

**NORTHLAND REGIONAL COUNCIL  
ENVIRONMENTAL MANAGEMENT COMMITTEE**

**Agenda**

Meeting to be held in the Council Chambers, 36 Water Street, Whangarei on Monday, 23 June 2014 commencing at 9:30am
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**MEMBERSHIP OF THE ENVIRONMENTAL MANAGEMENT COMMITTEE**

Cr J Carr, Chairman

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

**OPEN MEETING**

**Item:**

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**ISSUE: Confirmation of Minutes – 14 April 2014**

**ID:** A649545

**To:** Environmental Management Committee, 23 June 2014

**From:** Peternel McLean, Committee Secretary

**Date:** 9 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input type="checkbox"/>	Information	<input type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input checked="" type="checkbox"/>	Legislative function	<input type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input type="checkbox"/>	Moderate	<input checked="" type="checkbox"/>	Low

**Executive summary:**

The purpose of this report is to present the minutes of the Environmental Management Committee meeting held on 14 April 2014 (**attached**) for confirmation.

**Legal compliance:**

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

**Recommendation:**

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That the minutes of the Environmental Management Committee meeting held on 14 April 2014 be confirmed.

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**NORTHLAND REGIONAL COUNCIL  
ENVIRONMENTAL MANAGEMENT COMMITTEE**

Minutes of the Environmental Management Committee Meeting  
held in the Council Chambers,  
Northland Regional Council, 36 Water Street, Whāngārei, on  
Monday 14 April 2014, commencing at 9.30 am

**Present:**

**Northland Regional Council**

Cr Joe Carr (Chairman)  
Cr Bill Shepherd (ex officio) (from 10.25 am)  
Cr Dennis Bowman

**Whāngārei District Council**

Cr Tricia Cutforth

**Far North District Council**

Cr Ann Court

**Kaipara District Council**

Commissioner Richard Booth

**Department of Conservation**

Ms Sue Reed-Thomas

**Environmental Interest Groups**

Dr Greg Blunden

**Farming Community**

Mr Alan Clarkson

**Forest Industry**

Mr Geoff Gover

**Māori Interests**

Mr Keir Volkerling

**In Attendance:**

Ms Helen Moodie (DairyNZ)  
Ms Ruth Marsh (Living Waters Bay of Islands)  
Messrs Allan Halliday, Hona Edwards, Solomon Tipene,  
Richard (Dick) Shepherd, Millan Ruka (Ngā Kaitiaki o  
Ngā Wai Māori)

**NRC Staff:**

Chief Executive Officer  
Operations Director  
Consents/Monitoring Senior Programme Manager  
Committee Secretary

**Part attendance:**

Biosecurity Senior Programme Manager  
Land/Rivers Senior Programme Manager  
Policy Programme Managers  
Environmental Monitoring Programme Managers  
Land Management Programme Manager  
Rivers Programme Manager  
Policy Specialist - Water

Environmental Monitoring Officers  
Land Management Advisors  
Estuary Management Advisor  
Iwi Liaison Officer  
Biosecurity Officer

The Chairman declared the meeting open at 9.30 am.

## **Apologies**

### **Moved (Bowman/Gover)**

That the apologies from Crs Craig Brown and Paul Dimery for non-attendance, and from Cr Shepherd for lateness, be received.

**Carried**

## **Declaration of Conflict of Interest**

Committee members were asked to declare any conflicts of interest during the course of the meeting. There were no declarations of conflict made at this point of the meeting.

## **Confirmation of Minutes: Environmental Management Committee meeting 24 February 2014 (Item 1.0)** **Report from Peternel McLean, Committee Secretary, dated 2 April 2014.** **A629850**

### **Moved (Blunden/Clarkson)**

1. That the minutes of the Environmental Management Committee meeting held on 24 February 2014 be confirmed.

**Carried**

## **Waioira Northland Water Progress – March 2014 (Item 2.0)** **Report from Natalie Glover, Water Policy Specialist, dated 3 April 2014.** **A620129**

### **Moved (Clarkson/Cutforth)**

1. That the report Waioira Northland Water Progress by Natalie Glover, Water Policy Specialist and dated 3 April 2014, be received.

**Carried**

**Matters arising from Item 2.0:**

Mr Keir Volkerling noted a potential conflict of interest as he is involved with three iwi currently appealing the Proposed Regional Policy Statement.

**Community wastewater treatment plant discharges – current compliance status (updated) (Item 3.0)**

**Report from Tess Dacre, Monitoring Programme Manager – Water and Wastes, dated 31 March 2014.**

**A581222**

**Moved (Blunden/Bowman)**

1. That the report Community wastewater treatment plant discharges – current compliance status (updated) from Tess Dacre, Monitoring Programme Manager – Water and Wastes, dated 31 March 2014 be received.

**Carried**

**Matters arising from Item 3.0:**

FNDC Cr Ann Court provided the committee with the background to the Paihia and Kerikeri wastewater treatment plant resource consent history, which had been delayed as a result of Environment Court processes but was now again making progress. The Committee Chairman noted his appreciation of this perspective, and asked that Cr Court provide additional wastewater budget figures for the committee's information at its next meeting. Dr Blunden also noted the significant progress being made on the three wastewater treatment plants in the Doubtless Bay catchment.

**Farm Dairy Effluent – update on FDE monitoring activities (Item 4.0)**

**Report from Tess Dacre, Monitoring Programme Manager – Water and Wastes, dated 25 March 2014.**

**A625937**

**Moved (Blunden/Gover)**

1. That the report Farm Dairy Effluent – update on FDE monitoring activities from Tess Dacre, Monitoring Programme Manager – Water and Wastes, dated 25 March 2014 be received.
- 2(a) That the committee supports the establishment of a NRC Dairy Industry Liaison Group on a similar basis to NEIP Group, with an expanded scope.
- 2(b) That the council be represented by Crs Shepherd and Carr, the Operations Director and a Senior Programme Manager.

**Carried**

**Matters arising from Item 4.0**

The Committee Chairman requested staff provide further analysis showing compliance comparison levels of current results against 2003/4 rules, as he voiced his concern over what was perceived as increasingly tighter requirements masking

improvements within the industry. Dr Blunden also suggested that improved clarity and a more positive picture could be gained by providing three separate graphs rather than condensing information into one table (ref Figure 1 in the item).

## **Recreational Swimming Water Quality Programme - Investigating and improving water quality at problem sites (Item 5.0)**

**Report from Colin Dall, Consents/Monitoring Senior Programme Manager and Jean-Charles Perquin, Environmental Monitoring Officer – State of the Environment and Compliance, dated 24 March 2014.  
A609661**

### **Moved (Cutforth/Carr)**

1. That the report Recreational Swimming Water Quality Programme - Investigating and improving water quality at problem sites by Jean-Charles Perquin, Environmental Monitoring Officer – State of the Environment and Compliance and dated 24 March 2014 be received.
2. That the recreational swimming water quality programme continue to be supported by council for informing the community about water quality at popular swimming sites, and for investigating and, where possible, improving water quality at problem bathing sites in Northland.
3. That the Northland DHB is asked to take financial responsibility for carrying out a single site pathogen sampling programme (three samples) at Whāngārei Falls.

### **Carried**

***Cr Ann Court opposed the motion.***

### **Matters arising from Item 5.0:**

John Ballinger, Environmental Monitoring Programme Manager – State of the Environment, provided a presentation supporting the agenda item. He agreed to provide the committee with some additional information on guidelines identifying water quality in terms of suitability for swimming or wading and also to investigate the reasons for the higher than normal “unsuitable swimming” levels recorded in 2007/08. Considerable discussion took place over the merit of pathogen testing, and also the advances that had been made in microbial source tracking (MST). Dr Blunden noted that this tool had great potential within priority catchments and would be encouraging its use by catchment working groups. The committee considered that Northland DHB should be requested to fund a three-sample pathogen testing programme at Whāngārei Falls, but should this request be declined, the committee would consider further whether to proceed with this sampling or not.

## **Land and Water Aotearoa: National River Water Quality Website Launch (Item 6.0)**

**Report from Tony Phipps, Operations Director, dated 4 April 2014.  
A626245**

### **Moved (Carr/Clarkson)**

1. That the report Land and Water Aotearoa: National River Water Quality Website Launch by Tony Phipps, Operations Director and dated 4 April 2014 be received.

**Carried**

## **Environment Fund and Farm Water Quality Improvement Plan update (Item 7.0)**

**Report from Bruce Howse, Land/Rivers Senior Programme Manager, Kerry Webster and Debbie Johnson, Land Management Advisors, dated 14 April 2014.  
A627877**

### **Moved (Carr/Volkerling)**

1. That the report Environment Fund and FWQIP update by Bruce Howse, Land/Rivers Senior Programme Manager, Kerry Webster and Debbie Johnson, Land Management Advisors dated 18 March 2014, be received.
2. That \$36,209 of funding is transferred from the Land Management Reserve to fund the land management projects granted funding approval in March 2014 and the purchase of poplar poles.
3. That no changes are made to the Environment Fund funding criteria for the 2014/15 financial year.

**Carried**

### **Matters arising from Item 7.0:**

Debbie Johnson, Land Management Advisor, provided a presentation to support the agenda item. Committee Chairman Joe Carr expressed a desire to see a greater use being made of mapping overlays showing soil types, etc., and eventually build a picture of how many Farm Water Quality Improvement Plans we needed to roll out. Dr Blunden noted a potential conflict of interest as he was currently working through the FWQIP process but did comment on it being an efficient and helpful process. The Chairman acknowledged Dr Blunden's situation but considered that it should not prevent him being involved in discussions or voting.

## **Northland Regional Pest Management Strategies 2010-15: Review process (Item 8.0)**

**Report from Don Mckenzie, Biosecurity Senior Programme Manager and  
Gail Townsend, Biosecurity Officer, dated 28 March 2014.  
A620613**

### **Moved (Carr/Clarkson)**

1. That the report Northland Regional Pest Management Strategies 2010-15: Review process by Gail Townsend, Biosecurity Officer and dated 28 March 2014, be received.
2. That the council approve the process for the review of the RPMS outlined in this agenda item.
3. That a workshop be undertaken with the Environmental Management Committee on 26 May 2014 to consider the scope of the review of the Northland Regional Pest Management Strategies and related issues.

**Carried**

## **Update on Biosecurity responses: Queensland fruit fly, Marine pests, Kauri dieback and Pest fish (Item 9.0)**

**Report from Don Mckenzie, Biosecurity Senior Programme Manager, dated  
14 April 2014.  
A626254**

### **Moved (Carr/Gover)**

1. That the report, Update on Biosecurity Responses: Queensland fruit fly, Marine Pests, Pest fish and Kauri dieback, by Don Mckenzie, Biosecurity Senior Programme Manager dated 24 March 2014, be received.

**Carried**

### **Matters arising from Item 9.0:**

A proposed business case to fund pest fish actions aimed at reducing the risk of spreading and eradicating key pest fish species was to be considered during the proposed Regional Pest Management Strategies workshop in May.

## **River Management Update (Item 10.0)**

**Report from Joseph Camuso, Rivers Programme Manager, dated 1 April 2014.  
A629620**

### **Moved (Bowman/Blunden)**

1. That the report River Management Update by Joseph Camuso, Rivers Programme Manager dated 1 April 2014, be received.
2. That the draft minutes of the Kerikeri-Waipapa and Waitangi River Liaison Committees, both held on 27 March 2014 be received.

**Carried**



### **Climate and Water Resources - Update (Item 11.0)**

**Report by Dale Hansen, Water Resources/Hydrology Programme Manager, dated 3 April 2014.**

**A630028**

#### **Moved (Volkerling/Cutforth)**

1. That the report Climate and Water Resources – Update by Dale Hansen, Water Resources/Hydrology Programme Manager dated 3 April 2014 be received.
2. That the committee supports the proposed response/monitoring plan.
3. That staff provide an initial assessment to a future committee meeting on the international Fifth Assessment Report (AR5) from the Intergovernmental Panel on Climate Change as it relates to Northland.

**Carried**

### **Environmental Monitoring for the period 1 – 31 March 2014 (Item 12.0)**

**Report by Colin Dall, Consents/Monitoring Senior Programme Manager, dated 2 April 2014.**

**A629216**

#### **Moved (Clarkson/Shepherd)**

1. That the Environmental Monitoring report for the period 1 – 31 March 2014 from Colin Dall, Consents/Monitoring Senior Programme Manager, be received.

**Carried**

### **Shellfish Decline at Mair Bank – update (Item 13.0)**

**Report by Colin Dall, Consents/Monitoring Senior Programme Manager, and Ricky Eyre, Monitoring Programme Manager – Coastal, dated 3 April 2014.**

**A627595**

#### **Moved (Blunden/Court)**

1. That the report Shellfish decline at Mair Bank – update, by Colin Dall, Consents/ Monitoring Senior Programme Manager, and Ricky Eyre, Monitoring Programme Manager - Coastal, and dated 3 April 2014 be received.
2. That the committee support the request to MPI for urgent action, including the immediate closure of the Mair Bank pipi fishery.
3. That the NRC Chair and CEO talk to the Minister of Primary Industries to seek his active assistance in this matter.

**Carried**

## **Ngā Kaitiaki o Ngā Wai Māori – Tuna Survey Presentation (Item 14.0)**

**Report by Rachel Ropiha, Iwi Liaison Officer, dated 3 April 2014.  
A629037**

### **Moved (Carr/Volkerling)**

1. That the report Ngā Kaitiaki o Ngā Wai Māori – Tuna Survey by Rachel Ropiha, Iwi Liaison Officer and dated 3 April 2014, be received.
2. That the presentation provided by Ngā Kaitiaki o Ngā Wai Māori be received.

### **Carried**

#### **Matters arising from Item 14.0:**

On behalf of the Chair and the Committee, Mr Keir Volkerling welcomed members of Ngā Kaitiaki o Ngā Wai Māori to the meeting. Mr Allan Halliday led the group's presentation which outlined the aims of the group which is a hapū collective in the Wairua and Mangakāhia catchments. Supported by a strategic plan, the group aims to return life to the waterways in its catchments through collaboration, relationships, working together, and education.

The Committee Chairman voiced his appreciation to the group for the presentation and the work being achieved, and noted his desire for NRC to support the aims of the group and to further work together. Mr Volkerling also provided a commitment to support the group through his work at a legislative level.

## **Conclusion**

The meeting closed at 12.52 pm.

**ISSUE: Waiora Northland Water Progress**

**ID:** A639984

**To:** Environmental Management Committee, 23 June 2014

**From:** Natalie Glover, Water Policy Specialist

**Date:** 4 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input checked="" type="checkbox"/>	Information	<input type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input checked="" type="checkbox"/>	Legislative function	<input checked="" type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input type="checkbox"/>	Moderate	<input checked="" type="checkbox"/>	Low

**Executive Summary:**

- *The purpose of this report is to provide an update on progress between 4 April and 4 June 2014 with Waiora Northland Water and contributing programmes.*
- *A Memorandum of Understanding for the Northland Region Economic Impact Joint Venture Studies Project is scheduled to be signed 17 June 2014 between Council and Ministry for Primary Industries.*
- *Stakeholder engagement on Regional Plans Review topics is scheduled for August 2014. The joint EMC/RPC workshop follows the EMC meeting.*
- *Advice on setting regional objectives and limits for water quality in Northland rivers is being sought to guide decision-making.*
- *Whangarei and Kaipara harbour 100 year sediment core analysis will provide for future targeted sediment mitigation initiatives.*
- *Waitangi and Pouto nominated catchment group members need approval at this Environmental Management Committee meeting. Inaugural catchment group meetings are scheduled for June 2014.*
- *The Taharoa Domain Reserve Management Plan Review has a draft project plan for approval at Kaipara District Council's June meeting.*
- *Council has now completed 180 Farm Water Quality Improvement Plans.*
- *The new Dairy Industry Liaison Group will be holding its first meeting 18 June 2014.*

**Legal compliance and significance assessment:**

The issues covered in this report are part of council's normal operations in particular the NPS Freshwater Management (NPS FM) implementation programme adopted in May 2012 (as detailed in the 2012-2022 Long Term Plan) and the activities in the Annual Plan 2013/14. They are therefore of low significance and comply with the Local Government Act 2002 and the Resource Management Act 1991.

**Recommendations:**

1. That the report Waioira Northland Water progress by Natalie Glover, Water Policy Specialist and dated 4 June 2014, be received.
2. That the nominations for the Pouto catchment group, as detailed below, be confirmed.
3. That the updated Pouto catchment group draft Terms of Reference (**attached**) be confirmed.
4. That the nominations for the Waitangi catchment group, as detailed below, be confirmed.
5. That the updated Waitangi catchment group draft Terms of Reference (**attached**) be confirmed.

**Pouto Catchment Group nominees**

<b>Nominee</b>	<b>Representative Position</b>
Cr Graeme Ramsey	NRC Councillor
Commissioner Richard Booth	Kaipara District Council representative
Henry Holyoake	Te Uri o Hau
Rawson Wright	Te Uri o Hau
Mikaera Miru	Te Uri o Hau (alternate)
Tokorua Leaf	Waikaretu marae
Aleesha Bennett	Waikaretu marae
Henry Kemp	Pouto Topu Trust
Rudi Hoetjes	Fish and Game New Zealand
Barbara Searle	Department of Conservation
Wayne Graham	Forestry interests
Allister McCahon	Dairy farming interests
Sheree Marlow	Dairy farming interests
Chris Biddles	Dry stock farming interests
Mark Farnsworth	Dry stock farming interests
Logan James Forrest	Public position
Jock Wills	Public position
Andrew Richard Turner	Recreational interests

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**Waitangi Catchment Group nominees**

<b>Nominee</b>	<b>Representative Position</b>
Cr Joe Carr	Northland Regional Council
Cr Dover Samuels	Northland Regional Council
Cr David Collard	Far North District Councillor
Liz Kingsford	Forestry Interests
Daryl Honey	Tourism Interests
Roger Ludbrook	Dry Stock Farming Interests
Donald Jack	Dry Stock Farming Interests
Terrence Brocx	Dairy Farming Interests
Kevin Baxter	Dairy Farming Interests
Sue Johnsen	Dairy Farming Interests
Ross Baker	Industry Interests
Neil Cates	Industry Interests
Darryl Way (Waimate North Landcare Group)	Environmental Interests
Carolyn Smith	Department of Conservation
Albie Apiata (Ngati Rahiri)	Waitangi River Liaison Committee
Bill Hunter	Kerikeri Irrigation Company
Nora Rameka (Ngati Rehia)	Iwi Representative
Arnold Maunsell (Ngati Hineria)	Iwi Representative
Gil Parker (Ngati Korohue)	Iwi Representative
Emma Gibbs-Smith (Ngati Rahiri)	Iwi Representative
Alec Jack	Public position
Robert Brown	Public position
Nathan Burkepile (Fish and Game)	Recreational interests

**Report:**

**NPS FM IMPLEMENTATION**

**Joint Venture with Ministry for Primary Industries**

Ministers have requested that officials work with regional councils to develop economic analysis on the trade-offs around managing water quality and quantity as part of councils' regional water planning and to assist with implementation of the National Policy Statement for Freshwater Management (NPS FM).

