trust	FDE 3048 at Kokopu Block	• There was a dead cow unburied within	Unknown	

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Date Consent Reference No.		Name	Description	Notes	Environmental impact
			Road, Maungatapere	50 metres of a drain.	
13/10/2014	REG.011208.01	Sidwell K R & P L Family Trust	FDE 3043 at Kokopu Road, Kokopu	<ul> <li>Untreated effluent from entry/exit race discharged to water.</li> </ul>	Moderate
14/10/2014	REG.008955.01	Cotton Farms Ltd	FDE 2611 at Caves Road, Mangapai	<ul> <li>Effluent from an irrigator discharged to water.</li> </ul>	Significant
14/10/2014	REG.010730.01	Carswell R J & A M Ltd	FDE 2744 at State Highway 1, Mata	<ul> <li>Water quality test results were outside RC limits.</li> </ul>	Significant

Reasons for Significant Non-Compliance	Aug	Sep	Oct	Total
Water quality test results outside consent limits	4	8	4	16
Untreated effluent discharged to water (e.g. feedpad; underpass; entry/exit race; stormwater bypass)	12	17	8	37
Discharge from irrigator to water	0	0	5	5
Excessive ponding; overland flow; discharge from irrigator into setback distances	2	3	4	9
Inadequate management (e.g. broken pipes, sump overflow)	7	7	3	17
High risk of adverse environmental effects (but no discharge to water at time of inspection)	2	2	1	5
Required upgrade not completed by due date	2	2	0	4
Discharge to water when should be irrigating	0	0	1	1
Total	29	39	26	94

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#### FARM DAIRY EFFLUENT DISCHARGES - NON-CONSENTED

Date	Consent Reference No.	Name	Description	Notes	Environmental impact
10/09/2014	REG.864674.01	Bellamy J & J	FDE 4255 at Simpson Road, Ruāwai	<ul> <li>Effluent overflowed from a sludge bed to land.</li> </ul>	Moderate
16/09/2014	REG.801006.01	Tarnhowe Farms Ltd	FDE 8633 at Inch Road, Tokatoka	<ul> <li>Untreated effluent from a feedpad discharged to water.</li> </ul>	Moderate
17/09/2014	REG.801023.01	Donaghue M B & D B	FDE 8674 at Hoyle Road, Arapohue	<ul> <li>Effluent discharged to water without RC.</li> </ul>	Unknown
17/09/2014	REG.801038.01	McLean J M	FDE 8742 at State Highway 12, Turiwiri	<ul> <li>Waste from a silage storage area discharged to water.</li> </ul>	Unknown
19/09/2014	REG.850066.01	Speedy S & S	FDE 2752 at 15 Erceg Road, Mata, RD1, Whāngārei	<ul> <li>Effluent from an irrigator discharged to water.</li> </ul>	Significant
22/09/2014	REG.800036.01	Bratton W R & S	FDE 88 at Far North Road, Awanui	<ul> <li>Untreated effluent from a feedpad and an irrigator discharged to water.</li> </ul>	Moderate
22/09/2014	REG.850380.01	PSR Trust	FDE 241 at State Highway 10, Kaitaia	<ul> <li>Untreated effluent from a feed area on a race discharged to water.</li> </ul>	Unknown
23/09/2014	REG.800012.01	Bryan N A	FDE 31 at Far North Road, Houhora	<ul> <li>Untreated effluent from a sump discharged to water.</li> </ul>	Moderate
24/09/2014	REG.800098.01	Travers G J	FDE 369 at Takahue Road, Takahue	<ul> <li>Irrigation to wet soils caused excessive ponding.</li> </ul>	Unknown
25/09/2014	REG.800055.01	Parker J E M Estate	FDE 168 at Sandhills Road, Ahipara	<ul> <li>There was no treatment/disposal system.</li> </ul>	Moderate
26/09/2014	REG.800871.01	Mahuta West Ltd	FDE 8171 at Hillam Road, Mt Wesley	<ul> <li>Untreated effluent from an entry/exit race discharged to water.</li> </ul>	Unknown
26/09/2014	REG.800887.01	Iain McCahon Trust	FDE 8212 at Colville Road, Dargaville	<ul> <li>Untreated effluent from an entry/exit race bypassed the ponds.</li> </ul>	Unknown
26/09/2014	REG.800865.01	Kouros Partnership	FDE 8163 at Mahuta Road, Mahuta	<ul> <li>Untreated effluent from an entry/exit race discharged to water.</li> </ul>	Unknown

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Date	Date Consent Reference No.		Description	Notes	Environmental impact
26/09/2014	REG.800970.01	Sodor Farms Ltd	FDE 8517 at State Highway 14, Te Wharau	<ul> <li>Effluent from a pond had been deliberately piped to a wetland.</li> </ul>	Significant
30/09/2014	REG.804424.01	Henderson M C & L J	FDE 1901 at Millbrook Road, Taipuha	<ul> <li>Effluent discharged over a pond embankment to water.</li> </ul>	Unknown
03/10/2014	REG.801385.01	Parker AJ & EA	FDE 3870 at Crane Road, Kauri	<ul> <li>Irrigation to wet soils caused excessive ponding and overland flow.</li> </ul>	Moderate
03/10/2014	REG.800592.01	ITR Ag Ltd	FDE 3859 at Pipiwai Road, Matarau	<ul> <li>Untreated effluent solids from a gravel trap were stored on land and likely to contaminate water.</li> </ul>	Unknown
03/10/2014	REG.800591.01	Finlayson A & R Ltd No. 1 Farm	FDE 3855 at Waipapa Road, Matarau	<ul> <li>Effluent from an irrigator caused excessive ponding and overland flow.</li> </ul>	Moderate
10/10/2014	REG.804009.01	Whananaki Farms Ltd	FDE 7104 at Whananaki North Road, Hikurangi	<ul> <li>Untreated effluent from a wintering barn access race discharged to land and was likely to enter water.</li> </ul>	Unknown
10/10/2014	REG.800768.01	Cutforth B & N	FDE 7332 at Whananaki North Road, Hikurangi	<ul> <li>Irrigation to wet soils caused excessive ponding and overland flow.</li> </ul>	Moderate
10/10/2014	REG.800767.01	Lenssen G H	FDE 7331 at Whananaki North Road, Hikurangi	<ul> <li>Inadequate management.</li> <li>Effluent from a storage pond had discharged to land.</li> </ul>	Unknown
10/10/2014	REG.800737.01	Opuawhanga Farms Limited	FDE 7105 at Whananaki North Road, Opuawhanga	<ul> <li>Effluent from an irrigator discharged to water.</li> </ul>	Moderate
13/10/2014	REG.800469.01	Anderson D G & L S	FDE 3012 at Kokopu Road, Kara	<ul> <li>Effluent discharged to water without RC.</li> </ul>	Moderate
21/10/2014	REG.804561.01	M.E.N Properties Limited			Significant

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Reasons for Significant Non-Compliance	Aug	Sep	Oct	Total
Untreated effluent discharged to water (e.g. feedpad; underpass; entry/exit race; discharge via stormwater bypass)	0	11	1	12
Unauthorised discharge of treated effluent to water	4	9	2	15
Discharge from irrigator to water	2	1	1	4
Excessive ponding; overland flow; discharge from irrigator into setback distances	4	1	3	8
Inadequate management (e.g. broken or blocked pipes; sump overflow; irrigator/pump maintenance)	2	2	2	6
High risk of adverse environmental effects (but no discharge to water at time of inspection)	1	0	1	2
Total	13	24	10	47

#### ENVIRONMENTAL INCIDENTS

Date	Reference No.	Description	Notes	Environmental Impact
26/09/2014	REQ.574838	Burning of bale wrap @ Heaton Rd, Hikurangi	<ul> <li>Incident investigation confirmed open burning of plastic bale wrap, spray paint cans and other general rubbish.</li> <li>Formal enforcement action taken.</li> </ul>	Significant
27/09/2014	REQ.574852	Smoke nuisance @ 3295 SH1, Waipū	<ul> <li>Incident investigation confirmed open burning of tyres, spray paint cans, plastic and other general household rubbish.</li> <li>Formal enforcement action taken.</li> </ul>	Significant
9/10/2014	REQ.574929	Smoke nuisance @ Mangapai Caves Rd, Whāngārei	<ul> <li>Incident investigation confirmed open burning of plastic bale wrap.</li> <li>Formal enforcement action taken.</li> </ul>	Significant

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#### SOE MONITORING – AIR, LAKES AND WATER

Classification	Date	Project	Notes
Air Quality	4/10/2014	Whāngārei Airshed – Ambient Air Monitoring	<ul> <li>Continuous ambient air monitoring results for PM<sub>10</sub>, sulphur dioxide and carbon monoxide at the Robert Street site, Whāngārei, indicated compliance with the National Environmental Standard during September 2014.</li> </ul>
	10/10/2014	Marsden Point Airshed – Ambient Air Monitoring	<ul> <li>Continuous ambient air monitoring results for PM<sub>10</sub> at Bream Bay College, Ruakaka, indicated compliance with the National Environmental Standard during September 2014.</li> </ul>
Catchment Investigation	30/09/2014	Waiora Northland Water – Mangere Catchment Investigation	Routine water quality monitoring of six sites in the Mangere catchment.
	30/09/2014	Waiora Northland Water – Whāngārei Harbour Catchment Investigation	<ul> <li>Routine water quality monitoring of the Hātea, Mangakino, Waitaua, Waiarohia, Raumanga, Puwera and Otaika rivers.</li> </ul>
Coastal – Water	21/10/2014	Kaipara Harbour Water Quality Programme	<ul><li>Eight water quality sites sampled in the Kaipara Harbour.</li><li>Results Pending.</li></ul>
Groundwater	26/09/2014	National Groundwater Monitoring Project – IGNS	Routine groundwater monitoring for IGNS programme.
River Water Quality Monitoring Network	22/10/2014	RWQMN – Southern	<ul> <li>Routine monthly water quality monitoring of the Ruakaka, Hakaru, Manganui, Waipao, Waiarohia, and Otaika Rivers, and two sites on the Mangere River.</li> </ul>
(RWQMN)	22/10/2014	RWQMN – Western	Routine monthly water quality sampling of the Kaihu, Waipoua, Waimamaku, Punakitere, Utakura, Mangakahia and Opouteke Rivers.