A Memorandum of Understanding for the Northland Region Economic Impact Joint Venture Studies Project will be signed on 17 June 2014 between council and Ministry for Primary Industries (MPI) project sponsor, David Wansbrough. The project will define, commission and run a series of economic studies in the Northland Region using a collaborative approach between the Parties.

**Proposed Regional Policy Statement**

Council began the process of preparing a new Regional Policy Statement (RPS) back in 2010 and has now reached the Environment Court phase, dealing with appeals. Council's good progress made during formal mediation meetings in early May mean that it's likely an Environment Court hearing will only be required for discrete matters<sup>1</sup>. The new RPS includes sections on water management and largely reflects and reinforces the NPS FM and council's implementation of it.

**Regional Plans Review**

The regional plans review evaluates the performance of our three current regional plans and identifies options for how they can be improved in the next generation of regional plans. Most activities covered by regional plans require resource consent - unless expressly permitted by a rule in a regional plan - so there's a particular focus in the review on identifying activities that should be permitted activities.

Staff are now preparing to engage with key stakeholders - including priority catchment groups - on the draft outcomes of the plans review. The joint Environmental Management Committee (EMC)/Regional Policy Committee (RPC) workshop scheduled after this meeting is the first opportunity to hear about and provide feedback on the key issues being identified by the review so far.

The process and indicative completion dates for each step in the review are as follows:

- RPC approved process for undertaking the review – February 2014
- Joint EMC/RPC workshop to provide feedback on key issues – 23 June 2014
- Draft review completed – July 2014
- Stakeholder engagement – August 2014
- Report finalised – Late September 2014

The review of the regional plans (particularly the Regional Water and Soil Plan) will complement implementation of the Waiora Northland Water programme and the new RPS, by identifying options for improving the way we manage water quality and quantity that give effect to the NPS FM.

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<sup>1</sup> Discrete matters may include the mapping of Natural Character areas and the Coastal Environment line.

### **Region-wide water quality objectives and limits for rivers**

Council has contracted NIWA to advise appropriate water quality objectives and standards for Northland's rivers, which are required to give effect to the NPS FM and the Proposed RPS.

Council will develop a range of alternative objectives and limits particular to the Northland region, that provide for increasing levels of protection for aquatic ecosystem health and human health (contact recreation). The limits will cover limiting nutrients in rivers (phosphorus and/or nitrogen) and fine sediment, and help decision-makers select an appropriate level of protection for Northland's rivers.

### **Freshwater Management Units**

Council is investigating whether all of Northland's rivers should be managed as a single freshwater management unit<sup>2</sup> (FMU) or as multiple units (i.e. can one objective and associated water quality standards apply to all the region's rivers?).

### **Sediment research in Kaipara and Whangarei harbours**

Council is undertaking further research on sources of sediment in the Kaipara and Whangarei Harbours. Sediment is the key contaminant of concern in Northland's rivers and estuaries in terms of impacts on aquatic ecosystems and other values such as natural character, amenity, fisheries, and navigation. The project involves researching the relative contributions of sediment from sources in the Kaipara Harbour and Whangarei catchments over the past 100 years. The research will help us to target sediment mitigation initiatives in a more effective and efficient way in order to achieve water quality objectives and meet water quality limits.

### **Outstanding Freshwater Bodies**

Management of outstanding freshwater bodies is a requirement of the NPS FM and is a priority in the Waiora Northland Water programme. Information shows that many of Northland's dune lakes are outstanding because of their ecological and social-cultural values. Despite their high values, many are impacted by nuisance plant and algae growth.

Council is seeking advice on whether nitrogen or phosphorus (or a combination of both) is causing the growth of nuisance plants and algae. The findings will allow council to set appropriate water quality objectives and limits for outstanding freshwater bodies and better target management actions to improve their ecological health.

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<sup>2</sup> A freshwater management unit could be a single catchment, multiple catchments, or part of a catchment (Proposed amendments to the National Policy Statement for Freshwater Management 2011 – A discussion document).

## **PRIORITY CATCHMENTS**

**Waiora Northland Water web pages** <http://www.nrc.govt.nz/waiora>

### **Whāngārei Harbour**

Whangarei catchment group held a meeting and a workshop on 6 May and 27 May respectively. At the meeting, staff presented information about freshwater quality in the catchment. Minutes are **attached**. At the workshop, staff presented the policy context for freshwater management; the group reviewed their uses and values of freshwater and addressed actions from the Whangarei Harbour Water Quality Improvement Strategy.

The next catchment group event is a workshop scheduled for 25 June 2014.

### **Mangere**

Mangere catchment group held a meeting and a workshop on 8 April and 13 May respectively. During the meeting, staff presented the freshwater policy framework; the group revisited the uses and values it had brainstormed in September 2013, and discussed chairmanship of the group. Royce Kokich and Tania Pene were unanimously elected as co-chairs to achieve a good balance of leadership for the group. Minutes of the meeting are **attached**.

At the workshop, the catchment group divided into three sub “industry” groups to discuss uses and values for their particular industries or communities of interest. Staff will present freshwater allocation information and the group will finalise their freshwater uses and values at the next workshop scheduled for 24 June 2014.

### **Doubtless Bay**

The Doubtless Bay catchment group investigated waterways management on two local drystock farms at a field trip (log **attached**) held during May and is now preparing an application for \$2,000 to the Environment Fund for a native riparian planting project on one of the farms. The group intends to visit the Taipa Wastewater Treatment Plant at its next fieldtrip scheduled for 25 June.

In response to a request from the catchment group to gather baseline data to enable actions to be prioritised, staff are expanding their single water quality monitoring site in the Oruru catchment, into a comprehensive monitoring programme that includes sites from Doubtless Bay’s three main subcatchments and lakes of the Karikari Peninsula.

Staff presented water allocation information about the Doubtless Bay catchment during the meeting held 28 May. Entomologist Jenny Dymock also presented her proposal for a Dung Beetle trial expansion at the meeting.

The next catchment group meeting is scheduled for 30 July 2014.



### **New catchment groups**

The Pouto and Waitangi catchment groups have made excellent progress with their recruitment. The following are the nominees for positions on the catchment groups, pending EMC approval at today's meeting:

#### **Pouto**

Nominations for the Pouto Catchment Group to date include:

<b>Nominee</b>	<b>Representative Position</b>
Cr Graeme Ramsey	NRC Councillor
Commissioner Richard Booth	Kaipara District Council representative
Henry Holyoake	Te Uri o Hau
Rawson Wright	Te Uri o Hau
Mikaera Miru	Te Uri o Hau (alternate)
Tokorua Leaf	Waikaretu marae
Aleesha Bennett	Waikaretu marae
Henry Kemp	Pouto Topu Trust
Rudi Hoetjes	Fish and Game New Zealand
Barbara Searle	Department of Conservation
vacant <sup>3</sup>	Forest and Bird
Wayne Graham	Forestry interests
Allister McCahon	Dairy farming interests
Sheree Marlow	Dairy farming interests
Chris Biddles	Dry stock farming interests
Mark Farnsworth	Dry stock farming interests
Logan James Forrest	Public position
Jock Wills	Public position
Andrew Richard Turner	Recreational interests

The inaugural meeting of the Pouto catchment group is scheduled for 6.30pm, 26 June 2014 at Te Kopuru Coronation Hall. The revised Terms of Reference for the Pouto catchment group is **attached**.

#### **Waitangi catchment**

##### ***Landcare Trust Waitangi River catchment project***

The final year of the Landcare Trust Waitangi River catchment project (June 2014-May 2015) will continue the theme of practical action on-farm to enhance river water quality as well as transitioning towards and eventual integration with the Waitangi Catchment Group. The programme of work, which includes physical restoration, in-the-field workshops and printed publications, is expected to dovetail with the "year of learning" that the Waitangi Catchment Group is embarking upon. A number of people involved in the project have been nominated for the Waitangi Catchment Group.

##### ***Waitangi Catchment Group***

Nominations for the Waitangi catchment group to date include:

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<sup>3</sup> Forest & Bird are interested in being involved, but are yet to confirm their nominee.

<b>Nominee</b>	<b>Representative Position</b>
Cr Joe Carr	Northland Regional Council
Cr Dover Samuels	Northland Regional Council
Cr David Collard	Far North District Councillor
vacant <sup>4</sup>	Whangaroa Community Board Member
Liz Kingsford	Forestry Interests
Daryl Honey	Tourism Interests
Roger Ludbrook	Dry Stock Farming Interests
Donald Jack	Dry Stock Farming Interests
Terrence Brocx	Dairy Farming Interests
Kevin Baxter	Dairy Farming Interests
Sue Johnsen	Dairy Farming Interests
Ross Baker	Industry Interests
Neil Cates	Industry Interests
Darryl Way (Waimate North Landcare Group)	Environmental Interests
vacant <sup>5</sup>	Environmental Interests
Carolyn Smith	Department of Conservation
Albie Apiata (Ngati Rahiri)	Waitangi River Liaison Committee
Bill Hunter	Kerikeri Irrigation Company
Nora Rameka (Ngati Rehia)	Iwi Representative
Arnold Maunsell (Ngati Hineria)	Iwi Representative
Gil Parker (Ngati Korohue)	Iwi Representative
Emma Gibbs-Smith (Ngati Rahiri)	Iwi Representative
Alec Jack	Public position
Robert Brown	Public position
Nathan Burkepile (Fish and Game)	Recreational interests

The inaugural meeting of the Waitangi Catchment Group is scheduled for 6.30pm, 19 June 2014 at Okaihau Golf Club.

## **CONTRIBUTING PROGRAMMES**

### **Climate change**

A separate agenda item in this agenda summarises the Fifth Assessment Report (AR5) from the Intergovernmental Panel on Climate Change as it relates to Northland, and outlines planning and adaptation measures that the Northland Regional Council has initiated with respect to the potential impacts of climate change.

### **Kaipara Catchment**

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

<sup>4</sup> Far North District Council opted not to provide a community board representative.

<sup>5</sup> The Living Waters representative nominated was unavailable.

The Kaipara Harbour Symposium *Looking Back- Thinking Forward* has been confirmed for 15/16 November to be held at Te Ao Marama cultural centre, Te Hana.

The next quarterly IKHMG hui is scheduled for Thursday 12 June at the Kaiwaka Sports Centre.

#### **Flagship Site Programme**

The review of the flagship programme is underway and is being co-ordinated by Annette Lee and Associates. Ms Lee has interviewed interested parties, held a workshop on 14 May, and will deliver her report to the next quarterly IKHMG hui.

The annual planting programme is due to commence on 14 June, utilising plants from local nurseries and volunteers to help with the planting.

#### **Kaipara Harbour Joint Political Committee (KHJPC)**

The next meeting is tentatively scheduled for Wednesday 16 July at Kaiwaka Sports Centre.

#### **Other Kaipara catchment activities**

There is currently a programme underway in the Hikurangi swamp to improve the water quality and ecology of the ox-bows that were created when the Wairua River was straightened. Initial work is underway with fencing, bunding and planting the Okarika ox-bow. The project involves Nga Kaitiaki o Nga Wai Maori, Whangarei District Council, Northland Regional Council and Landcare Trust with support from Reconnecting Northland.

#### **Kai Iwi Lakes**

Discussions on the Draft Project Plan for the **Reserve Management Plan Review** occurred in May to determine further work to be performed by the project partners. Council's contribution to the next stage will include providing:

- GIS mapping information
- Information about the catchment
- Water quality results and protection options.
- Integration oversight of the Pest Management Plan
- Resources for the development of an engagement plan
- Submissions advice.

Kaipara District Council staff are preparing an agenda item for their council meeting scheduled for 17 June 2014.

#### **Annual Plan 2014/15**

Council deliberated on the submissions and additional information on 30 May and agreed to adopt the proposals including increased freshwater monitoring in priority catchments and increased funding for Kauri dieback. As a result of submissions and officer advice council has included additional funding (\$163,000) for pest management (including Kai Iwi / Taharoa Domain and Kauri Dieback) to provide an integrated management approach to the Kai Iwi lakes. The plan will be adopted on 17 June 2014.

#### **Community Wastewater and Dairy Effluent Improvement**

The programmes that manage community wastewater and dairy effluent point source

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discharges are reported to every second meeting of the Environmental Management Committee and will next be reported on at the August meeting.

**Land Management**  
***Flyger Road Nursery***

Development of Flyger Road Nursery Block two is now complete, with twenty new rows now available for planting during June-July. Also installed:

- Nursery signage along the roadside
- Irrigation system and infrastructure.

***Farm Water Quality Improvement Plans***

**Farm Water Quality Improvement Plans (FWQIP) as of 4 June 2014**

<b>ALL FWQIPs TO DATE</b>					
Sum of Projects		District			
Status of FWQIP	FARM TYPE	Far North	Kaipara	Whangarei	Grand Total
Awaiting visit	Dairy	1			1
	Drystock	5			5
	Drystock & Dairy	1			1
	Other	1			1
Awaiting visit Total		8			8
Completed	Dairy	38	4	53	95
	Drystock	38	9	29	76
	Lifestyle	2		5	7
	Other			2	2
Completed Total		78	13	89	180
In progress	Beef			1	1
	Dairy	1	7	14	22
	Dairy Grazing			1	1
	Drystock	19	11	3	33
	Other			1	1
In progress Total		20	18	20	58
Grand Total		106	31	109	246

An Environment Fund and Farm Water Quality Improvement Plan update is provided as a separate agenda item.

**Industry liaison**

- Northland Forestry Liaison Group met 13 May 2014 in Waipapa.
- Inaugural meeting of the 'new' Dairy Industry Liaison Group is scheduled for 18 June 2014.

**Environmental Education**

**Northland Regional Council Teacher Workshop**

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This year's annual Northland Regional Council Teacher Workshop, opened by Cr Paul Dimery and attended by twenty one teachers from six Northland estuary and harbour catchments, was held at Ngunguru on Wednesday 26 May 2014. The workshop aimed to empower teachers to increase their estuary catchment care-themed environmental education actions, including exploring their local estuary catchment and carrying out field-based estuary monitoring.



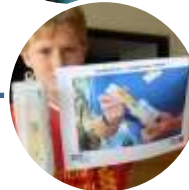
Teachers at the NRC  
2014 Teacher  
Workshop at  
Ngunguru



Maunga and  
awa in a Bay  
of Islands  
estuary  
catchment



Students  
checking out  
their stream  
health  
checklist



Learning  
about  
water  
quality  
tests

### **Northland Regional Council School Visits**

Activities carried out during Council's school visits included:

- Students working with the NIWA SHMAK kit monitored quality indicators in highly modified as well as pristine catchments in Bay of Islands and Hokianga waterways.
- Parents, teachers and students participated in water quality monitoring training in relation to a long-term stream health monitoring programme being developed for a Kerikeri waterway.
- Senior secondary school students visited the Whangarei catchment to investigate the effects of the dairy industry on the catchment.
- Russell School students learned about council's coastal water quality monitoring.
- Oromahoe students compared the quality of two different streams to work out what action they should take to improve the water quality.
- Westmount Northland (Waipapa) students further developed stream food web and food chain understandings in a SHMAK-themed visit to a Hokianga Harbour waterway on the edge of Puketi Forest.

### **Enviroschools**

A separate agenda item covers three recent Enviroschools activities – WaiFencing skills workshops, WaiRestoration professional development for schools day and Project Possum – stage 1 skills workshops.

**Attachment A to Item 2**

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## **Draft Terms of Reference: Pouto Catchment Group**

**Purpose:** To work collaboratively to maintain and improve the state and management of freshwater in the Pouto Catchment.

To work with the Northland Regional Council and its Environmental Management Committee in Pouto Catchment to deliver the Waiora Northland Water programme, including the review of the freshwater provisions of the current Water and Soil Plan for Northland to give effect to the Freshwater NPS.

To discuss and develop objectives, policies and rules to be included in the Water and Soil Plan for Northland (or other relevant regional plan) and other related actions for recommendation to the Northland Regional Council and others.

The Pouto Peninsula is located on the West Coast of Northland, approximately 60 km south of Dargaville. About 60 lakes are found within the Pouto Peninsula; [Significant lakes include Greivilles Lagoon, Kapoai, Parawanui, Wainui, Rototuna, Wairere, Phoebe's, Karaka, Rotopouua, Humuhumu, Roto – otuauru, Mokeno, Rotokawau, Waingata, Kanono, Kahuarere, Whakaneke]. The lakes are primarily located on private and Department of Conservation (DoC) held land and have high cultural, recreational, ecological and environmental values. The lakes have excellent water quality and outstanding ecological condition, providing habitat for a range of endangered plants and animals.<sup>1</sup> For these reasons the Northland Regional Council identified the Pouto Lakes as some of several outstanding waterbodies for the Waiora Northland Water Programme.

Under the National Policy Statement for Freshwater (NPS), councils must set freshwater objectives, and water allocation and water quality limits for all waterbodies in Northland so that the overall quality of freshwater in the region is maintained or improved.

Councils will remain responsible for preparing resource management plans and plan changes to give effect to the NPS (in particular setting freshwater objectives and limits). Work on this in Northland will commence during 2013-14 when the Council has made decisions on the Proposed Regional Policy Statement and the review of regional plans begins.

The Pouto Lakes have been identified by the Northland Regional Council as outstanding fresh water bodies in line with the National Policy Statement for Freshwater Management 2011 (NPS). This has implications for the management of the Lakes and for the setting of objectives and limits. Objectives and limits need to be set in a statutory document (the appropriate statutory document is currently the Water and Soil Plan for Northland, or in future, a combined regional plan).

Outstanding freshwater bodies are those water bodies with outstanding values. The quality of outstanding freshwater bodies must be protected under the NPS.

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<sup>1</sup> NIWA have recorded that 4 Pouto lakes have outstanding lake value and 7 Pouto lakes have high to medium lake value.



## Attachment A to Item 2

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The collaborative stakeholder group will confirm the values for management of the Pouto Catchment and the objectives and limits to be included in a management plan for the lakes.

The collaborative stakeholder group will develop regulatory (e.g. limits, policies and rules) as well as non-regulatory management options to achieve the agreed environmental objectives with the aim of providing the Environmental Management Committee and the Northland Regional Council with consensus recommendations for a plan change to the Water and Soil Plan for Northland and an agreed plan for implementing the non-regulatory management options.

The Environmental Management Committee will implement the recommendations of the Pouto Catchment Group where they are able to do so and will promote the recommendations that require Northland Regional Council or other committee, or stakeholder endorsement. To facilitate this occurring, recommendations from the Pouto Catchment Group must also be consistent with the Resource Management Act 1991, relevant National Policy Statements and Environmental Standards, the Regional Policy Statement, the Local Government Act 2002 and the Northland Regional Council's Long Term Plan.

**Establishment:** The Pouto Catchment Group is established as a subcommittee of the Northland Regional Council Environmental Management Committee and advisory group to a Kaipara District Council Sub-committee under the Local Government Act 2002.

**Chair:** The subcommittee may select its own chair, but in the event the selected chair is not a regional councillor, the appointment must be confirmed by the regional council. The Group will select a Chair and Deputy Chair from amongst its members.

**Quorum:** A quorum shall include the Chair ~~or Deputy Chair~~ and a total of at least 50% of the normal membership.

**Membership:** Members have been selected to reflect the broad local interests in water management in the Pouto Catchment and to provide a cross-section of values, understanding and perspectives. It is expected that members will engage with their organisations and wider networks to share information and get feedback on the matters being considered.

One nominated Northland Regional Council representative who is a NRC Councillor and a member of the Environmental Management Committee

One Kaipara District Council representative (elected member or commissioner)

Up to two members nominated by and representative of Te Uri o Hau

Up to two representatives nominated by other local iwi and hapu with interests in the catchment.

One member nominated by Pouto Topu Trust

One member nominated by Fish and Game New Zealand

One member nominated by Department of Conservation.

One member nominated by Forest and Bird

## Attachment A to Item 2

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One member nominated by recreational interests  
One member nominated by local forestry interests  
~~One~~ Two members nominated by dairy farming interests  
~~One~~ Two members nominated by dry stock farming interests  
Two members nominated by public process to represent residents of the catchment not otherwise represented.

Members are generally mandated sector or group representatives, with preference given to selection of members who reside in the catchment. Where members have not been given a mandate from their sector or interest group they will participate as individuals and are expected to convey ideas and perspectives from their wider networks.

Councillors and council staff have particular statutory (and non-statutory) responsibilities outside of the Pouto Catchment Group, but within the group they have the same rights and responsibilities as all other members. In addition to the particular knowledge, expertise and perspectives, they will represent the interests of the wider district and regional communities.

To assist the Pouto Catchment Group to make satisfactory progress and build consensus, members are expected to attend all meetings. Substitutes are discouraged and must be approved by the Chair in advance. (If a meeting is missed, or if a substitute does participate, members will be expected to catch up and to resist the temptation to re-litigate matters that have been agreed in their absence.)

Between meetings members are expected to interact with their nominating body / wider networks to obtain feedback on options being discussed.

As the group is undertaking a collaborative exercise based on consensus decision-making, at the end of the process, members will be asked to declare whether they can support the outputs and recommendations to the Environmental Management Committee and Kaipara District Council Subcommittee that have been produced by the process and will be expected to promote them to their organisations and networks. Members will also be asked whether their nominating organisations / organisations they represent (where appropriate) will formally endorse the consensus agreement.

Where it becomes known that an important sector, interest or perspective is not represented on the Pouto Catchment Group, the Environmental Management Committee will consider adding another member, taking into account their interest/perspective, their availability and the need to keep the group to a size that can work effectively together.



## Attachment A to Item 2

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The Pouto Catchment Group may establish working groups to advance work on specific topics and may request research and expert advice from, but not limited to, the Northland Regional.

Collaborative  
decision making:

Collaborative decision making is not consultation. A credible commitment to the collaborative process by the individuals and organisations involved is required. Decisions need to be made by consensus (near consensus) not majority rule.

Consensus:

Consensus is defined as every member of the Pouto Catchment Group agreeing that they can accept the agreement / recommendation.

Principles of  
participation:

To this end all members will:

- Participate cooperatively and civilly.
- Be committed to achieving a balanced – environmentally, economically, culturally and community – management regime for the catchment and Northland's freshwater.
- Commit to open, honest and collaborative discussions and decision making.
- Chatham House Rules will be followed. Members and participants in working groups are free to discuss matters with other parties – but not the media – but won't attribute people to the options or opinions discussed.
- Contributions are made without prejudice – i.e. nothing said within the group may be used in subsequent planning or legal processes except for any recommendations or agreements reached by the group.
- Members are expected to show respect for other views and avoid promoting discord within the group.
- Any public statements by the group must be agreed by the group and made through an agreed spokesperson. (This also applies to those technical advisors, staff and others who attend the meetings in support of the Pouto Catchment Group.
- Support decisions and recommendations reached by consensus by the group in subsequent public discussion, including appearing at any subsequent hearing if requested.

The Chair of the Group / Facilitator will:

- Ensure a fair and equitable group process
- Foster an atmosphere of respect, open-mindedness and group learning
- Design an enjoyable and productive process to enable the group to achieve its task
- Facilitate input from all members of the group so that every voice is heard

## Attachment A to Item 2

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- Provide or acquire guidance on collaborative decision making techniques, including constructive ways to voice disagreement and negotiate potential outcomes.

### Key Tasks:

1. Establish objectives, uses and values (e.g. ecosystem health, stock watering, etc) for the catchment.
2. Establish desired environmental state (and confirm the current state - does this mean things have to improve and by how much).
3. Determine freshwater limits to achieve the desired environmental state (both quality and quantity).
4. Determine the potential policy and management options (regulatory and non-regulatory) to achieve the preferred state.
5. Develop good management practices and other non-regulatory tools for maintaining and improving the catchment's freshwater and its management and establish the on the ground costs and benefits of them (which may include trials).
6. Develop an implementation plan and recommendations (including a draft plan change) for:
  - a. the Environmental Management Committee to consider / implement / recommend to the Northland Regional Council as part of regional plan changes and annual and long term planning
  - b. other relevant parties such as Kaipara District Council Sub-Committee, government, industry, community groups, landowners etc to consider / implement.

In completing the tasks the Pouto Catchment Group will:

- Consult with relevant stakeholders throughout the development of the implementation plan and recommendations.
- Receive, review and consider technical material as well as consultation and engagement feedback and results.

### Key outputs and timeframes:

1. Report documenting the values, objectives, desired environmental state (and freshwater limits to achieve it), and agreed management options for the catchment [initially suggest October 2014].
2. A draft plan change ready for notification incorporating any preferred / agreed management responses.

### Technical advice:

The Pouto Catchment Group will be supported by a technical group made up of technical advisors across a range of specialisms relevant to the catchment including: environmental science, matauranga Maori and Maori values, farm systems and land management, economics and social science.

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NRC shall provide secretariat and administrative support, as well as technical support in line with NRC functions and work programmes.

DRAFT

**Attachment B to Item 2**

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## **Draft Terms of Reference: Waitangi Catchment Group**

- Purpose:**
- To work collaboratively to maintain and improve the state and management of the Waitangi Catchment's fresh and coastal water.
  - To work with the Northland Regional Council and its Environmental Management Committee in Waitangi Catchment to deliver the Waiora Northland Water programme, including the review of the freshwater provisions of the current Water and Soil Plan for Northland to give effect to the Freshwater NPS.
  - To discuss and develop potential objectives, policies and rules to be included in the Water and Soil Plan for Northland (or other relevant regional plan) and other related actions for recommendation to the Northland Regional Council and others.

The Waitangi River drains an area in the Mid-North from near Kaikohe in the west, Okaihau in the north and just north of Moerewa-Kawakawa in the south, and out to the Bay of islands via a narrow strip between Kerikeri and Paihia.

Water quality issues in the catchment may increase due to the potential for dairy conversions increasing the current number of dairy farms (22). There are also some intensive beef units where stocking rates would match dairy units. Inherently, the catchment has sediment issues due to large areas of erosion susceptible soils in the upper catchment.

The catchment is highly allocated, primarily due to water consent holders/users located outside of the catchment - being the public water supply for the communities of Waitangi, Paihia and Opuia, and the irrigation scheme.

Under the National Policy Statement for Freshwater (Freshwater NPS), councils must set freshwater objectives, and water allocation and water quality limits for all waterbodies in Northland so that the overall quality of freshwater in the region is maintained or improved.

Councils will remain responsible for preparing resource management plans and plan changes to give effect to the Freshwater NPS (in particular setting freshwater objectives and limits). Work on this in Northland will commence during 2013-14 when the Council has made decisions on the Proposed Regional Policy Statement and the review of regional plans begins.

The Waitangi Catchment has seen a groundswell of local involvement in collaborative water quality improvement, with the establishment of NZ Landcare Trust's "Waitangi River Catchment: Farming for the Future" project, which has provided the impetus for the establishment of a collaborative stakeholder catchment subcommittee.

The collaborative stakeholder group will determine the values for management of the Waitangi Catchment to be included in the Water and Soil Plan or a future combined regional plan and the environmental state to be achieved (which can be selected from

## Attachment B to Item 2

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a range of options from maintenance through to various degrees of improvement) based on the local context, community aspirations and any legal minimums such as the National Objectives Framework (NOF).

The collaborative stakeholder group will develop regulatory (e.g. limits, policies and rules) as well as non-regulatory management options to achieve the agreed environmental objectives with the aim of providing the Environmental Management Committee (and the Northland Regional Council) with consensus recommendations for a plan change to the Water and Soil Plan for Northland and an agreed plan for implementing the non-regulatory management options.

The Environmental Management Committee will implement the recommendations of the Waitangi Catchment Group where they are able to do so and will promote the recommendations that require Northland Regional Council or other committee, or stakeholder endorsement. To facilitate this occurring, the recommendations from the Waitangi Catchment Group must also be consistent with the Resource Management Act 1991, relevant National Policy Statements and Environmental Standards, the Regional Policy Statement, the Local Government Act 2002 and the Northland Regional Council's Long Term Plan.

Establishment: The Waitangi Catchment Group is established as a subcommittee of the Northland Regional Council Environmental Management Committee under the Local Government Act 2002.

Chair: The subcommittee may select its own chair, but in the event the selected chair is not a regional councillor, the appointment must be confirmed by the regional council. The Group will select a Chair and Deputy Chair from amongst its members.

Quorum: A quorum shall include the Chair ~~or Deputy Chair~~ and a total of at least 50% of the normal membership.

Membership: Members have been selected to reflect the broad interests in water management in the Waitangi Catchment and to provide a cross-section of values, understanding and perspectives. It is expected that members will engage with their organisations and wider networks to share information and get feedback on the matters being considered.

Two nominated representatives of the Northland Regional Council's Environmental Management Committee (one of which is a NRC Councillor)

One Far North District Councillor

One Bay of Islands Whangaroa Community Board member

Up to four representatives nominated by local iwi and hapu with interests in the catchment.

One member nominated by forestry interests in the catchment

One member nominated by the tourism interests associated with the catchment

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~~Two-Three~~ members nominated by dairy farmers in the catchment  
Two members nominated by other (non-dairy) farming interests in the catchment  
Two members nominated by industry in the catchment.  
Two members representing environmental interest groups  
Two members nominated by public process to represent residents or business interests of the catchment not otherwise represented.  
One member representing recreational interests  
One member nominated by the Waitangi River Liaison Committee  
One member nominated by Kerikeri Irrigation Company

Members are generally mandated sector or group representatives. Where members have not been given a mandate from their sector or interest group they will participate as individuals and are expected to convey ideas and perspectives from their wider networks.

Councillors and council staff have particular statutory (and non-statutory) responsibilities outside of the Waitangi Catchment Group, but within the group they have the same rights and responsibilities as all other members. In addition to the particular knowledge, expertise and perspectives, they will represent the interests of the wider district and regional communities.

To assist the Waitangi Catchment Group to make satisfactory progress and build consensus, members are expected to attend all meetings. Substitutes are discouraged and must be approved by the Chair in advance. (If a meeting is missed, or if a substitute does participate, members will be expected to catch up and avoid re-litigating matters that have been agreed in their absence.)

Between meetings members are expected to interact with their nominating body / wider networks to obtain feedback on options being discussed.

As the group is undertaking a collaborative exercise based on consensus decision-making, at the end of the process, members will be asked to declare whether they can support the outputs and recommendations to the Environmental Management Committee that have been produced by the process and will be expected to promote them to their organisations and networks. Members will also be asked whether their nominating organisations or organisations they represent (where appropriate) will formally endorse the consensus agreement.

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Where it becomes known that an important sector, interest or perspective is not represented on the Waitangi Catchment Group, the Environmental Management Committee will consider adding another member, taking into account their interest/perspective, their availability and the need to keep the group to a size that can work effectively together.

The Waitangi Catchment Group may establish working groups to advance work on specific topics and may request research and expert advice from, but not limited to, the Northland Regional Council.

Collaborative  
decision making:

Collaborative decision making is not consultation. A credible commitment to the collaborative process by the individuals and organisations involved is required. Decisions need to be made by consensus (near consensus) not majority rule.

Consensus:

Consensus is defined as every member of the Waitangi Catchment Group agreeing that they can accept the agreement / recommendation.

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### Principles of participation:

To this end all members will:

- Participate cooperatively and civilly.
- Be committed to achieving a balanced – environmentally, economically, culturally and community – management regime for the catchment and Northland's freshwater.
- Commit to open, honest and collaborative discussions and decision making.
- Follow Chatham House Rules. Members and participants in working groups are free to discuss matters with other parties – but not the media – but won't attribute people to the options or opinions discussed.
- Make contributions without prejudice – i.e. nothing said within the group may be used in subsequent planning or legal processes except for any recommendations or agreements reached by the group.
- Show respect for other views and avoid promoting discord within the group.
- Make any public statements agreed by the group through an agreed spokesperson. (This also applies to those technical advisors, staff and others who attend the meetings in support of the Waitangi Catchment Group.
- Support decisions and recommendations reached by consensus by the group in subsequent public discussion, including appearing at any subsequent hearing if requested.

### The Chair of the Group / Facilitator will:

- Ensure a fair and equitable group process
- Foster an atmosphere of respect, open-mindedness and group learning
- Design an enjoyable and productive process to enable the group to achieve its task
- Facilitate input from all members of the group so that every voice is heard
- Provide or acquire guidance on collaborative decision making techniques, including constructive ways to voice disagreement and negotiate potential outcomes.

### Key Tasks:

1. Establish objectives, uses and values (e.g. ecosystem health, stock watering, etc.) for the catchment.
2. Establish desired environmental state (and confirm the current state - does this mean things have to improve and by how much).
3. Determine freshwater limits to achieve the desired environmental state (both quality and quantity).



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4. Determine the potential policy and management options (regulatory and non-regulatory) to achieve the preferred state.
5. Develop good management practices and other non-regulatory tools for maintaining and improving the catchment's freshwater and its management and establish the on the ground costs and benefits of them (which may include trials).
6. Develop an implementation plan and recommendations (including a draft plan change) for:
  - a. the Environmental Management Committee to consider / implement / recommend to the Northland Regional Council as part of regional plan changes and annual and long term planning
  - b. other relevant parties such as government, industry, community groups, landowners etc. to consider / implement.

In completing the tasks the Waitangi Catchment Group will:

- Consult with relevant stakeholders throughout the development of the implementation plan and recommendations.
- Receive, review and consider technical material as well as consultation and engagement feedback and results.

Key outputs and timeframes:

1. Report documenting the values, objectives, desired environmental state (and freshwater limits to achieve it), and agreed management options for the catchment [initially suggest February 2016].
2. A draft plan change ready for notification incorporating any preferred / agreed management responses.

Technical advice: The Waitangi Catchment Group will be supported by a technical group made up of technical advisors across a range of specialisms relevant to the catchment including: environmental science, matauranga Maori and Maori values, farm systems and land management, economics and social science.

NRC shall provide secretariat and administrative support, as well as technical support in line with NRC functions and work programmes.

## NORTHLAND REGIONAL COUNCIL

Fieldtrip log of the Doubtless Bay Working Group,  
*of the Environmental Management Committee*  
held at Doubtless Bay Farms,  
Wednesday 16 April 2014,  
commencing at 2 pm

<b>Present:</b>	Dr Greg Blunden	(Catchment Group Chair, NRC EMC, QEII Trust, NZ Kiwi Foundation)
	Peter Wiessing	(NRC – Catchment Lead)
	Clara Lugnet	(Doubtless Bay Promotions)
	Murray Walden	(Dairy farming rep)
	Wayne Parsonson	(Clean Waters to the Sea)
	Allan Heteraka	(Te Whanau Moana Te Roruhuri ki Karikari)
	Timoti Flavell	(Te Runanga a Iwi O Ngati Kahu)
	Mike Ward	(Te Hiku Community Board)
	Gerald Messenger	(Friends of Taumarumaru)
	Andreas Kurmann	(Recreational users)
	Julian Peters	(Beef farming rep)
	Dennis O'Callaghan	(Beef farming rep)
	Grant Parker	(Dairy farming rep)
<b>In Attendance:</b>	Natalie Glover	(NRC)
	Yvonne Steinemann	(DB Marine Protection Group)
	Mrs Ward	
	Larry Matthews	(Beef farmer)

### REPORT

The Doubtless Bay Working Group attended a fieldtrip on 16 April 2014 to learn about biodiversity and soil and water quality management initiatives undertaken on the farms of Larry Matthews and Dennis O'Callaghan. The group also visited the site where the Taipa Wastewater Treatment Plant discharges and where samples will be taken for the Aurere Catchment Investigation.