#### ITEM: 11

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# ISSUE: National Environmental Monitoring and Reporting Project (EMaR) and LAWA website update

ID: A706040

To: Environmental Management Committee, 8 December 2014

From: Tony Phipps, Operations Director

Date: 20 November 2014

Report Type:	Normal operations		Decision
D	Infrastructure	Public service	Regulatory function
Purpose:	Legislative function	Annual\Long Term Plan	Other
Significance:	Triggered	Not Triggered	

### **Executive Summary:**

Demand is increasing from all sectors of the community for readily available, high quality environmental information. In response to this, the Regional Sector, in partnership with the Ministry for the Environment (MfE) is developing an Environmental Monitoring and Reporting (EMaR) framework. This is a journey the sector has been on for the past three years to become more consistent and integrated in the collection and presentation of environmental data.

EMaR is a regional council sector wide collaboration with the objective of developing and providing integrated regional/national environmental data collection networks and widely accessible reporting platforms.

The report provides an update on progress with EMaR and the LAWA<sup>1</sup> website, which is a major component of the project. The committee received an initial report<sup>2</sup> on LAWA at the April meeting.

A national governance and project management structure has been established by the Regional Sector Group<sup>3</sup>. The project and its structure are described in the October update. The next project update is due in December.

### Legal compliance and significance assessment:

The council 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. This matter is considered to be of low significance, as the report is only provided to be received for information.

<sup>&</sup>lt;sup>1</sup> <u>http://www.lawa.org.nz/</u>

<sup>&</sup>lt;sup>2</sup> <u>http://www.nrc.govt.nz/upload/16342/EMC%20Agenda%20-%2014%20April%202014.pdf</u>

<sup>&</sup>lt;sup>3</sup> The Regional Sector Group is comprised of regional council/unitary authority, chairs and mayors.

### Recommendation(s):

1. That the report National Environmental Monitoring and Reporting Project (EMaR) and LAWA website update by Tony Phipps, Operations Director and 20 November 2014, be received.





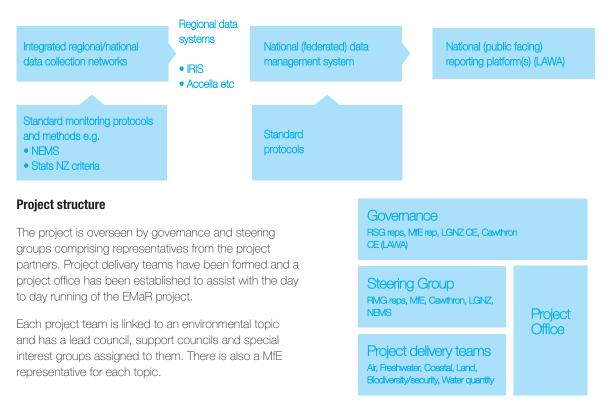
# **Environmental Monitoring and Reporting Update October 2014**

Earlier this year the Regional Sector Group and Ministry for the Environment entered into a partnership to progress an Environmental Monitoring and Reporting (EMaR) Framework. This update provides information on the progress made as well as upcoming milestones.

The objective of EMaR is to provide integrated regional/ national environmental data collection networks and widely accessible reporting platforms. This is a journey the sector has been on for the past three years to become more integrated in the collection and presentation of environmental data. The Land, Air, Water Aotearoa (LAWA) website is one key product of this journey, providing a centralised location from which to access data and information about New Zealand's natural resources.

To date, a lot of background and scoping work has been carried out by staff throughout the country. The results of these efforts will start to be seen towards the end of this year with coastal recreation data due to go live on LAWA in December, followed by water quantity in April 2015.

#### **EMaR framework**



#### **Project teams**

Air Quality
Canterbury, Auckland, Wellington
Water Quantity
Hawkes Bay, Horizons, Canterbury
Lakes
Bay of Plenty, Waikato, Northland
Rivers
Taranaki, Waikato, Wellington
Groundwater
Southland, Hawkes Bay, Canterbury
Coastal Water Quality
Auckland, Northland, Marlborough
Land
Waikato, Wellington, Tasman
Biodiversity/security
Marlborough, Southland, Waikato
Federated National Data System
Horizons, Hawkes Bay

#### **Identified Risks**

Project teams were asked to identify possible risks to the project. One of the recurring risks was resourcing of staff time on the project. The project has been structured to spread the workload across councils and special interest groups. However, all councils will need to contribute staff time to the project in terms of supply of data and content for LAWA. Ultimately the regional sector and MfE will benefit from having an integrated environmental reporting framework and shared enhanced technical capacity. It is hoped that the work required to establish and maintain this framework will become embedded in councils' work programmes and public reporting regimes.

The Governance Group ask that council leadership ensure their council's support of EMaR is resourced and the importance of the project is communicated to staff involved.

#### **Project Office**

When the EMaR project was formed there was a desire to appoint a project manager, ideally located in Wellington. A secondment from within the sector or central government was determined as the best opportunity to find someone with the desired skills and relationships. However, a suitable candidate willing to work out of Wellington was not identified and in light of this, the Governance Group has asked Caroline Rowe to continue work on the project in a project manager capacity. Caroline will be based out of Otago and travel to Wellington as required. Horizons will continue to provide administrative support.