### Discussion topics and outcomes

- Riparian planting – the group discussed how they could provide practical help to farmers and agreed to make an Environment Fund application for riparian plants, to be planted by catchment group members over winter. Weed infestation in riparian vegetation and control methods were discussed.
- Intensive beef farming systems that can provide benefits for water and soil management by reducing nutrient runoff and erosion were discussed.



Discussion on managing the riparian zones



Larry Matthews explains his riparian planting programme in the coastal zone

## NORTHLAND REGIONAL COUNCIL

Minutes of the Whāngārei Harbour Catchment Group Meeting,  
*Sub-Committee of the Environmental Management Committee*  
held at NRC, 36 Water Street, Whāngārei  
on Tuesday 6 May 2014, commencing at 6.30 pm

### Present

Adrian Tonks	Community representative
Brian McLachlan	WDC Councillor
Freya Lynch	Dairy farming representative
Glenn Mortimer	Community representative
Jack Price	Commercial fishing representative
Jeremy Busck	Environmental interests representative
Mira Norris	Kaitiaki Roopu Whangarei Harbour Health
Murray Owen	Beef and sheep farming representative
Murray Byles	Dairy farming representative

### In attendance

Ben Tait	Northland Regional Council
David Hebart-Coleman	Whāngārei District Council
Darryl Jones	Northland Regional Council
Helen Moodie	DairyNZ
John Ballinger	Northland Regional Council

Glen Mortimer opened the meeting at 6.30pm.

### Apologies

Andrew Warren, Dane Karapu, David Sinclair, Jon Clotworthy, Julian Chetham, Kim Jones, Margaret Kay, Neville Erceg, Nicki Wakefield, Paul Dunn

### Presentation - Water Quality

Environmental Monitoring Programme Manager, Northland Regional Council

John Ballinger gave a presentation on water quality in the streams and rivers that flow into Whāngārei Harbour, and copies of the presentation were given to those in attendance

Questions arising during the presentation:

The biggest concern of the group was the need to get a better idea of the impact of seasonality and other trends within the overall monitoring results, rather than averages. Further analysis may be necessary to pull out data to determine whether or not any management action is actually warranted and, if so, what action.

- A connected issue is that many of the results reflect “normal conditions”, whereas extreme weather events may actually be the main causes of issues such as sedimentation. Glenn noted there was some work done in the late 1980s on storm inputs of sediment and nutrients to the upper harbour from the Hātea River and the Waiarohia and Raumanga Streams.
- The group also noted that the dry weather conditions over the last few years means that ‘scouring’ of stream beds has not occurred.

- **Bacteria (Escherichia coli)**
  - The results at Waiarohia Stream didn't seem to fit given its location at the top of a catchment, leading to a question as to how far the group can rely on the monitoring results, not just in terms of Waiarohia but other monitored sites, or are the readings too localised?
  - Noted that Whau Valley is a non dairy low farming area – could it be 1 farmer consistently leaves a gate open – e.g. the monitoring officer noted frequent cow effluent in the streambed running through a farming property – shut the gate and then problem might be solved.
  - There was some surprise that the Second Avenue Waiarohia Stream monitoring station indicates higher water quality in terms of physical attributes than upstream elements. The reverse would normally be expected.
  - The group also noted that there is a strong smell of sewage after rainfall in Raumanga Stream just up from the Raumanga Falls.
- **Dissolved Oxygen Levels**
  - The spot measurements at RWQMN sites were taken at monthly intervals during mid-morning/afternoon and therefore represent the best case scenario. Continuous monitoring for 7 days using SONDES during summer low flows is required to capture the peaks and troughs in DO levels.
  - Also noted that monitoring for some sites is very recent.
- **Puwera Stream (Otaika)**
  - This is a slow flowing stream and has been highly modified to behave more like a drain
  - Straight, less rocks, and soft sediment
  - It was felt Puwera Stream was not a good example of a natural stream and therefore an unbalanced comparison against other monitored SoE sites.
  - Monitoring of the River stopped in 2011
- The cost of set up/maintenance of a monitoring station was queried and John advised the group it cost approximately \$3,000 pa (lab costs only)
- One member asked was it fair to say that there were 'pocket problem areas', i.e. some 'hot spots' that cause many of the issues but over the long term the whole catchment was fine or improving.
- NRC noted that additional research was underway, using core samples that will give a very strong picture of sedimentation history, including samples at Parua Bay and Onerahi.
- Stormwater Monitoring testing is also an area of concern and more information from WDC should be obtained. Glenn noted that contamination from stormwater drains into the upper harbour had also been assessed in the late 1980s.
- Group also felt that more source tracking would be useful, especially in locations like the Otaika River.
- A final question was raised as to priority based on "if NRC won lotto what would they spend the money on?" John Ballinger replied staff on the ground, especially sediment work, and sediment monitoring stations.

John completed his presentation with a summary of water quality issues in the Whāngārei catchment. These included:

- Nutrient levels in Hatea and Waiarohia generally good. Otaika elevated.

- No toxicity or cyanobacteria problems but nuisance periphyton growth occurring during warmer weather.
- Elevated bacteria levels compared to national data. OK for secondary contact, but data suggests not suitable for swimming between ¼ to ½ of all sampling occasions.
- MST shows main sources of bacteria are ruminant and avian.
- “Fair” MCI scores don’t reflect “good” WQI scores due to sedimentation and water clarity issues.
- Likely sediment sources include sub-soil bank erosion, and general run-off from areas in the upper catchment. Fine clay soils exacerbate water clarity problems

## **Uses and values in the Whāngārei Harbour Catchment**

Darryl Jones distributed a handout which tabulated the results of the groups’ brainstorming activity on uses and values undertaken at the February 2014 workshop. These will be discussed at the next meeting.

### **General business**

Ben officially introduced Darryl Jones as his replacement, explaining that he was taking a step back due to other work commitments, especially involvement in the development of the next regional land and water plan.

The meeting closed at 9.30pm.

Next meeting/Workshop: Tuesday 27 May 2014

## NORTHLAND REGIONAL COUNCIL

Minutes of the Mangere Catchment Group meeting  
*Sub-committee of the Environmental Management Committee*  
held at Kokopu School, Kokopu Road, R D 9, Whangarei  
On Tuesday 8 April 2014, commencing at 7.00pm

### Present

David Coleman	Whangarei District Council
George Tuhiwai	Te Parawhau
Gerry Brackenbury	Pukenui/Western Hills Forest Charitable Trust
Hona Edwards	Te Urioroi
Ian Pritchard	Catchment resident
Rob Pye	Non-dairy farming representative
Royce Kokich	Dairy industry representative
Shayne O'Shea	Dairy industry representative
Tania Pene	Te Runanga A Iwi O Ngapuhi
Roger Holder	Catchment resident
Alan Clarkson	EMC, farming industry representative
Murray Gregor-Smith	Catchment resident

### In attendance

Bill Shepherd	Northland Regional Council
Dean Evans	Northland Regional Council
Helen Moodie	Dairy New Zealand
Justin Murfitt	Northland Regional Council
Susan Karels	Catchment resident

### Apologies - nil

The meeting opened at 7.15am. Bill Shepherd, interim Chairman welcomed everyone.

Dean re-capped the March field trip with Kim Jones from Whitebait Connection.

### Election of group chair/co-chairs

Prior to the meeting, Royce and Tania indicated their interest in becoming chair of the group. Both members stated that they would be happy to co-chair. Bill explained that the office of chair doesn't come with any additional powers. The main role is to make sure the meetings run efficiently. George asked the two members to share why they would like to lead the group.

#### Royce

- affinity to the Mangere Stream
- long-time resident
- recreational use of the Mangere as a child
- now using the stream as a dairy farmer

#### Tania

- represents Te Runanga a Iwi o Ngapuhi and supports the three hapu representatives of the group
- would give a tangata whenua perspective
- has worked alongside many hapu and cross-cultural projects
- has managed community projects



The meeting agreed that a co-chair situation would work well for the group.

The group congratulated the co-chair pair.

Hona congratulated Shane for Charmain O'Shea recently winning Diary Woman of the Year.

Bill handed the meeting over to Justin.

## **Presentation**

### **Water policy – the big picture**

Justin Murfitt, Programme Manager Resource Management, Northland Regional Council

Group members received a copy of Justin's Powerpoint presentation, (attached).

Discussion:

- **The coast**
  - the group has an interest in the coast, as the Mangere drains into the sea
- **National Objectives Framework (NOF)**
  - Helen will email members a copy of the NOF table
  - There is a default-setting protocol to use if catchment information is lacking
  - Minimum flows may be subject to emergency applications, eg. to stop communities from running out of water in times of drought. It all depends on how the rules are set and comes back to the objectives for particular water bodies
- **Hydro data**
  - A member of the regional council's hydrology team will come to a future meeting to share what is happening in the catchment regarding water takes
- **National Policy Statement for freshwater management**
  - National water policies have not necessarily been created with Northland in mind; they appear more Canterbury-induced.
  - The National Policy Statement for freshwater management was the outcome of a collaborative process, ie. not just central government's idea
- **Catchment groups**
  - What the group is doing at its workshops and meetings is feeding into what the regional council is doing
  - We are the Mangere Catchment Group for a reason – degraded river
  - The Mangakahia and Wairua do not currently have catchment groups
  - Heavy metals from the Waiariki Stream in Puhipuhi could end up in the Mangere. Is this physically manageable? A catchment group may not be able to do anything about this
  - Phase two of the regional council's Waiora Northland Water programme is to move into other catchments – issue driven or community desire
  - The Mangere was chosen because it is a well contained, small number of industries and is well defined geographically
  - Are the too-big catchments in the too-hard basket?
  - Dairy NZ is currently providing resources to work with NRC in the Mangere catchment
- **Environment affecting policy**
  - eg. trade deal with China - coming from the environment



- **River grading**
  - Do we have to grade the Mangere River – A, B...? Are we happy with where it sits? How much do we want to change? How much will it cost?
  - The Mangere rates B's and A's. The only D is for minimum dissolved oxygen
  - In 2007 the Mangere was rated D for ecoli and in 2012 it was rated B. Farm dairy effluent upgrades, septic tank improvements, fencing and good farming practices have contributed to the improvement
  - How are the biodiversity values rated? The March field trip results showed a variety of water life. Kim rated the Kara stream site 8/10 and the Knight Road site 5/10
- **Data**
  - We are dealing with old data. Lots has happened in the catchment since the data was collected. We need up-to-date data. Tom Stephens' presentation showed improvement
  - Helen will bring Tom Stephens' final report to the next meeting and will email it out to members. Dairy NZ is helping the regional council with water quality data and a fish survey
  - There is value in taking measurements to base decisions on, however there needs to be a balance between measuring stuff and doing stuff. Trade-offs have to be made, and costs considered
  - Need more information to make policies
- **Weeds**
  - Weeds are not a focus of the NPS Freshwater but may be targeted through the group's recommended management plan. They are growing all the time at the confluence of the Mangere and Wairua. Ask a member of the NRC biosecurity team to talk with us
- **Pest control**
  - Pest control makes for a healthy forest, which in turn makes for less sediment going out. The Pukenui Forest has a high level of sediment going out of it. The forest Group is increasing possum control which will help. More vegetation means less rain hitting the ground and less sediment going into the water
- **NIWA sedimentation presentation**
  - A presentation to the Environmental Management Committee showed that in the Whangarei Harbour catchment, sediment is predominately coming from subdivision and road sides

Bill thanked Justin for his presentation. He summed up by saying that the regional council is involving groups, like the Mangere catchment group, to gain better community by-in and understanding of how the laws of national government affect us.

### **Mangere Catchment Group freshwater uses and values**

Dean talked to a hand-out that showed what the group said at its second gathering about the uses and values of the Mangere catchment, (attached). The green column is generic for catchments; the brown column represents the group's feedback.

Do we want to make any changes to what was originally put up?

### **Actions – last green column**

Whilst the planning process is happening, what is currently happening within the catchment? Where could we make the easy wins; gain the most water quality benefit by completing actions on the ground?  
What is already happening?

Discussion:

- The river is lonely – we need more physical human relationships with the waterways e.g. waka ama.
- Actions in the past:
  - Aunty Nicky – mokopuna down to the river
- Actions happening:
  - Waka ama has been instigated as an annual event. It brings people to the waterways and interaction between all peoples
  - Annual Radio Rhema camp on the river flats
  - Maunu School and Mangakahia Area School carry out annual field studies on the river.
  - George's whanau camp annually for three weeks
  - Sustainable milk plans for every dairy farmer in the catchment – the majority will be completed by the end of May. The plans identify what people are thinking of doing and put a timeframe on it.
  - Farm water quality improvement plans by the regional council. 90% are turning into actions on the ground
  - Fencing and planting trees
  - Regional council publication 'Regional Report' features good news stories
  - Regional council media releases of good news stories published in the media
  - Shayne - illegal dumping by the general public. Last Christmas, sheep offal was dumped by the Mangapiu Bridge. Despite several calls to the Environment Hotline, it was not removed quickly enough. This is frustrating to the land owner.
- Opportunities for action
  - Royce - wants to fence off a few more seepage areas. He is planning to plant flax
  - Ian - would like to offer a site on his property as an education centre. He is getting in contact with Kim Jones, Whitebait Connection
  - Hona – has a group that has 8,000 plants needing a home. There are a team of people working with farmers. Waimarie Nurseries donated plants, others also. Hona's group works between plant suppliers and end users
  - George - schools are keen to plant. Do we know of places needing plants?
  - David – the group could try something to engage other landowners. It would be good to involve people outside the group. This group can be advocates and encourage others to play a part.
  - Community planting day/catchment group meet and greet with group update, create opportunities and networks for two way feedback with catchment residents?
  - Gather fencing statistics on dairy farms – the regional council only captures what happens through the Environment Fund
  - Email a list of areas that could do with some work. We want to get stuff happening while we're going through this process.
  - Mangere Catchment Group Face book page or linked to NRC page? Would need catchment residents to 'like' the council page to receive updates – perhaps a flyer drop to provide the detail if agreed to
  - Regular articles about the good things happening in the catchment. People from town can think: "I'd like to get involved in that" – example to date – regional report covering Mangere Catchment Group field trip

**Any other business** - nil

The meeting closed at 9.10pm.

Next group get together is a workshop at Kokopu School – Tuesday 13 May 2014

**ISSUE: Northland Climate Change Predictions for Northland – IPCC 2014**

**ID:** A641696

**To:** Environmental Management Committee, 23 June 2014

**From:** Bruce Howse, Land/Rivers Senior Programme Manager and Toby Kay, Natural Hazards Advisor

**Date:** 20 May 2014

<b>Report Type:</b>	<input type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
<b>Purpose:</b>	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input checked="" type="checkbox"/> Other
<b>Significance:</b>	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low

**Executive Summary:**

The purpose of this report is to provide a summary of the Fifth Assessment Report (AR5) from the Intergovernmental Panel on Climate Change as it relates to Northland, and outline planning and adaptation measures that the Northland Regional Council has initiated with respect to the potential impacts of climate change.

**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 under council policy because the report does not seek a decision other than that information be received.

**Recommendation:**

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That the report Climate Change Predictions for Northland – IPCC 2014 by Bruce Howse, Land/Rivers Senior Programme Manager and Toby Kay, Natural Hazards Advisor and dated 20 May 2014, be received.

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## Report:

### Background

At the 14 April 2014 EMC meeting, the committee resolved '*That staff provide an initial assessment to a future committee meeting on the international Fifth Assessment Report (AR5) from the Intergovernmental Panel on Climate Change as it relates to Northland*'.

### Fifth Assessment Report (AR5) from the Intergovernmental Panel on Climate Change

The Intergovernmental Panel on Climate Change (IPCC) periodically assesses knowledge of climate change, using the evidence and analyses published in peer-reviewed journals and other credible sources.

The IPCC's Fifth Assessment involved 803 scientific authors and more than 3500 expert reviewers. It comprises four related reports:

1. The Physical Science Basis (September 2013)
2. Impacts, Adaptation and Vulnerability (March 2014)
3. Mitigation of Climate Change (April 2014)
4. Synthesis Report (October 2014).

The report on impacts, adaptation and vulnerability includes a chapter about Australia and New Zealand.

The New Zealand Climate Change Centre (NZCCC)<sup>1</sup> has produced a four page summary of some key findings for New Zealand based on the IPCC Impacts, Adaptation and Vulnerability (March 2014) report. A copy of the NZCCC report is **attached**.

Some of the key findings that relate to New Zealand and **northern New Zealand**, as taken from the NZCCC summary, include:

### Temperature rise

- New Zealand has warmed by about 0.9°C since 1900
- New Zealand's temperature is expected to rise by another 0.8°C or so above the 1986–2005 average over this century if the world rapidly implements stringent measures to limit greenhouse gas emissions
- by contrast, New Zealand's temperature is expected to keep on rising throughout this century – by about 3.5°C above the 1986-2005 average – in a high carbon world

### More Change Expected

- Up to 60 more hot days per year (over 25°C) for **northern areas** by 2090.
- Significant shifts in rainfall patterns, rise in extreme rainfalls (up to 8% more intense rain for every 1°C of warming, but with significant regional variations).
- Time spent in drought in eastern and **northern New Zealand** projected to double or triple by 2040.

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<sup>1</sup> Launched in 2008, and comprised of member organisation representatives from many of New Zealand's providers of science-related climate research and services, in response to a perceived need for collaboration across providers of science-related climate research and services, and for mechanisms to facilitate interactions with end-users - See more at: <http://www.nzclimatechangecentre.org/about#sthash.gmxvReDd.dpuf>

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- Global sea level rise by 2100 of about 0.5–1 metre above the 1986–2005 average in a high carbon world, or about 0.3–0.6 metre if there is rapid decarbonisation. Even if temperatures peak and decline, sea level is projected to continue to rise for many centuries at a rate dependent on future emissions.
- Increase in days with ‘very high’ and ‘extreme’ fire danger index in some locations by up to 400% by 2040 and 700% by 2090.
- Shifts in wind speed and direction, with the average westerly flow projected to increase in spring and winter, but decrease in summer and autumn by 2090.