#### Focus for next quarter

With the rivers data updated on LAWA at the end of September focus now turns to the development of the coastal recreation module. Work is currently underway on the design and build of this module while simultaneously the project team has been collecting the data required. A test site will be available in early December with the module ready to go live mid-December.

In developing this module there is also an opportunity to revisit the freshwater recreation data available for rivers. There is wide spread agreement that the Suitability for Recreation Gradings (SFRG) are not meeting the needs of the sector or the general public and these will be replaced by a seasonal grading based on E.Coli or Enterococcai supported with weekly testing results where available. Once the recreational component is complete both the freshwater and coastal teams will continue on other aspects of their projects, for example macroinvertebrates, periphyton, salinity and estuarine quality.

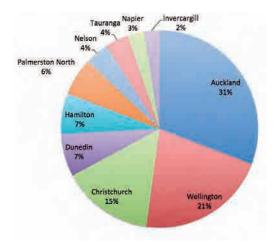
Meanwhile, workshops have also been held with the water quantity project team to present water allocation data on LAWA. This module is due to go live April 2015. Although these are the key priorities for LAWA, other teams have been busy with their projects. Many of these teams have been engaged in scoping exercises to determine the extent of data available across the councils for various indicators. The Governance Group will then consider which modules are next in line for presentation on LAWA.

Parallel to all this work is the establishment of a Federated National Data System (FNDS) which will allow for the seamless transfer of data between councils and the LAWA interface as well as any other organisation which may wish to access raw data (e.g. Central Government, CRIs etc). To create a FNDS all councils need to have a timeseries data server (e.g. Hilltop, Kisters) able to externally publish data. This will allow for data to be easily transferred between organisations and ultimately allow for 'real-time' data to be made available via LAWA.

Until a FNDS is in place the transfer of data will remain a manual process and mean that some aspects of the LAWA modules will need to be phased until an automated system is available. A project team has been formed to work with councils to ensure the necessary components are in place for a FNDS by mid-2015.

#### LAWA visitor update

There have been 29 000 visitors to the site to date, two thirds of these new. 90% of visitors are from New Zealand with the majority located in Auckland, Wellington or Christchurch.



LAWA provides a communication channel and in addition to providing data for the site, councils are expected to keep their region's news and events section of the site up to date. Councils contributions to the news and events section of LAWA is still an area that needs greater attention. The table below shows freshwater related news and events posted to LAWA since launch.

	EVENTS	NEWS
National	N/A	5
Northland	4	1
Auckland	0	0
Waikato	0	12
Bay of Plenty	8	13
Gisborne	1	0
Taranaki	0	3
Hawkes Bay	4	0
Horizons	14	20
Wellington	2	8
Nelson	4	5
Tasman	0	1
Marlborough	0	1
West Coast	0	0
Canterbury	0	2
Otago	23	19
Southland	1	2
TOTAL	61	88

# Key Dates

**28 September** Data refresh rivers

**15 October** Coastal, river, lake recreation data due

**20 November** Copy & imagery for coastal module due

**24-28 November** NZ Freshwater Science Society Presentation

**3 December** Coastal recreation test site live

4 December EMaR steering group meeting

#### **13 December**

Coastal recreation module live on LAWA Upgraded recreational rivers data

#### 20 February

Copy for water quantity due **15 March** 

Water quantity test site live **1 April** 

#### Water quantity module live on LAWA

# **Project Contacts**

#### **Governance Group Chair**

Fran Wilde, Greater Wellington Regional Council 04 830 4246

#### **Steering Group Chair**

Tony Phipps, Northland Regional Council 027 286 1725

#### **Project Office**

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# ISSUE: Climate Update For Summer 2014/2015

A704893

To: Environmental Management Committee, 8 December 2014

From: Dale Hansen, Water Resources/Hydrology Programme Manager

Date: 12 November 2014

Report Type:	☑ Normal op	erations	Information	Decision
Purpose:		ure	Public service	Regulatory function
	Legislative	function	Annual\Long Term Plan	Other
Significance:	Triggered	Ø	Not Triggered	

#### **Executive Summary:**

2014 has been a year of extreme weather. In the summer and early autumn there was a localised drought in the west of Northland. This was followed by one of the wettest winters in the eastern and central areas of Northland in decades.

Some areas were behind in their annual rainfall amounts. These included Opononi, Dargaville, Pouto Point and Ruawai.

Water resources are in a better shape than at the same time during the past five years, however further close monitoring is required during November and December, particularly in the drought effected areas of last summer.

International guidance continues to indicate that a weak El Niño is the most likely outcome (approximately a 66 % chance) over the next three months. If this pattern develops further throughout the summer this may lead to drier conditions in eastern areas and more rain in western areas of the region.

Given the unpredictability of the long term outlook, the response and monitoring plan for this summer will be implemented.

#### Legal compliance and significance assessment:

The council 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.

This matter is considered to be of low significance, as the report is only provided to be received for information.