**Getting drier and wetter**

- The best evidence currently projects lower annual average rainfall in the northeast South Island and **northern** and eastern **districts of the North Island**, with higher annual average rainfall elsewhere. Reduced winter rainfall by approximately 10% - 20% under a high emissions scenario is projected to be the main contributor to reduced annual rainfall in **Northland**. But uncertainty in projected rainfall changes remains large for many parts of New Zealand, which creates significant challenges for adaptation.

**Freshwater**

- The best evidence available so far suggests lower flows in rivers originating in the northeast of the South Island and the east **and north of the North Island** but more in those from near and west of the main divide.

**Coastlines and flood plains**

- Rising sea levels and increasing heavy rainfall are projected to increase flooding and erosion in many coastal areas and particularly near river mouths, with escalating risks to many low-lying ecosystems, infrastructure and housing. This is cause for serious concern given patterns of development and population distribution.
- The Northland coast includes many low lying areas which are protected by either stop banks or coastal dune ridge. Sea level rise in these areas will in future lead to increased likelihood of these defences overtopping, and potentially breaching, in large storm surge events. The upward shift in the tidal cycle will also lead to increasing land drainage challenges following storm events, potentially requiring pump assisted drainage. With continued sea level rise some low lying areas may potentially become untenable.

**Key risks for New Zealand**

The IPCC Impacts, Adaptation and Vulnerability (March 2014) report identified three key risks for New Zealand, these being:

- **Increased frequency and intensity of flood damage to settlements and infrastructure.**  
Effective adaptation includes land-use controls and relocation as well as protection and accommodation of increased risk; in many locations, reliance on increased protection alone will become progressively less feasible.
- **Increased damage from wildfires – to ecosystems and settlements, economic losses and risks to human life in many parts of New Zealand.**

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Local planning mechanisms, building design, early warning systems and public education can help with adaptation. This risk is already very real in Australia. The wildfire risk for New Zealand alone is probably lower than that for Australia.

- Increasing risks to coastal infrastructure and low-lying ecosystems from continuing sea level rise, with widespread damage if the more severe projections are realised.

Some communities are already struggling with coastal erosion and inundation risk, and successive building and protection cycles constrain flexible responses. Coastal retreat is a long-term adaptation strategy but challenging to implement; options for some natural ecosystems are limited due to the speed of change and lack of suitable space. Sea level will continue to rise beyond 2100 even if global warming is limited.

**Northland Regional Council – Planning and Adaptation for Climate Change**

In respect of the aforementioned potential changes and impacts, Northland Regional Council has implemented a number of initiatives to assist, plan for, and adapt to the potential changes and impacts of climate change.

These include:

**Natural Hazard assessments**

- Coastal erosion hazard zone assessments, which consider the potential for increased sea level rise and beach erosion response, to derive setback lines based on predicted erosion hazard.
- Flood maps, which include an allowance for climate change based on increased extreme rainfall for a mid-range temperature warming scenario, and sea level rise in coastal boundary locations.
- Accurate and high resolution land elevation data (LiDAR) for over 30 coastal settlements and 25 river floodplains in Northland, which allows for rapid assessment of inundation risk potential from rising sea levels and accurate river flood hazard zone mapping – refer **attached** map of LiDAR extent.

**Planning**

- Regional Policy Statement (RPS) for Northland, which includes provisions for planning for climate change. The impacts of climate change are also identified as an issue of significance to tangata whenua in section 2.6.
- Relevant provisions include Natural Hazards related policy and methods in chapter 7. Policy 7.1.6 relates to climate change and development, and states that climate change effects will be included in all estimates of natural hazard risk when managing land use and development in Northland.
- RPS chapter 4.3 'Region-wide water quantity management' includes policy to encourage efficient use of water within allocation limits, as well as to recognise and promote the benefits of water harvesting, storage, and conservation measures. The explanations under these policies refer to the potential for future climate change, with longer dry spells and more frequent high intensity rain events.

**Other**

- Hydrometric network, which enables monitoring of river flows, sea levels and rainfall for trend analysis and management of water resources.

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- Proposed Northland irrigation feasibility study, which will enable further assessment of water resources and storage, including consideration of the potential impacts on climate change.
- Civil Defence Emergency Management planning, including the development of community response plans
- Flood control planning and flood scheme development, for example the development of the Kotuku detention dam which has been designed with an allowance for future climate change, and the investigation into the proposed Awanui flood scheme upgrade which includes a consideration of future climate change.



**ISSUE: Dairy Industry Liaison Group update**

**ID:** A649546

**To:** Environmental Management Committee, 23 June 2014

**From:** Tony Phipps, Operations Director

**Date:** 10 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input checked="" type="checkbox"/>	Information	<input type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input checked="" type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input type="checkbox"/>	Moderate	<input checked="" type="checkbox"/>	Low

**Executive Summary:**

At the April Environmental Management Committee meeting, members confirmed the role expansion of the Northland Effluent Improvement Project Group into the "Dairy Industry Liaison Group". The wider scope of the new group would allow it to consider other areas of interest beyond farm dairy effluent, for example, water takes, nutrient management and so on.

Council representation on this advisory/liaison group was nominated by the committee (Cr Joe Carr, Cr Bill Shepherd), and dairy industry representatives were to be coordinated by Ms Helen Moodie, DairyNZ. Once established, the group would select its own chair.

The inaugural meeting of the Dairy Industry Liaison Group was scheduled for Wednesday 18 June. Tony Phipps will provide a brief report on outcomes from this meeting.

**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 under council policy because the report does not seek a decision other than that information be received.

**Recommendation:**

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That the report Dairy Industry Liaison Group update by Tony Phipps, Operations Director and dated 10 June 2014, be received.

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**ISSUE: Environment Fund and Farm Water Quality Improvement Plan update**

**ID:** A645744

**To:** Environmental Management Committee, 23 June 2014

**From:** Dean Evans, Land Programme Manager

**Date:** 6 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input type="checkbox"/>	Information	<input type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input type="checkbox"/>	Moderate	<input type="checkbox"/>	Low

**Executive Summary:**

The purpose of this report is to update the Committee on the funding of Land Management projects through the Environment Fund for the year to date and provide a summary of Farm Water Quality Improvement Plan (FWQIP) information requested.

It concludes with the recommendations that the report is received, that \$44622 of funding is transferred from the Land Management Reserve to fund projects approved via delegated authority during April and May 2014.

**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, the activities covered in this report are considered to be of low significance under council policy because the report does not seek a decision other than that information be received.

**Recommendations:**

- 
1. That the report Environment Fund and Farm Water Quality Improvement Plan update by Dean Evans, Land Programme Manager and dated 6 June 2014, be received.
  2. That a total of \$44622 of funding is transferred from the Land Management Reserve to fund the land management projects granted funding approval of \$37,890 in April 2014 and \$6732 in May 2014.
  3. The signed conflict of interest form of Greg Blunden be noted.
-

## Report

### Background

The Northland Regional Council Environment Fund has been available to assist Northland landowners since 1996. The fund recognises that while Northlanders are generally committed to protecting and enhancing their natural environment, and minimizing the effects of their land management practices on the wider community, the economic viability of many farms dictates spending priorities. The Environment Fund enables a partnership approach whereby Northland Regional Council's priority works can be identified and brought further up the list by being partially funded. The production of FWQIP's is one of the tools used to promote this partnership

### Farm Water Quality Improvement Plans from 1 July 2013 to 28 May 2014

Status of FWQIP	Farm Type	Far North	Kaipara	Whangarei	Total
Awaiting visit	Dairy	2			2
	Drystock	5			5
Completed	Dairy	29	4	46	79
	Drystock	30	6	27	63
	Lifestyle			6	6
In progress	Dairy	1	5	13	19
	Drystock	19	12	3	34
	Other				
	Lifestyle	1		1	2
<b>TOTAL</b>		<b>87</b>	<b>27</b>	<b>96</b>	<b>210</b>

### Environment Fund Allocation Update

The approved April 2014 Environment Fund funding applications for land management projects are provided in Attachment 1 and May 2014 projects are provided in Attachment 2.

A Conflict of Interest for Greg Blunden went through the approved process and was declared to the Chairman and CEO. This is provided in Attachment 3.

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The following table provides a summary of the 2013/14 funding allocations to date (costs) against the approved budget (revenue).

**Environment Fund costs vs budget summary to date.**

<b>Costs</b>	<b>Funds</b>	<b>Allocations</b>
2012/13 over allocation - repayment to reserve		\$ 3,641
Funding commitments carried forward from 12/13 - Land		\$ 6,354
Approved Applications Land - July 2013		\$ 2,846
Approved Applications Land - August 2013		\$ 385,153
Approved Applications Land - October 2013		\$ 45,971
Approved Applications Land - November 2013		\$ 78,125
Approved Applications Land - December 2013		\$ 55,324
Approved Applications Land - February 2014		\$ 40,792
Approved Applications Land – March 2014		\$ 11,209
Approved Applications Land – April 2014		\$ 37,890
Approved Applications Land – May 2014		\$ 6,732
Poplar contract for supply		\$ 34,500
Less Withdrawn Projects		-\$ 22,888
<b>TOTAL FUNDING APPLICATIONS - LAND</b>		<b>\$ 684,172</b>
Funding Applications Biosecurity - August 2013		\$ 75,000
Funding Applications Biosecurity - November 2013		\$ 80,960
<b>TOTAL FUNDING APPLICATIONS – BIOSECURITY</b>		<b>\$ 155,960</b>
<b>Total Project Costs</b>		<b>\$ 840,132</b>
<b>Revenue</b>		
Environment Fund - Land	\$ 410,000	
Additional Funding from Land Mgmt. Reserve - L	\$ 355,000	
<b>TOTAL LAND REVENUE</b>	<b>\$ 765,000</b>	
Environment Fund - Biosecurity	\$ 75,000	
Additional Funding from Land Mgmt. Reserve - Biosecurity	\$ 45,000	
<b>TOTAL BIOSECURITY REVENUE</b>	<b>\$ 120,000</b>	
<b>Total Revenue</b>	<b>\$ 885,000</b>	
<b>Remaining Available Funds</b>		<b>\$ 44,868</b>
<b>Plus Underspend on Projects</b>		<b>\$ 8,173</b>
<b>TOTAL</b>		<b>\$ 53,041</b>

Final figures will be reconciled at the completion of the financial year.

### **Focus for the 2014/15 Financial Year**

To help support the Waioira Northland Water programme the focus will be:

1. To directly offering support to the farmers (in the first instance) living and working in the new collaborative catchment group catchments e.g. Pouto, Waitangi.
2. To support all of the collaborative catchment groups with advice and funding to achieve ongoing water quality improvement actions within their catchments.
3. To approach landowners who live and work within outstanding water body catchments, to offer advice, the opportunity to have a FWQIP completed for their property and the possibility of funding of agreed priority actions.
4. To work with Dairy NZ to ensure all dairy farms within the Waitangi (23) and Mangere (18) catchments have received either a Dairy NZ Sustainable Milk Plan (SMP) or a NRC FWQIP, and provide funding assistance as appropriate to implement those highlighted actions on the ground. Provide mapping support to Dairy NZ in providing SMP's to priority catchment dairy farmers.
5. Large drystock/dairy farms, for example some of Landcorp's Northland farms where staff are currently starting or completing FWQIPs, will be jointly put to the Environmental Management Committee under the exceptional projects umbrella, with the hope of achieving wide scale water quality improvements that will exceed current funding caps and with a minimum amount of processing.
6. To provide soil conservation plant material to landowners who have active erosion or have at risk sites. To provide for the demand of plant material from the council poplar and willow nursery in the 14/15 planting season.

### **Current Supply vs Demand**

<b>Poplar poles</b>		<b>Willow wands</b>		<b>Protective sleeves</b>	
Available	Requested	Available	Requested	Available	Requested
4225	4525	2340	3000	575	265

Willow wands are available through local suppliers and numbers can be adjusted to meet demand. There doesn't seem to have been any loss in demand for erosion planting materials because of the new per pole charge that has been introduced this year i.e. \$4 per poplar pole; this still maintains a 50% subsidy.

**Delegated Authority Recommendations - April 2014**

EFD No.	FWQI P	NRC STAFF MEMBER	Applicant	Previous Funding Year(s)	Previous Funding Amount(s)	Farm Type	Funding Stream	District	Brief Project Description	Amount Recommended
APP.036702	103	ASE	R G Proctor Farms (Ltd)	N/A	N/A	Drystock	Water Quality	Far North	Fencing	\$ 750.00
APP.036674	157	ASE	Ngamaia Farms Limited	N/A	N/A	Drystock	Water Quality	Far North	Fencing	\$ 7,000.00
APP.036679	141	ASE	Greg & Gay Blunden (Tokoeke Trust)	N/A	N/A	Drystock	Biodiversity	Far North	Wetland Fencing	\$ 2,400.00
APP.036692	97	KWE	James Robert Parsons	N/A	N/A	Drystock	Water quality	Kaipara	Fencing & Planting	\$ 3,940.00
APP.036744	0	LAS	Pataua Island Reserve	N/A	N/A	N/A	Coastal	Whangarei	Planting Project	\$ 600.00
APP.036745	0	LAS	Tern Point Recreational & Conservation Society	2010	\$ 5,227.00	N/A	Coastal	Kaipara	Planting Project	\$ 2,500.00
APP.036747	0	LAS	Te Pahii Bird Sanctuary	2013	\$ 570.00	N/A	Coastal	Far North	Planting Project	\$ 300.00
APP.036751	0	LAS	Whangaumu-Wellingtons Bay	N/A	N/A	N/A	Coastal	Whangarei	Planting Project	\$ 1,500.00
APP.151261.04.01	0	LAS	Tauranga Bay Community Association	2013	\$ 2,220.00	N/A	Coastal	Far North	Planting Project	\$ 500.00
APP.151878.02.01	0	LAS	Tapeka Ratepayers Group	2013	\$ 365.00	N/A	Coastal	Far North	Planting Project	\$ 200.00
APP.151464.03.01	0	LAS	D Jones (Long Beach Coastcare Group)	2013	\$ 1,505.00	N/A	Coastal	Far North	Planting Project	\$ 2,000.00
APP.036743	0	LAS	Trevor Le Clus - Ruakaka Coastcare	2013	\$ 675.00	N/A	Coastal	Whangarei	Planting Project	\$ 500.00
APP.151742.02.01	0	LAS	Tokerau Beach Whatuwhiwhi Residents & Ratepayers Association	2013	\$ 3,480.00	N/A	Coastal	Far North	Planting Project	\$ 1,000.00
APP.151474.02.01	0	LAS	Rangiputa Residents & Ratepayers	2013	\$ 1,587.00	N/A	Coastal	Far North	Planting Project	\$ 1,000.00
APP.151480.02.01	0	LAS	Taipa Beach Improvement Society	2013	\$ 1,782.00	N/A	Coastal	Far North	Planting Project	\$ 500.00
APP.036281	0	LAS	Tina-Lee Yates (Parapara Marae) (Taipa Beach)	2013	\$ 900.00	N/A	Coastal	Far North	Planting Project	\$ 500.00
APP.151239.02.01	0	LAS	Baylys Beach Society	2013	\$ 2,231.00	N/A	Coastal	Kaipara	Planting Project	\$ 4,400.00
APP.036750	0	LAS	Waipapakauri Coastal Care Group	2012	\$ 550.00	N/A	Coastal	Far North	Planting Project	\$ 2,500.00
APP.151881.01.01	0	LAS	Te Rununga O Te Rarawa	2013	\$ 970.00	N/A	Coastal	Far North	Planting Project	\$ 2,500.00
APP.151882.01.01	0	LAS	Ahipara Coastcare Group	2013	\$ 2,215.00	N/A	Coastal	Far North	Planting Project	\$ 2,000.00

APP.151890.01.01	0	LAS	Gabrielle Pfaender	2013	\$1,070.00	N/A	Coastal	Far North	Planting Project	\$ 1,300.00
									<b>TOTAL</b>	<b>\$ 37,890.00</b>

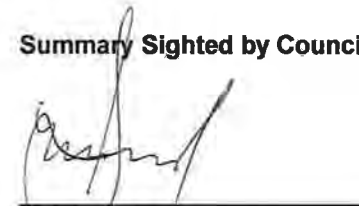
**Approved Under Delegated Authority**



Bruce Howse  
Land & Rivers Senior Programme Manager

**Date:** 16 April 2014

**Summary Sighted by Councillor**



Bill Shepherd  
Chairman Northland Regional Council

**Date:** 16 April 2014

### Delegated Authority Recommendations - May 2014

EFD No.	FWQI P	NRC STAFF MEMBER	Applicant	Previous Funding Year(s)	Previous Funding Amount(s)	Farm Type	Funding Stream	District	Brief Project Description	Amount Recommended
APP.036793	106	ASE	The Broadacre Farms Trust	N/A	N/A	Drystock/Dairy	Water Quality	Far North	Fencing	\$ 6,732.50
									<b>TOTAL</b>	<b>\$ 6,732.50</b>

#### Approved Under Delegated Authority



Bruce Howse

Land & Rivers Senior Programme Manager

Date: 15 May 2014

#### Summary Sighted by Councillor



Bill Shepherd

Chairman Northland Regional Council

Date: 15 May 2014



## Declaration of Conflicts of Interest

I, Bruce Howse declare  
the following conflicts of interest(s) for the Council Register of Conflicts of Interests.

Greg Blunden (EMC Committee member)  
has applied for EFund funding.

Signed:  Date: 15/4/14

Actions agreed:

Report to Chairman at time of EFund  
Approval. Advise CEO (by email). Advise  
EMC in next report on allocations.