#### **Recommendation:**

That the report Climate Update for Summer 2014/2015 by Dale Hansen, Water Resources/Hydrology Programme Manager and dated 12 November 2014, be received.

#### Report:

The purpose of this report is to provide an update on Northland's rainfall patterns, soil moisture conditions, groundwater levels and river flows leading into the 2014/2015 summer.

The report also refers to the NIWA Seasonal Climate Outlook for Northland from November 2014 to January 2015.

Figures 1 to 15 (**attached**) show rainfall, soil moisture, groundwater and river flow trends. Accumulative rainfall trends, probabilities and soil moisture graphs are supplied by the NIWA Climate Centre.

#### Background

In the summer and early autumn of this year, the western and southern Kaipara areas in particular, were subjected to low rainfall amounts, high soil moisture deficits and low river flows with rainfall drought returns periods in excess of 50 years and river flows near 20 years. The drought 'broke' in mid April 2014 leaving a significant regional rainfall deficit of approximately 245mm.

In relation to the effects of the 2013/2014 drought the following statement was reported in the Climate and Water Resources report at the Environment Management Committee meeting dated 14 April 2014;

'Given the rainfall deficits in the south western Kaipara area over the past 15 months and the international climate models currently indicating a 50/50 chance of an El Niño pattern developing by spring 2014, there is a concern that drought conditions will return to the region in 2014/2015. Council will closely monitor rainfall trends over the next six months'.

Consequently, monitoring and reporting of rainfall, groundwater levels and river flows continued throughout the winter and spring of 2014.

Following on from a record drought in localised areas of western Northland, there was a persistent series of severe storms throughout June, July and August which resulted in the eastern and central areas of Northland experiencing one of the wettest winters in decades. However, the western and southern areas of Northland remained relatively sheltered from these storm events until September and October when westerly weather patterns brought periods of heavy rain to western areas.

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

The table below shows rainfall surplus and deficits for the year as at 1 November at various locations in Northland.

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Location	Rain mm to 1	Expected Rainfall	Surplus/Deficit	Surplus/Deficit
	November	mm to 1	mm	%
	2014	November		
Kaitaia	1317.6	1188	129.6	111
Kaikohe	1895.4	1357	538.4	140
Kerikeri	1649	1433	216	115
Whangarei	1500	1319	181	114
Opononi	1022.5	1204	-181.5	85
Dargaville	1003.8	1052	-48.2	95
Ruawai	815	1045	-230	78

- As at the end of October most areas of Northland had received their expected rainfall, or more, for this time of year. However, those localised areas affected by last summer's drought such as South Hokianga, South Kaipara including Ruawai and the Pouto Peninsular have not reached their expected rainfall amounts, varying from 15% to 22% below the expected rainfall.
- Generally, groundwater levels have responded very well to the winter rain recharge, although close monitoring of groundwater levels and river flows over the following months is required in Kaipara districts.
- Soil moisture levels recorded at the main Northland centres are at or above their expected levels for this time of year.
- Generally, river flows have been average to above average for the past five months. Lower than average flows had been recorded in the central and southern areas during October.

During early to mid November there had been more frequent southerly and southwesterly winds across the region with good rainfall amounts being recorded over western areas. Rainfall for November is expected to be normal to below normal.

#### NIWA Seasonal Outlook

After having reached borderline El Niño conditions during September 2014, ocean and atmospheric indicators in the Pacific returned to more neutral levels towards the end of September and beginning of October, but recently increased again to close to or above El Niño thresholds.

International guidance continues to indicate that a weak El Niño is the most likely outcome (approximately a 66 % chance) over the next three months.

El Niño events are related to stronger and/or more frequent westerly winds over the New Zealand region. Such a climate pattern typically leads to drier conditions in eastern areas and more rain in western areas of the country. This will then be more favourable for those areas in the west and south where current rainfall deficits exist.

During November 2014 – January 2015, weak anticyclonic anomalies are forecast to the west of the country and could be accompanied with weak south westerly flow anomalies.

The outlook for Northland from November 2014 to January 2015 indicates:

• Temperatures are equally likely (35% - 45% chance) to be in the near average or above average range.

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- Rainfall totals are equally likely (40%) to be in the near normal or above normal range.
- Soil moisture levels and river flows are most likely (35% 45%) to be in the below normal range.

The probabilities for Northland are shown in the following table.

	Temperature	Rainfall	Soil Moisture	<b>River Flows</b>
Above Average	25%	20%	35%	35%
Near Average	40%	40%	40%	40%
Below Average	35%	40%	25%	25%

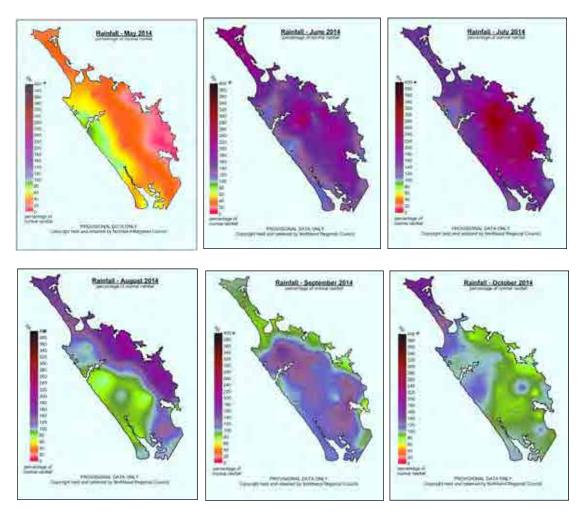
For the coming tropical cyclone season in the southwest Pacific, New Zealand has a slightly elevated risk of having an ex-tropical system coming within 550km of the country. The tropical cyclone outlook also indicates risk will be highest between February and April.