Acknowledged by: (Name)

Bill Shepherd

Signed:  Date: 16/04/14

**ISSUE: Review of Regional Pest Management Strategies  
– Workshop outcomes**

**ID:** A646152

**To:** Environmental Management Committee, 23 June 2014

**From:** Don Mckenzie, Biosecurity Senior Programme Manager

**Date:** 10 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
<b>Purpose:</b>	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input checked="" type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
<b>Significance:</b>	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low

**Executive Summary:**

At its April meeting, committee members were notified of the intention to review the Northland Regional Pest Management Strategies (RPMS) and the proposed process for conducting the review was outlined.

An RPMS workshop with committee members was held on 26 May. The workshop formed part of the non-statutory process, with the aim of providing the opportunity for the committee to become aware of key biosecurity issues, ask questions and consider the role the council should play in pest management over the next decade.

**Key issues identified at the workshop**

- Creating a vision for Northland and prioritising high value areas for pest management.
- Community and site led pest control - the need to consider where the gaps in the region are, how these align with high value areas and how the existing programmes are sustained over time.
- Biosecurity responses - we need to be better prepared and what this will cost.
- Support for a Marine Pathway plan focussed on stopping the vectors of marine pests
- Resourcing the predicted needs, and:
- Weed control rules on roadsides, rail corridors, and property boundaries, do we keep the status quo, rely on stricter rules or support voluntary compliance?

The next stage of the review will be to engage with key stakeholders during June and July and prepare a proposal for consideration by the Committee at their first meeting in 2015. The formal statutory process of public consultation begins in 2015 with the aim of producing a revised Regional Pest Plan and Marine Pathways Plan by July 2015.

**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:**

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That the report Review of Regional Pest Management Strategies – Workshop outcomes by Don Mckenzie, Biosecurity Senior Programme Manager and dated 10 June 2014, be received.

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**ISSUE: Biosecurity Responses update**

**ID:** A649527

**To:** Environmental Management Committee, 23 June 2014

**From:** Don Mckenzie, Biosecurity Senior Programme Manager

**Date:** 6 June 2014

<b>Report Type:</b>	<input type="checkbox"/>	Normal operations	<input checked="" type="checkbox"/>	Information	<input type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input checked="" type="checkbox"/>	Annual\Long Term Plan	<input checked="" type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input type="checkbox"/>	Moderate	<input checked="" type="checkbox"/>	Low

**Executive Summary:**

The purpose of this report is to update the Committee on kauri dieback, marine pests and Queensland fruit fly.

**Kauri dieback**

Council provided for a budget allocation of \$263k for Kauri dieback and pest control at Kai iwi lakes over the following year as part of the recent Annual Plan deliberations. This will provide for better coordination of kauri dieback activities within Northland and action on the ground to help prevent disease spread. Work is underway to advertise and appoint a Programme Manager to lead this work and liaise with key stakeholders. The budget allocation will also mean pest control activities at Kai iwi lakes; an important natural asset which is located in the heart of kauri land is sustained.

**Marine pests**

NIWA dive teams are currently undertaking surveillance at high risk ports in Northland and thus far nothing new to New Zealand has been discovered nor has there been any range extension of fanworm populations beyond Whangarei harbour. A final report on the NIWA survey findings will be available at the next committee meeting.

**Queensland fruit fly**

The past two incursions of fruit fly which occurred during February and April have cost the regional council \$105,065 plus gst. These costs have been fully reimbursed by MPI. No further flies have been found and additional surveillance traps have been set up around the vicinity of the port and upper harbour. MPI are continuing with an investigation into the possible sources of the fruit flies and council biosecurity staff will continue to work with national response teams on any further reports.

**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:**

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That the report Biosecurity Responses update by Don Mckenzie, Biosecurity Senior Programme Manager and dated 6 June 2014, be received.

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**ISSUE: Warawara Forest Pest Control – Collaboration Memorandum of Understanding**

**ID:** A647435

**To:** Environmental Management Committee, 23 June 2014

**From:** Don Mckenzie, Biosecurity Senior Programme Manager

**Date:** 3 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input type="checkbox"/>	Information	<input checked="" type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input type="checkbox"/>	Annual\Long Term Plan	<input checked="" type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input checked="" type="checkbox"/>	Moderate	<input type="checkbox"/>	Low

**Executive Summary:**

- Staff propose that the committee support a Memorandum of Understanding aimed at controlling pests over an area of more than 4,000 hectares of Warawara forest and surrounding private land.
- Northland Regional Council, Te Runanga o Te Rarawa, Department of Conservation, and Reconnecting Northland have proposed collaborative pest control operations and the attached MOU is aimed at confirming the roles and responsibilities of each party.

**Report**

Warawara forest is administered by the Department of Conservation and ranks as one of the regions highest priority kauri forests. This forest last received extensive pest control in December 1997.

Strong support for community led pest control on private land surrounding Warawara is evident. The work on private land could begin during 2015 and would be timed to coincide with extensive control of pests across the crown managed area of Warawara forest.

The Northland Regional Council will contribute funds as part of the High Value Areas policy within the Regional Pest Management Strategy and initiate pest control on private land surrounding Warawara. The cost of the whole operation on Crown and private land is estimated at \$150,000 in year one of the project. The Northland Regional Council will undertake to complete the work on private land at a cost of \$47,000 for the first year and an average cost of \$12,000 per annum thereafter for the following four years.

The remaining parties will contribute operational funding and staff resources to manage the control of pests on crown land.

**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. This issue is considered to be of moderate to low significance under council policy, because it is in keeping with the council's overarching programmes for pest management as detailed in the 2012-2022 Long Term Plan.

**Recommendations:**

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1. That the report Warawara Forest Pest Control – Collaboration, Memorandum of Understanding by Don McKenzie, Biosecurity Senior Programme Manager and dated 3 June 2014, be received.
  2. That the committee recommends to council that it sign the attached Memorandum of Understanding aimed at controlling pests across Warawara forest and surrounding private land.
-

# **Memorandum of Understanding – Warawara Forest Project**

Between

**Te Runanga o Te Rarawa (TROTR)**

and

**Department of Conservation (DOC)**

and

**Northland Regional Council (NRC)**

and

**Reconnecting Northland (RN) (“the Partners”)**

**Date:**

## **1. Background**

- 1.1 The Warawara Forest Project (“the Project”) primarily involves a collaborative effort amongst the Partners and other stakeholders to enhance the mauri / health of Warawara Forest through coordinated pest control operations both within the reserve, and within the surrounding private lands bounded by West Coast Road, Runaruna Road, Pawarenga Road, Whangape Harbour and the west coast.
- 1.2 In addition to the Partners, the other primary stakeholders in the Project are identified as being:
  - The Warawara communities (Pawarenga, Panguru, Motuti, Waihou, Rangi Point, Mitimiti), including their marae their schools and their churches
  - The landholders involved in the operation
  - Related organisations such as: Kiwis for Kiwi Trust, Nga Whenua Rahui, Hauora Hokianga, Far North District Council, etc.
- 1.3 The door will remain open for any other organisation which wishes to contribute substantively towards the Project to join the Partners within this MOU.
- 1.4 The Project is seen by the Partners as being an initial step towards wider aspirational goals for the area, including:



- Enhanced opportunity and capacity for the Warawara communities to exercise their kaitiakitanga in relation to Warawara Forest and the surrounding district
- Enhanced social, cultural, economic, health and educational wellbeing within these communities
- A sustained pest control effort to maintain the benefits achieved by the Project, and to possibly extend the range of pest control in the future to connect with other areas of high biodiversity value
- Implementation of related environmental initiatives such as healthy waterways and control of invasive weeds
- Motivation and inspiration for other rural Northland communities to initiate similar projects within their own rohe

## **2. Nature of the Relationship**

- 2.1 The Partners wish to conduct the relationship on the basis of good faith and respect for one another's views.
- 2.2 While it is recognised that each of the Partners will have their own priorities in relation to the Project, all decision-making will be made by consensus amongst the Partners while giving due recognition to these priorities.
- 2.3 Each Partner has trust and confidence in the other Partners' integrity and capacity to deliver their part of the Project, and will work supportively with the other Partners.
- 2.4 Each Partner recognises that the reputation of the other Partners is also linked to the Project, and will endeavour to ensure that no action of theirs will reflect detrimentally on any of the other Partners.

## **3. Term**

- 3.1 The duration ("the Term") of the agreement will be for three years, from 2014/15 to 2016/17 financial years, this being the period over which there is currently a reasonable degree of certainty for all of the Partners.
- 3.2 If circumstance at the time so indicate, consideration will be given at the conclusion of the Term for an extension or renegotiation of the MOU at that stage.
- 3.3 If any of the Partners wishes to withdraw before the end of the Term, it may do so by giving six months written notice to the other Partners.

## 4. Roles

### 4.1 The primary roles of Te Runanga o Te Rarawa will be:

- To lead the relationship with the Warawara communities, working with the Komiti Kaitiaki
- To coordinate fundraising efforts, with the support of the other Partners, to fund the outstanding labour component for the Community Pest Control Area (CPCA) operation within the private lands for at least the duration of the Term (ideally for five years)
- To manage the contracts for the ground-based operators working within the private lands
- To coordinate educational and advocacy events within these communities, with the support of the other Partners

### 4.2 The primary roles of the Department of Conservation will be:

- To lead (liaise, plan, implement, monitor, report) the pest control operation within the reserve, working within Te Korowai, their statutory co-management relationship with TROTR
- To fund the pest control operation within the reserve

### 4.3 The primary roles of the Northland Regional Council will be:

- To lead (liaise, plan, implement, monitor, report) the CPCA pest control operation within the private lands
- To fund the materials for the CPCA pest control operation within the private lands for its five year duration

### 4.4 The primary roles of Reconnecting Northland will be:

- To facilitate the partnerships which will enable the Project to be implemented
- To fund a significant proportion (30-40%) of the labour component for the CPCA pest control operation within the private lands for the duration of the Term
- To develop strategic connections beyond the immediate area of the Project to maximise and amplify its benefits

### 4.5 All Partners will:

- Plan the Project collaboratively to ensure that the effects of their collective contributions are optimised
- Contribute where they can in terms of technical and logistical support, in proportion to their capacity, to assist with the implementation of the Project and to ensure its success
- Respect the fact that the mana of the Project ultimately rests with the Warawara communities

## 5. Resources

- 5.1 Responsibility for all human resources, equipment and funding contributed towards the implementation of the Project will remain vested in that Partner, unless these resources are formally transferred to another Partner or stakeholder.
- 5.2 Where it is necessary for funds to be transferred between Partners, this will be carried out in line with best practice, acknowledging the requirements of both parties involved.

## 6. Timeline

- 6.1 The indicative time for implementation of the Project is:

Year 1	2014/15	MOU term commences CPCA pest control operation within the private lands commences
Year 2	2015/16	Pest control operation within reserve implemented CPCA pest control operation within the private lands continues
Year 3	2016/17	CPCA pest control operation within the private lands continues MOU term concludes
Year 4	2017/18	CPCA pest control operation within the private lands continues
Year 5	2018/19	CPCA pest control operation within the private lands concludes

Note that this timeline is based on a 1 July to 30 June financial year

## 7. Communications

- 7.1 The Partners agree to operate on the basis of open communication resulting in a “no surprises” policy. Regular communications will be incorporated into work planning for the Project.
- 7.2 The relationship amongst the Partners will be maintained by designated personnel within each of the Partner organisations, with all Partners copied into relevant communications.
- 7.3 In any public statements about the Project, written or verbal, all Partners should refer to the relationship as ‘... in partnership with ...’
- 7.4 While it would be unrealistic to expect that all public communication materials related to the Project will be collaboratively drafted, all Partners should endeavour to ensure that such materials are fair and balanced in their acknowledgement of the roles of other Partners in enabling the Project to be implemented effectively.
- 7.5 The Partners will use sound judgement to ensure that any potentially contentious communication related to the Project will be shared in draft format with the other Partners for their comment and agreement before release.

- 7.6 While the Warawara communities are not a Partner in a formal sense, the mana of the Project rests with these communities, and respect for this unique role should be implicit within all communications by the Partners.
- 7.7 While adhering to the agreed conditions outlined above, each Partner is free to undertake their own public communication in relation to the Project.

## **8. Intellectual Property**

- 8.1 All intellectual property brought to the relationship by any Partner will remain vested in that Partner.
- 8.2 Should any Partner contribute intellectual property that is not developed specifically as part of the Project, the other Partners must acknowledge their ownership and contribution.
- 8.3 Use of logos or other corporate identification must be agreed by each Partner on a case by case basis, with written sign-off being required prior to the print or publication of another Partner's logo or corporate identification.
- 8.4 Relevant data may be shared between Partners provided data storage is of an adequate security level. Data should not be shared with other parties without the prior consent of the Partner which has contributed the data.

## **9. Health and Safety**

- 9.1 All events and project operations will include adequate health and safety provisions, including the staff of Partner organisations, other stakeholders, and volunteers. This will be the responsibility of the Partner which is leading the activity.

## **10. Resolution of Disputes**

- 10.1 Any dispute concerning the subject matter of this document will be settled by full and frank discussion and negotiation between the Partners. Should the dispute not be resolved satisfactorily by these means, the Partners agree that they will engage in mediation conducted in accordance with the terms of the LEADR New Zealand Inc. Standard Mediation Agreement.

## Signatories

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Te Runanga o Te Rarawa

Date \_\_\_\_\_

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Department of Conservation

Date \_\_\_\_\_

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Northland Regional Council

Date \_\_\_\_\_

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Reconnecting Northland

Date \_\_\_\_\_

**ISSUE: Reducing Risk of Kiwifruit Vine Disease- Psa-V –  
Memorandum of Understanding with Kiwifruit  
Vine Health Incorporated**

**ID:** A647290

**To:** Environmental Management Committee, June 23, 2014

**From:** Don Mckenzie, Biosecurity Senior Programme Manager

**Date:** 3 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input type="checkbox"/>	Information	<input checked="" type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input type="checkbox"/>	Annual\Long Term Plan	<input checked="" type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input checked="" type="checkbox"/>	Moderate	<input type="checkbox"/>	Low

**Executive Summary:**

The purpose of this report is to advise the Committee of a Memorandum of Understanding which has been proposed by Kiwifruit Vine Health Incorporated (KVH). A copy of the MOU is attached and the content is aimed at reducing the risk of Psa-V spreading to vines throughout the Northland region.

**Background**

- The Kiwifruit industry in Northland produces \$80M or approximately 5% of the national crop and employs up to 800 seasonal workers.
- The committee agreed to support the Kiwifruit industry in February 2012 for two years at a cost of approximately \$10,000 per annum to proactively remove abandoned kiwifruit orchards and aimed at preventing Psa-V spread.
- A National Kiwifruit (Psa-V) Pest Plan was approved by the Minister for Primary Industries in May 2013 which sets rules aimed at preventing the spread of the disease.
- Psa-V has since been found in vines in Kerikeri but is still not throughout the region.
- Abandoned kiwifruit orchards pose a risk as they are unmanaged, not monitored and can act as a source of Psa-V if they become infected.
- The attached MOU identifies that KVH will lead the compliance and enforcement of rules according to the National Kiwifruit (Psa-V) Pest Plan.
- KVH proposes that council and KVH share the costs of vine removal in a 50/50 share agreement and continue the proactive removal of abandoned kiwifruit vines as they arise.

**ITEM: 9**

Page 2 of 2

- KVH also propose council share the cost of removing wild kiwifruit vines however this is not relevant for Northland as the incidence of wild kiwifruit is very low and they are not a priority weed species.
- Bay of Plenty Regional Council has supported a similar agreement.
- The MOU undertakings are considered manageable by staff and costs are predicted to be minimal as most abandoned orchards have already been removed. However, staff propose that removal of wild kiwifruit not be included in the agreement, and that the council share is limited to a maximum contribution of \$20,000 per annum of operational funding - subject to the Long Term Plan.

**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. This issue is considered to be of moderate to low significance under council policy, because it is in keeping with the council's overarching programmes for pest management as detailed in the 2012-2022 Long Term Plan.

**Recommendations:**

- 
1. That the report Reducing Risk of Kiwifruit Vine Disease - Psu-V – Memorandum of Understanding with Kiwifruit Vine Health Incorporated by Don McKenzie, Biosecurity Senior Programme Manager and dated 3 June 2014 be received.
  2. That the committee recommends to council that it sign a Memorandum of Understanding with Kiwifruit Vine Health Incorporated to reduce the risk of Psu-V spread throughout Northland.
  3. That change to the current agreement be made to include a maximum annual contribution of \$20,000 operating budget and the removal of all references to the management of wild kiwifruit vines.
-



## **Memorandum of Understanding (MOU)**

**Between** Kiwifruit Vine Health Incorporated (KVH)

**And** Northland Regional Council (NRC)

### **Purpose of this agreement**

1. This Memorandum of Understanding establishes a formal agreement between Kiwifruit Vine Health and the Northland Regional Council (the agencies) to work collaboratively to achieve effective surveillance and management of wild kiwifruit (*Actinidia spp.*), abandoned orchards, increase machinery hygiene standards and progress other aspects of kiwifruit industry environmental management where the agencies have overlapping interests and objectives.

### **Duration of Memorandum of Understanding**

2. **This MOU applies to the period from the date of signing until 31 July 2016 unless revoked earlier.**

### **Desired Outcome**

3. The MOU seeks to ensure, within NRC 10 year plan budget funding, a continuation of the KVH / NRC partnership achieving cost-effective management of abandoned orchards and surveillance for wild kiwifruit; develop a partnership programme ensuring a high standard of horticultural machinery hygiene; and NRC assistance with the initial enquiry stage of any kiwifruit industry biosecurity investigation on a case-by-case basis. The MOU clarifies responsibilities, funding arrangements and activity procedures.

### **Context**

4. Kiwifruit is New Zealand's highest value horticultural crop with current annual export earnings of \$1.6 billion. 5% of the crop (equating to approximately \$80 million) is grown in Northland. The kiwifruit industry is a major regional employer and focus for subsidiary industries.
5. Kiwifruit Vine Health's mission is to minimise the impact of PsA-V (*Pseudomonas syringae* pv. *actinidiae*) on the New Zealand kiwifruit industry and to lead the strategic and operational preparedness for other potential biosecurity risks on behalf of the kiwifruit industry. The bacterium disease PsA-V was discovered in Te Puke in November 2010 and a National PsA-V Pest Management Plan (NPMP) approved by government in May 2013. The Plan supports a collective approach to managing PsA-V.
6. Northland Regional Council guides and supports the sustainable development of Northland. A major focus of Council's work involves looking after the environment, with broader responsibilities, working with others for the economic, social and cultural well-being of the regional community. NRCs functions include managing pest plants through provisions of Regional Pest Management Strategies (RPMs) and protecting indigenous biodiversity and other values on private land.
7. Note that the kiwifruit industry (KVH) and NRC have worked collaboratively since 2012 to effectively manage abandoned orchards and currently have an MOU in place, operable until 30 June 2014. This MOU will supersede the current MOU signed by KVH and NRC, 30 March 2012.

### **Interests and general functions**

8. Through implementation of the NPMP, KVH seeks to ensure continual reduction in the amount of PsA-V inoculum in the environment, which helps ensure the on-going financial viability of kiwifruit orchards. Abandoned and unmanaged orchards, wild kiwifruit growing within close proximity to orchards and movement of contaminated machinery present the highest-risk source of PsA-V inoculum and continual PsA-V infection of viable orchard vines.
9. KVH undertake education and awareness, respond to complaints, record locations and enforce NPMP rules around the management of abandoned or unmanaged orchards, the movement of risk items (e.g.



machinery, plant material and reject kiwifruit) and ensuring appropriate crop protection programmes are in place.

10. NRC is the management agency for the Regional Pest Management Strategies for Northland (RPMSs). Landowners are bound by the rules and statutory obligations outlined in RPMSs. NRC undertake surveillance of private and Territorial Authority lands for the presence of pest plants and other invasive organisms, map infestations, undertake management of some pest plant species, records management activity, oversee contractors and monitor effectiveness of control programmes. NRC also undertakes environmental awareness and education, enforces rules to ensure that identified pest plants are appropriately managed and can carry out “work on default” and seek cost-recovery for pest plant control costs where landowners or occupiers fail to comply with RPMS rules. NRC undertakes inspections of nurseries and other plant outlets as part of the National Pest Plant Accord programme.
11. NRC has an interest in preventing wild kiwifruit establishing in the Northland region to protect biodiversity values of native forest and the production value of exotic forest. Best-practice management of kiwifruit, including any abandoned orchards, results in a reduction of seed-source and therefore reduced likelihood of wild kiwifruit establishing. A healthy and sustainable kiwifruit industry will continue to provide employment and boost Northland’s economy.

#### **Decision-making and prioritisation**

12. KVH and NRC representatives will meet at least annually, or as required, to agree a partnership programme to: review and prioritise wild kiwifruit surveillance and control if required; management of abandoned orchards; partnership to promote kiwifruit industry machinery hygiene; NRC assistance (on a case-by-case basis) in the early stage of any KVH investigation in the Northland region; and include surveillance for *Actinidia* species and *Psa-V* symptoms when undertaking National Pest Plant Accord (NPPA) inspections in the Northland region. KVH and NRC will work collaboratively, with work prioritised by consensus decision making process.

#### **Roles and responsibilities**

13. KVH will take ‘lead responsibility’ for operations and compliance (i.e. under the NPMP) in relation to management of abandoned orchards in the wider Northland region.
14. NRC will take the ‘lead responsibility’ for wild kiwifruit surveillance, control and compliance as agreed with KVH (N.B. infestations of wild kiwifruit have not yet been detected in the Northland area).
15. NRC will, **within 10 year plan budget allowances**:
  - 15.1 Assist with the costs of abandoned kiwifruit orchard removal;
  - 15.2 Include surveillance for wild kiwifruit while undertaking biosecurity programme property inspections;
  - 15.3 Manage the control of wild kiwifruit on an as agreed case-by-case basis;
  - 15.4 Work in partnership with KVH to promote high standards of horticultural machinery hygiene in the Northland region through an agreed awareness programme;
  - 15.5 Assist with the early stages of a KVH non-compliance activity on a case-by-case basis (e.g. an Authorised Person or warranted officer may check a report of an abandoned orchard and report findings to KVH);
  - 15.6 Include surveillance for symptoms of *Psa-V* on any kiwifruit plants sold within plant retail outlets while undertaking NPPA inspections, and report findings to KVH.
16. ‘Lead responsibility’ as described above means that agency is responsible for:
  - management of operations;
  - any compliance action, including enforcement;
  - cost-recovery;
  - information management;
  - reporting.

17. Where the other agency is lead, the other plays a supporting role. 'Supporting role' as used above means:

- information sharing;
- collaborating to ensure that enforcement action is undertaken when required;
- undertaking joint property inspections when necessary;
- cost-sharing as agreed.

#### **Cost sharing and cost recovery**

#### **18. Abandoned Orchards:**

18.1 KVH and NRC to cost-share direct costs only. Direct costs include contractor costs and do not include costs recovered by KVH from landowners, District Councils, DOC or post-harvest operators; KVH or NRC staff salaries, administration costs or staff vehicle running costs.

18.2 Direct costs will be 50/50 cost-shared between KVH and NRC.

18.3 Any other cost-sharing to be decided on a case-by-case basis.

18.4 KVH will apply the following cost-recovery policy:

- Where reasonable efforts to achieve a voluntary and timely solution have not been successful, a KVH authorised person will issue the 'Notice of Direction' under section 122 of the Biosecurity Act 1993, which sets out the management actions that must be taken by the land owner or occupier, and when those actions must be undertaken by.
- Where a Notice of Direction is not complied with, KVH will act on default under section 128 of the Biosecurity Act, by appointing a contractor to carry out the work set out in the Notice of Direction.
- KVH will recover costs from the landowner or occupier under section 129 of the Biosecurity Act, and will only recover the costs of services delivered by the third party contractors. KVH will not recover costs associated with KVH staff time or legal advice.
- All costs recoverable shall be a charge against the land concerned.

#### **19. Wild kiwifruit:**

19.1 KVH and NRC to cost-share direct costs only. Direct costs include contractor costs and do not include costs recovered by NRC from landowners, District Councils, DOC or post-harvest operators; KVH or NRC staff salaries, administration costs or staff vehicle running costs.

19.2 Direct costs will be 50/50 cost-shared between KVH and NRC.

19.3 Any other cost-sharing to be decided on a case-by-case basis.

#### **20. KVH funding for abandoned orchard removal, wild kiwifruit control and other agreed programmes:**

KVH agree to provide, on an annual basis, funding for the programmes specified at 15 above, the level of funding will be agreed to by both parties annually and not exceed \$20,000 + GST per annum from KVH.

#### **21. NRC funding for abandoned orchard removal, wild kiwifruit control and other agreed programmes:**

NRC agree to provide, on an annual basis, funding available for the programmes at 15 above, the level of funding will be agreed to by both parties annually and not exceed \$20,000 + GST per annum from NRC.

**22. The funding provided from NRC is subject to Council approving the budget as set in the Ten Year Plan.** If the level of funding is significantly changed in any one financial year, NRC will communicate this with KVH as soon as practicable.



**ISSUE: River Management Update**

**ID:** A649075

**To:** Environmental Management Committee, 23 June 2014

**From:** Joseph Camuso Rivers Programme Manager and Toby Kay, Natural Hazards Advisor

**Date:** 6 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input checked="" type="checkbox"/>	Information	<input type="checkbox"/>	Decision
<b>Purpose:</b>	<input checked="" type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input type="checkbox"/>	Moderate	<input checked="" type="checkbox"/>	Low

**Executive Summary:** The purpose of this report is to give council an update on the River Management Programme. All major scheduled river management works for 2013-14 have been completed, see abstract below for highlighted river projects.

**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:**

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That the report - Rivers Management Update by Joseph Camuso, Rivers Programme Manager and Toby Kay, Natural Hazards Advisor dated 6 June 2014 be received.

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**Highlighted Works Abstract:**

**Awanui** – Grade Control (to control bed scour) completed on the Tarawhataroa and continuation of the stopbank (retreat) work on the Lower Awanui.

**Kaeo** – Construction of Kaeo Stage I deflection banks and spillway completed with a projected 1% above estimated scheme budget.

**Kerikeri-Waipapa** – Flood mitigation work at the Stone Store completed (removal of boulder bank up stream of the Stone Store and the abandoned Stone Store Bridge abutment) this required extensive cooperation and coordination with HPT, DoC, Iwi and FNDC. This project was piggy-backed on a DoC upgrade to the parking lot.

**Whangarei** – Rust Avenue Bridge upgrade is complete. The utility relocation for the Kotuku Street Dam is nearing completion. Tenders for the Dam Construction and Demolition of Houses are currently live and close on 19 June.

**Kaihu** – Long-reach digger machine cleaning works completed with smaller more versatile machine.

**Waitangi** – Targeted drill and kill willow removal to reduce choking in vulnerable areas.

**Minor Rivers – Pawarenga Bridge**, Rock Gryones installed to reduce outside bend-scour and decrease the possibility of the river outflanking the Bridge.

**Waima Marae** - Tree removal and channel clearance at Otatara Marae Bridge, using the channel widening work (benching and silt build-up) to construct a bund for flood protection around marae.

**Full Report:**

**Awanui River:** All major work components are completed; there is only one flood gate repair underway. Spraying is approximately 90% complete.

**Awanui Preliminary Design and Hydraulic Model Improvements**

Progress on these 2 separate work streams is outlined below.

Staff intend to use the GHD hydraulic model (after improvements are completed) to simulate scheme improvement options and produce flood maps.

**Preliminary Scheme design work – Tonkin & Taylor**

Tonkin & Taylor have completed model simulations for the design scenario originally proposed by Haigh Workman, which includes spillways alongside the SH1 to reduce overflow to the Tarawhataroa. The scheme concept for Kaitaia is to reduce pressure on the Tarawhataroa, which only has a 1:30yr design capacity, and limited opportunity for upgrade, by accommodating higher flow in the Awanui, which has a 1:100yr design capacity. Channel upgrade in the Awanui through Kaitaia, and SH1 spillways are the proposed mechanisms to achieve this re-allocation of flood flow through Kaitaia.

An additional adjustment to the scheme at Kaitaia is proposed for the Whangatane spillway intake weir, to optimise use of the spillway, especially through increased duration of flow. Lowering of the weir by 0.75m to 10.25m Unahi is expected to increase the duration of flow in the Whangatane by approximately 14 hours, and in so

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doing, improve the operation of flood gates in the lower Awanui during the earlier and later stages of a flood. However, the proposed design involves a number of scheme adjustments which may to some extent offset each other in order to achieve the reduced flow in the Tarawhataroa. An increase in peak flow in the Whangatane is expected, and the options of controlled spills and partial containment are to be assessed further during the design process.

In the Lower Awanui (downstream of Kaitaia), flood flow would be altered by 3 scheme adjustments:

1. Increased flow due to the SH1 spillways and Awanui channel upgrades through Kaitaia
2. Decreased flow due to Whangatane spillway intake lowering
3. A managed increase in flow due to a proposed 2<sup>nd</sup> flood gate at the Waihoe outfall, which is planned to be manually operated to reduce detention time in Lake Tangonge.

It should be noted that the 3 adjustments above are likely to impact on flows at different times in a flood event. For instance the 3<sup>rd</sup> adjustment would only impact on flows during the later stages of a flood (past the peak). The full impact of the proposed adjustments on the Lower Awanui have yet to be assessed, and the full catchment model is required to undertake this.

Model results have been received for the original Haigh Workman concept design, as well as the most recent round of Tonkin & Taylor flood model results incorporating preliminary design changes to the Whangatane Intake weir.

An update on progress with the preliminary design is outlined below.

<b>Project Elements</b>	<b>Milestone</b>	<b>% Progress</b>	<b>Issues / Comments</b>
Stage 1 Design	Model adjustments	100%	T&T Model Results received from consultant.
	Awanui Channel Upgrade	100%	T&T model generates a flow of 375 m <sup>3</sup> /s on the Awanui through Kaitaia for the Haigh Workman scheme proposal which incorporates the SH1 spillways.
	Whangatane Spillway Design	70%	Whangatane spillway design brief is for flow diversion to start at 20m <sup>3</sup> /s. Due to design adjustments, it is likely that peak flow will be slightly higher relative to baseline peak of 240m <sup>3</sup> /s. This is to accommodate most of the additional peak flow from the SH1 spillways.  The spillway channel redesign extends from the intake to downstream of Donald Road bridge.
Stage 2 Design	SH1 Spillways	50%	The purpose of the spillways is to reduce SH1 overflow into the Tarawhataroa.
Stage 3 Design	Lake Tangonge Drainage Upgrade	0%	A major component of this work includes assessment and design of a 2 <sup>nd</sup> Waihoe flood gate.

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Geotechnical investigations on the scheme are well progressed. In general there are no sub-surface impediments to the establishment of spillways alongside the SH1, but bank stability issues have been identified at a number of locations along the Awanui, which will have a bearing on bank slope and stopbank design. A freeboard of 500mm above the 1% AEP design flood level has been adopted for stopbank crest levels.

Consultation over the preliminary design work results will be undertaken with the Awanui River Liaison Committee in late July, before progressing to simulation of the scheme improvement options using the catchment model.

**Hydraulic Model Improvements to the Catchment Model - GHD**

The current upgrades are to enable the model to be used for both flood mapping and scheme simulations. Recent model runs have reduced design flows and the GHD model 1:100yr flow for the Awanui through Kaitaia is 340m<sup>3</sup>/s for the baseline design storm event, and 230m<sup>3</sup>/s in the Whangatane Spillway. These are similar to design baseline flows in the Tonkin & Taylor model.

An update on progress with the hydraulic model improvements is outlined below.

Project elements	Milestone	% Progress	Issues / Comments
Part 1 Model flow checks	Model Flow Checks	100%	All results received by NRC
Part 2 Model Adjustments	Tarawhataroa Stream adjustments to remove baseflow	80%	This is proving to be the most challenging part of the project. Work still in progress.
	Update DTM to reflect recent development	100%	DTM updates based on 2008 LIDAR and manual GPS survey
	Recalibration of the Lower Awanui past old Slackline gauge site including adjustment of model Qh (flow to stage) relationship	70%	
	Adjustments to Whangatane Spillway hydraulic parameters	70%	Spillway intake sections re-surveyed and Whangatane bifurcation recalibrated.
	Adjustments to Lake Tangonge set up in model, including tributaries	100%	
Part 3 Design Storm Runs	Design Storm Runs	0%	Revised design storm type to be used for scheme simulations and flood mapping

This project is expected to be completed by the end of June, so that the catchment model is ready for scheme option simulations following the liaison committee meeting proposed for July.

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**Kaeo-Whangaroa Rivers**

Construction of the Kaeo Stage 1 flood scheme works are practically complete, with only some tidy-up, reinstatement and disestablishment works remaining. Staff are forecasting an unfavourable variance of 1% against the project capital budget, pending receipt of the final claim for the remaining tidy-up, reinstatement and disestablishment works.

**Kaeo Vulnerable Properties Funding Assistance**

Works have been completed for a total of seven flood vulnerable properties. The completed works include demolition of dwellings (2), raising dwellings on site (3), removal of dwelling from site (1), encumbrance registered on title to prevent use of dwelling for accommodation (1). A further two funding agreements are in place, awaiting completion of works. Staff have presented an agreement to another property owner and are awaiting the owners acceptance to proceed. Channel works in the Waiare Valley to benefit two properties will be undertaken in the 2014/15 works season.

**Kerikeri-Waipapa River**

The removal of the Stone Store Bridge abutment was the last element of the planned annual works programme. This was completed in coordination with the DoC Parking Lot Improvement Project and closely coordinated with DoC, Iwi, FNDC and HPT. Staff are progressing with the next stages for the Kerikeri flood scheme and have completed initial geotechnical site exploration using hand augers and scalars.



**Kerikeri Stone Store Bridge Abutment removal**

**Whangarei Urban Rivers**

The final targeted tree removal has been completed, concluding the annual maintenance works programme.

**Kotuku Street Dam**

Tenders for the demolition of houses and for the construction of the Kotuku Street detention dam were advertised on the GETS (Government Electronic Tender Services) website. Staff and dam engineers held a pre-tender meeting and site visit with prospective contractors on 30 May. The meeting was attended by eight separate contracting firms. Both tenders close 19 June.

United Civil Contractors have completed installation on approximately 80% of the trenching for the utility relocation for the Kotuku Street Detention Dam. United is now working on installation of pumping sanitary sewers for 4 of the houses.

Staff are progressing with the remaining two land acquisitions required to complete the land purchases necessary for the project.

Staff have received and are reviewing the dam break analysis that is a requirement for the emergency action plan.



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Kotuku Street Utility Relocation looking down slope from 19 Kotuku Street

**Minor River Works**

The scheduled minor river works programme is complete, with only resource consenting for the Waima gravel extraction, Ngunguru gravel extraction and Otiria spillway remaining.

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<b>River</b>	<b>Description of Work Programmed for Current Season</b>	<b>Proposed Date for Physical Works</b>
Awanui - Bells Hill Drains	Clean Drains	Complete
Manganuiowae Stream Broadwood	Stream bank protection on corner	Complete
Pawarenga Streams	Clear vegetation and drains near Marae	Complete
Rotokakahi @ Pawarenga Bridge	Fence and plant river bank and provide erosion protection measures upstream of road bridge including Resource Consent. RC approved, quotes received.	Complete, aside from planting.
Mangamuka	Rock armour bend adjacent to Church and Marae. Contractor has been given the go ahead.	Complete
Waihou/Rahiri-Rangiahua	Continue to lower berm along Rahiri Settlement Road	Rescheduled for 2015
Panguru and Lower Waihou	Gravel management around bridges	Complete
Waitangi	Haruru Falls gravel management resource consent	Complete
	Gravel island extraction	Complete
	Willow spraying/removal	Complete
Waima	Tree removal and channel clearance at Otatara Marae bridge. Bund construction around marae from surplus cut.	Complete
	Gravel management resource consent	In progress
Whirinaki	Supply rock for armouring near school	Complete
	Gravel management SH12 bridge	Complete
Awapokonui/Pakanae	Weed spray from SH12 Bridge upstream	2 rounds complete. 3 <sup>rd</sup> follow up spray to be completed in Spring
Waimamaku	Tree Removal	Complete
Otiria	Spillway Resource Consent	In progress
Ngunguru	Gravel management resource consent	In progress
Otaika	Willow spraying/removal/mulch log clearance	June 2014
Ruakaka	Mangrove removal at bridge	Complete
Waipu	Fallen tree removal at the Braigh	Complete
Contingency	Emergency/Flood Damage Response/ Project Contingencies	N/A

**Natural Hazards**

New Zealand Aerial Mapping have commenced LIDAR survey for Waipu, Whangarei, Dargaville and Ruawai areas. Waipu is 100% complete, Whangarei is 70% complete, and Dargaville / Ruawai areas are due to be surveyed around the 13<sup>th</sup> of June. This data is being acquired to support future flood mapping and coastal hazard assessments.