Northland may experience a normal summer with a mixture of wet and dry spells. However, given this unpredictability and the historical prolonged dry spells that had developed from similar predictions and outlooks, the following monitoring plan will be implemented.

#### **Response and Monitoring Plan**

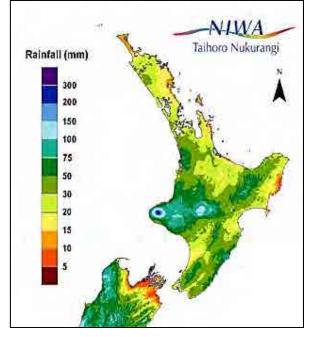
The response and monitoring plan is the same approach taken prior to previous summers and during prolonged dry periods. This includes the following.

- Continue to closely monitor rainfall, groundwater levels and river flows incorporating the council's hydrometric network and rainfall and water level stations operated by the MetService and NIWA. Monitoring will initially focus on the western and southern areas of Northland.
- When monitoring identifies areas of potential water depletion, then prepare letters to major water users informing them of current conditions, future rainfall and river flow predictions and notification of water conservation measures.
- Provide regular climate and water resources updates to council, Territorial Authorities, MPI, Northland Rural Support Trust 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.
- If required, work closely with climate scientists to determine rainfall probabilities and low flow predictions.



# Fig 1: Monthly Rainfall Patterns from May 2014 to October 2014.

Fig 2: Rainfall 1 to 12 November 2014



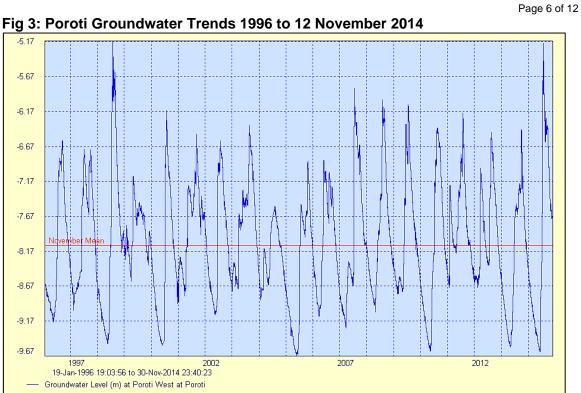
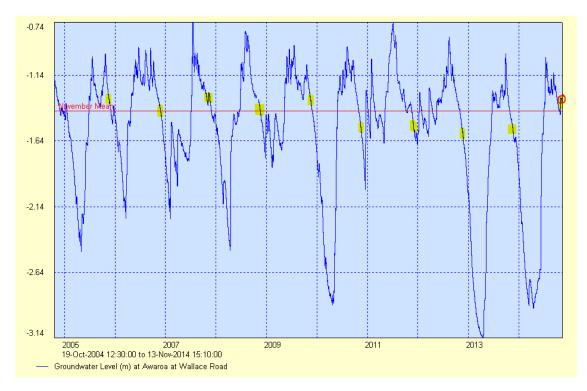


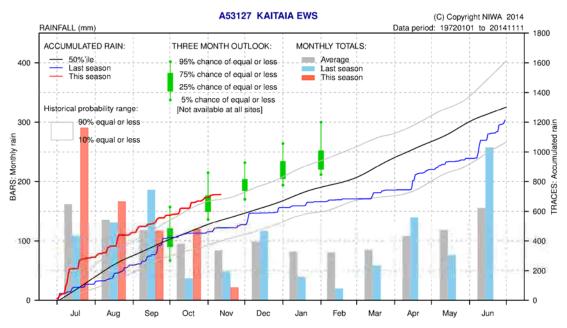
Fig 4: Ruawai Groundwater Trends 2005 to 12 November 2014



The highlighted areas are the water levels recorded at the same time (12 November) in previous years.

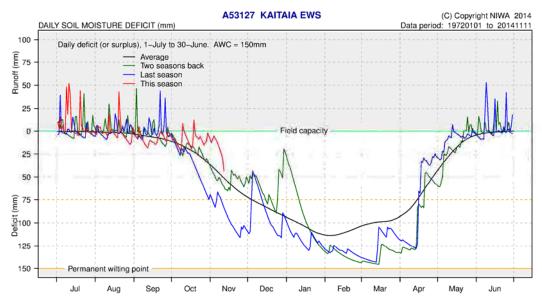
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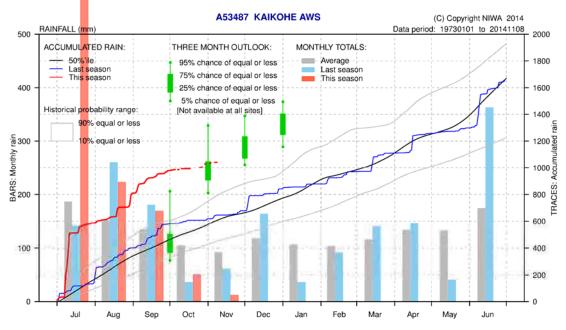


### Fig 5: Kaitaia - Accumulative Rainfall Trends and Probabilities

#### Fig 6: Kaitaia - Soil Moisture Deficits



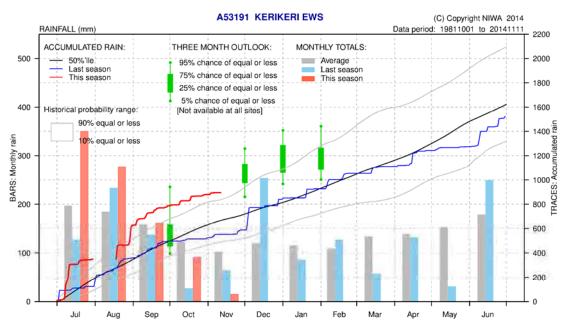
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### Fig 7: Kaikohe - Accumulative Rainfall Trends and Probabilities

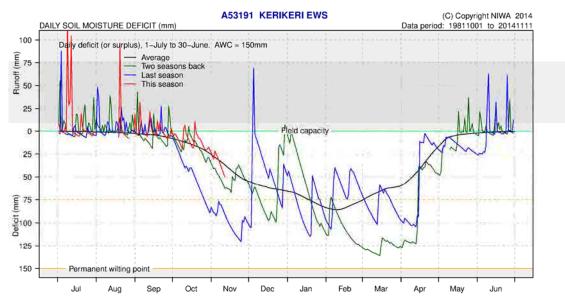
Fig 8: Kaikohe - Soil Moisture Deficits (no data available at time of this report)

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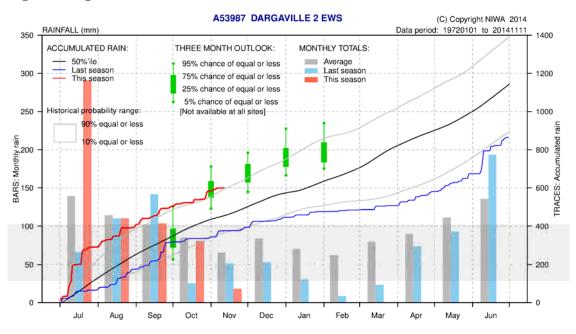


#### Fig 9: Kerikeri - Accumulative Rainfall Trends and Probabilities

#### Fig 10: Kerikeri - Soil Moisture Deficits



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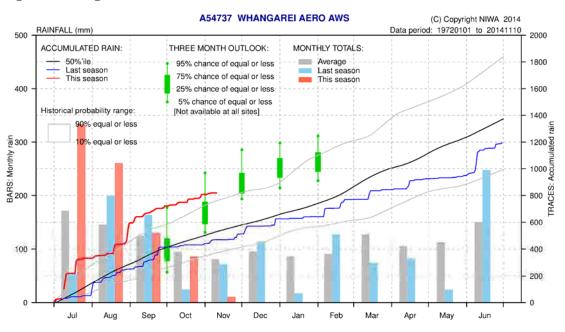


#### Fig 11: Dargaville - Accumulative Rainfall Trends and Probabilities

#### Fig 12: Dargaville - Soil Moisture Deficits

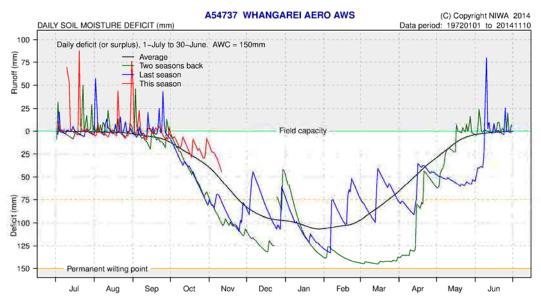


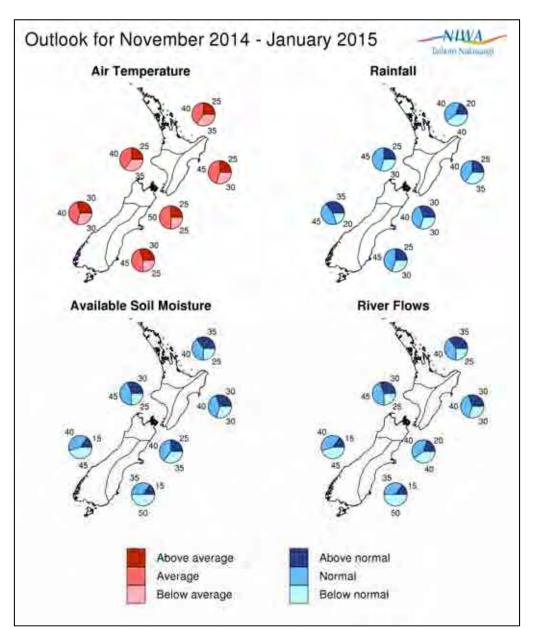
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#### Fig 13: Whangarei - Accumulative Rainfall Trends and Probabilities

#### Fig 14: Whangarei - Soil Moisture Deficits





# Fig 15: NIWA Seasonal Outlook Predictions – Temperature, Rainfall, Soil Moisture and River Flows

#### ITEM: 13 Page 1 of 1

# ISSUE: Agenda items for next EMC Meeting – 23 February 2015

**ID:** A708169

To: Environmental Management Committee, 8 December 2014

From: Tony Phipps, Operation Director

Date: 28 November 2014

Report Type:	Normal operations	$\mathbf{\nabla}$	Information		Decision
<b>D</b>	Infrastructure		Public service		Regulatory function
Purpose:	Legislative function		Annual\Long Term Plan	$\checkmark$	Other
Significance:	Triggered	V	Not Triggered		

#### **Executive summary**

The purpose of this report is to request committee members for agenda items for the next Environmental Management Committee meeting on 23 February 2015.

#### Legal compliance and significance assessment:

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

#### **Recommendation:**

That the Environmental Management Committee members suggest agenda items for inclusion into the agenda for the next Environmental Management Committee meeting on 23 February 2015.

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#### ITEM: 14

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# ISSUE: Northland Conservation Management Strategy – presentation

ID: A708168

To: Environmental Management Committee, 8 December 2014

From: Tony Phipps, Operations Director

Date: 28 November 2014

Report Type:	Normal operations		Information	$\checkmark$	Decision
<b>D</b>	Infrastructure	Q	Public service		Regulatory function
Purpose:	Legislative function		Annual\Long Term Plan		Other
Significance:	Triggered	$\square$	Not Triggered		

#### Report

Mita Harris, Chairman of Northland Conservation Board wishes to give a 30 minute presentation to the Environmental Management Committee on the Northland Conservation Management Strategy.

### Legal compliance and significance assessment:

This matter is considered to be of low significance, as the report is only provided to be received for information.

#### **Recommendation:**

- 1. That the introductory report and presentation from Northland Conservation Board be received.
- 2. That the Northland Conservation Board's request to be represented on the Whangarei Harbour Catchment Liaison Group be considered.

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Northland Conservation Board Te Runanga Papa Atawhai O Te Taitokerau

PO Box 842 Whangarei Phone 09 470 3300

Our ref : SBC-07-10-05

11 November 2014

Mr Bill Shepherd Chair Northland Regional Council Private Bag 9031 WHANGAREI

Dear Mr Shepherd

The Chair and Members of the Northland Conservation Board wish to express our appreciation to Council for assigning Councillor Craig Brown to represent Council at meetings of the Board. His presence and wise counsel imparted at our meetings is invaluable and we appreciate the lengths Craig will go to ensure that he attends our meetings. This is appreciated. His contribution adds great value to the business of the Board.

At its meeting in Kaiwaka on Friday 07 November 2014, the Board learnt of the existence of the Northland Regional Council's Whangarei Harbour Catchment Liaison Group. The work of this Group covers all the areas the Board is also interested in and I have been asked to approach you to see if it would be appropriate for the Northland Conservation Board to be represented on this Group?

The Board is keenly interested in marine protection in all its facets and is already represented on the Department of Conservation Whangarei Harbour Marine Reserves Advisory Committee. However, this Committee is focused only on the Marine Reserves and the Boards sees the Council's Liaison Group as providing a holistic approach to issues relating to the entire Harbour.

I would be most grateful if your Council could consider inviting the Board to be represented on the Whangarei Harbour Catchment Liaison Group.

Thank you for your consideration of this request.

Yours sincerely

ie bogarth.

Jeannie Hogarth Board Support Officer for CHAIRPERSON

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# **ISSUE:** Waimate North Landcare Trust – presentation

ID:	A708167

To: Environmental Management Committee, 8 December 2014

From: Tony Phipps, Operations Director

Date: 28 November 2014

Report Type:	Normal operations	✓ Information	Decision
Purpose:		Public service	Regulatory function
	Legislative function	Annual\Long Term Plan	✓ Other
Significance:		✓ Not Triggered	

#### Report

Daryl Way, Chairperson of Waimate North Landcare Trust wishes to address the Environmental Management Committee on Monday 8 December 2014 for 10 minutes on the funding issues affecting community pest control groups like theirs.

#### Legal compliance and significance assessment:

This report is for information only and no decisions are required.

#### **Recommendation:**

That the introductory report and presentation from Waimate North Landcare Trust be received.

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# ISSUE: Go Slow – presentation

To: Environmental Management Committee, 8 December 2014

From: Tony Phipps, Operations Director

Date: 28 November 2014

Report Type:	Normal operations	V	Information		Decision
Purpose:			Public service		Regulatory function
	Legislative function		Annual\Long Term Plan	V	Other
Significance:		V	Not Triggered		

#### Report

Jenni Peterson, Veterinarian wishes to address the Environmental Management Committee on Monday 8 December 2014 for 15 minutes about the investigation into the cause of "Go Slow" which is affecting pig dogs and working dogs.

### Legal compliance and significance assessment:

This report is for information only and no decisions are required.

### **Recommendation:**

That the introductory report and presentation from Jenni Peterson, Veterinarian be received.