**ISSUE: Coastal Erosion Hazard Zone Assessment**

**ID:** A647429

**To:** Environmental Management Committee, 23 June 2014

**From:** Bruce Howse, Land/Rivers Senior Programme Manager and Toby Kay, Natural Hazards Advisor

**Date:** 3 June 2014

<b>Report Type:</b>	<input type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
<b>Purpose:</b>	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input checked="" type="checkbox"/> Other
<b>Significance:</b>	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low

**Executive Summary:**

The purpose of this report is to provide a summary of the Coastal Erosion Hazard Zone Assessment project and provide an update on progress to date.

**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:**

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That the report Coastal Erosion Hazard Zone Assessment by Bruce Howse, Land/Rivers Senior Programme Manager and Toby Kay, Natural Hazards Advisor and dated 3 June 2014, be received.

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## **Introduction**

During the development of the 2013/14 NRC Annual Plan, the revision of Northland's coastal erosion hazard zones (CEHZ) was included as a programme of work.

The revision is necessary as the existing hazard zones were typically developed ten or more years earlier, and reassessment is required to reflect changes in the understanding of coastal processes, changing sea level rise predictions, and site specific changes that have occurred since the previous assessments were undertaken.

## **Coastal Erosion Hazard and Setback Lines**

Coastal erosion is a natural process, becoming a hazard when the process threatens development and infrastructure.

Around the Northland coast, the development of coastal margins over the past five or six decades has increased the coastal erosion hazard risk. Numerous examples of the hazard are present around the Northland coast, and as of 2006 more than 630 dwellings and 1090 properties were located within or partially within identified coastal hazard zones with a total capital value worth of approximately \$450 million (NRC, 2008).

Coastal erosion hazard management approaches include monitoring of the shore profile (i.e. NRC beach profile monitoring programme), retreat (i.e. removal of the Omapere information centre), dune enhancement (i.e. Coastcare) and shore protection works.

However, taking a precautionary approach to planning new development, infrastructure and services to avoid coastal hazards over their intended lifetime is deemed to be the most effective and sustainable long-term approach to managing the hazard (MfE, 2008). In New Zealand, this is generally achieved through the development and implementation of CEHZ to determine setback lines to implement planning provisions to reduce increased risk from the coastal erosion hazard.

## **Northland Coastal Erosion Hazard Zones**

CEHZ for setback lines have been in place at many of Northland's coastal settlements for over two decades, with the inaugural development of setback lines in the former Whangarei County in 1988. Further setback lines have since been developed for settlements in the Far North District, and various reviews or revisions of setback lines have occurred in the intervening years.

The setback lines are implemented through District Plan planning provisions that place certain controls over the land identified at risk and/or require developers to assess and mitigate risk when planning development within the identified at risk land.

## **Development of Revised Northland Coastal Erosion Hazard Zones**

NRC staff consulted with district council staff over the proposed approach and selection of priority sites. 29 priority sites were included for coastal erosion hazard zone assessments including several new sites (**Attachment 1**).

Tenders were called for professional services to deliver the coastal erosion hazard zone assessments during mid-2013. Amongst other points the tender specified that the submitted methodology must address the following matters:

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- The approach to be in general accordance with the guidance of the 2012 NIWA publication 'Defining coastal hazard zones and setback lines. A guide to good practice'.
- Coastal erosion hazard zone assessments to be undertaken in accordance with the principles of Policy 24: Identification of coastal hazards, of the New Zealand Coastal Policy Statement 2010 (NZCPS), where applicable to the coastal erosion hazard.
- Define the approach to addressing uncertainty & probability.
- An independent peer review process to be undertaken concurrent with the delivery of the project.

The tender was awarded to Tonkin and Taylor Limited, with Professor Paul Kench of the University of Auckland appointed as the independent project peer review for the duration of the project.

The Tonkin and Taylor Limited methodology builds on the previous well established methodology used in Northland and New Zealand. The methodology defines the coastal erosion hazard zones as areas of coast that may be subject to potential future coastal erosion based on an assessment of a suite of components including short-term and long-term changes in shoreline position, sea level rise, dune slope and the nearshore seabed profile.

In addition to these factors, a near 40 year duration of offshore wave hindcast data were obtained for several sites around the Northland coast. These data were then transformed to the nearshore using a wave model to generate wave-climate for nearshore sites to provide further assessment of the potential erosion hazard. This approach has previously not been applied to Northland.

Uncertainty and probability of occurrence were also given particular consideration. The methodology combines standard and well tested approaches for defining erosion hazard zones by addition of component parameters but rather than including a single factor for uncertainty, parameter bounds are specified for each parameter and combined by stochastic (randomly determined) simulation providing a probabilistic forecast of the potential hazard zone width. This contrasts with traditional deterministic models which are based on addition of component parameters with additional uncertainty (safety factor) factors added on top with limited understanding of the potential uncertainty range.

Probability distributions constructed for each component are randomly sampled and the extracted values used to define a potential coastal erosion hazard zone distance. This process is repeated 10,000 times using a Monte Carlo technique and the probability distribution of the resultant CEHZ width is forecast. This enables selection of probability exceeding values to be selected for each CEHZ.

In terms of the selection of probability exceeding values, a high hazard area (or CEHZ1) corresponding to 66% probability exceeding (likely) at 2065, and a low hazard (or CEHZ2) corresponding to 5% probability exceeding (potential) at 2115 have been selected.

Staff have received preliminary outputs from the CEHZ assessment and are in the process of reviewing these. Final outputs are scheduled for delivery by the end of June 2014. Staff intend to hold a workshop with district council staff to discuss the outputs during August 2014, and intend to notify affected land owners within the

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revised CEHZ setback lines by letter, and will make the revised hazard lines available online during September 2014.

**References**

Ministry for the Environment, 2008. Coastal Hazards and Climate Change. A Guidance Manual for Local Government in New Zealand. 2nd edition Revised by Ramsay, D., and Bell, R. (NIWA) Prepared for the Ministry for the Environment. Wellington. viii +127p.

Northland Regional Council, 2008. 2007 State Of Environment Report.

Ramsay, D.L., Gibberd, B., Dahm, J., Bell, R.G. (2012) Defining coastal hazard zones and setback lines. A guide to good practice. National Institute of Water & Atmospheric Research Ltd, Hamilton, New Zealand.

## Attachment 1

Table 1. Coastal erosion hazard zone assessment sites.

Site	District	Name	Existing CEHZ's	Last Assessed
1	Whangarei	Langs Beach	Yes	1988
2	Whangarei	Bream Bay (Waipu, Ruakaka & Marsden Point)	Yes	2010
3	Whangarei	Marsden Bay	Yes	1998
4	Whangarei	One Tree Point	Yes	1998
5	Whangarei	Taiharuru	Yes	1988
6	Whangarei	Pataua Estuary & Pataua North	Yes	1999
7	Whangarei	Whangaumu Beach (Wellingtons Bay)	Yes	1998
8	Whangarei	Matapouri Estuary & Bay	Yes	1999
9	Whangarei	Woolleys Bay	Yes	1988
10	Whangarei	Sandy Bay	Yes	1988
11	Whangarei	Whananaki Sandspit	Yes	1998
12	Whangarei	Teal Bay Beach (Ngawai Bay)	Yes	2002
13	Whangarei	Helena Bay Beach (Te Mimiha)	Yes	2002
14	Whangarei	Ohawini Bay (& Parutahi Beach)	Yes	1998
15	Whangarei	Oakura Bay	Yes	1998
16	Whangarei	Bland Bay	Yes	1988
17	Far North	Te Ti Bay Waitangi	No	N/A
18	Far North	Matauri Bay	No	N/A
19	Far North	Te Ngairi Beach	Yes	2003
20	Far North	Tauranga Bay	Yes	2002
21	Far North	Taupo Bay	Yes	2002
22	Far North	Hihi	Yes	2002
23	Far North	Coopers Beach	Yes	2002
24	Far North	Cable Bay	Yes	2002
25	Far North	Taipa	Yes	2002
26	Far North	Rangiputa	Yes	2002
27	Far North	Tokerau Beach (North)	Yes	1991
28	Far North	Ahipara	Yes	2003
29	Far North	Omapere & Opononi	Yes	1991

**ISSUE: Environmental Monitoring for the period 1 April – 31 May 2014**

**ID:** A649073

**To:** Environmental. Management Committee Meeting, 23 June 2014

**From:** Colin Dall, Consents/Monitoring Senior Programme Manager

**Date:** 9 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
<b>Purpose:</b>	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input checked="" type="checkbox"/> Regulatory function
	<input checked="" type="checkbox"/> Legislative function	<input checked="" type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
<b>Significance:</b>	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low

**Executive Summary:**

The purpose of this report is to provide an update on council's monitoring and compliance work for the period 1 April– 31 May 2014. The attached graphs provide a summary of the resource consent monitoring compliance visits undertaken and investigations of environmental incidents during the period in question. Where an activity is noted as having a significant environmental impact, the details are recorded in the accompanying tables. A further table includes information on State of the Environment monitoring carried out.

**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.

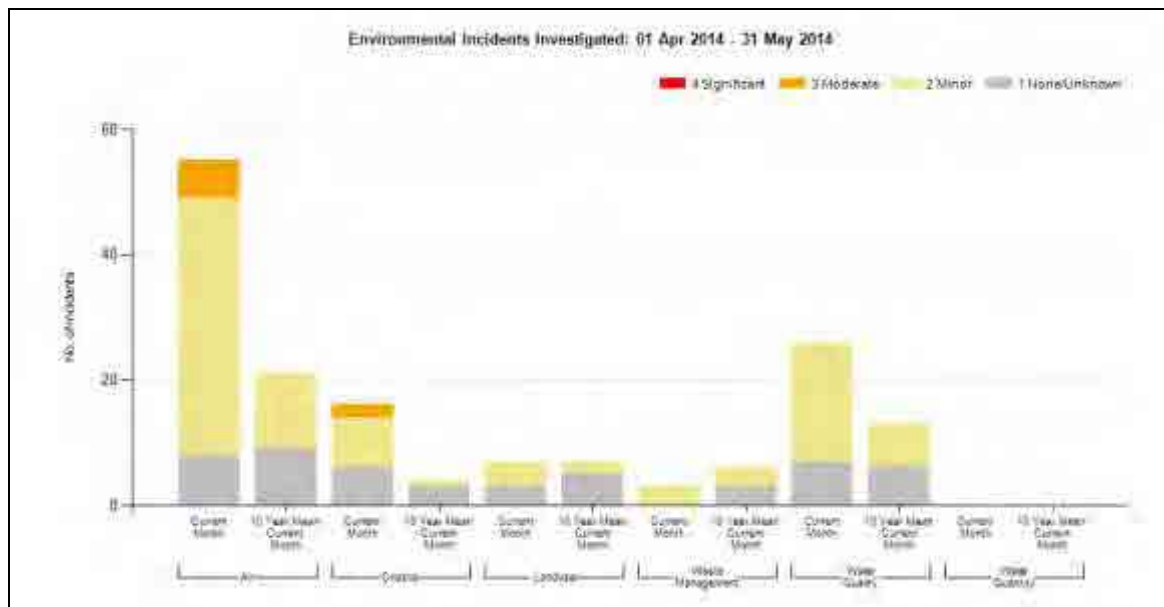
In relation to section 79 of the Local Government Act 2002, this issue is considered to be of low significance under Council policy because the report does not seek a decision other than that information be received.

**Recommendation:**

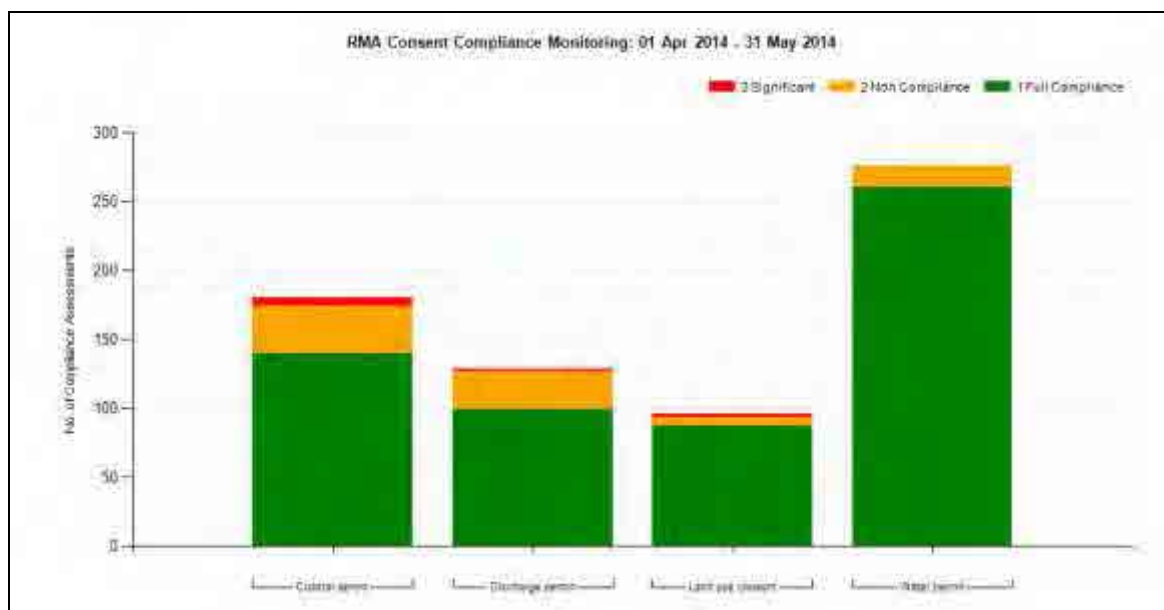
- 
1. That the Environmental Monitoring report for the period 1 April – 31 May 2014 from Colin Dall, Consents/Monitoring Senior Programme Manager, be received.
-



## Environmental Incidents Investigated 1 April – 31 May 2014



## Resource Consent Compliance Monitoring 1 April – 31 May 2014



# **ABBREVIATIONS KEY**

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

**DISCHARGES TO AIR** – No significant non-compliant events were recorded during the period 1 April – 31 May 2014.

**FARM DAIRY EFFLUENT DISCHARGES – CONSENTED** – No significant non-compliant events were recorded during the period 1 April – 31 May 2014.

**FARM DAIRY EFFLUENT DISCHARGES – NON-CONSENTED** – No significant non-compliant events were recorded during the period 1 April – 31 May 2014.

**WATER TAKES** – No significant non-compliant events were recorded during the period 1 April – 31 May 2014.

# **COASTAL ACTIVITIES**

Date	Consent Reference No.	Name	Description	Notes	Environmental Impact
03/03/2014	REG.007130.01	Olsen D C & M A	Oyster farm – Waitiki Channel Parengarenga Harbour	<ul style="list-style-type: none"> <li>Large amount of debris (oyster bags) on sea floor for some years.</li> </ul>	Significant
04/03/2014	REG.014075.01	Waihaua Trust Trustees	Oyster farm lease No. 326 Kirikiri Inlet, Kaipara Harbour	<ul style="list-style-type: none"> <li>Farm is in similar poor/derelict condition as noted in previous years.</li> <li>Urgent maintenance is needed.</li> </ul>	Significant
04/03/2014	REG.012941.01	Zephyr Oyster Farms Ltd	Oyster farm lease No. 111 Kaipara Harbour	<ul style="list-style-type: none"> <li>Significant sea floor build up.</li> <li>Derelict structures.</li> <li>Farm is well marked.</li> </ul>	Significant
04/03/2014	REG.012950.01	Transcoastal Limited	Oyster farm lease No.147 Kaipara Harbour	<ul style="list-style-type: none"> <li>Farm is abandoned.</li> <li>Very poor/derelict condition overall.</li> </ul>	Significant

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04/03/2014	REG.012967.01	Symes P L and G	Oyster farm lease No. 185 Arapaoa River, Kaipara Harbour	<ul style="list-style-type: none"> <li>A large part of the farm is in a derelict condition. However, some rows of the farm have been cleared and overall the farm is in a better condition than noted in previous years.</li> </ul>	Significant
04/03/2014	REG.012935.01	Jannock Investments Limited	Oyster farm lease No. 97 Pahi River, Kaipara Harbour	<ul style="list-style-type: none"> <li>Farm is in a derelict condition.</li> <li>No maintenance has been undertaken for many years.</li> </ul>	Significant

**DISCHARGES TO WATER OR LAND**

Date	Consent Reference No.	Name	Description	Notes	Environmental Impact
12/03/2014	REG.001108.01	FNDC - Paihia STS	Discharge treated municipal sewage @ Paihia Sewage Treatment System, Waitangi Forest	<ul style="list-style-type: none"> <li>The ammonia levels exceeded RC limits at the downstream compliance site.</li> <li>Upgrades to the treatment system have not been completed.</li> <li>Discussions are ongoing with FNDC in regard to compliance.</li> </ul>	Moderate
14/05/2014	REG.001168.01	FNDC – Kawakawa STS	Discharge treated municipal sewage @ Kawakawa Sewage Treatment System	<ul style="list-style-type: none"> <li>Enforcement action taken in relation to a non-compliant sample result.</li> <li>Due to an operational issue with low flows through the UV, the levels were significantly elevated. Operators are to ensure that a change in how the discharge system is operated is initiated to eliminate this in future.</li> </ul>	Minor

**LAND USE ACTIVITIES**

Date	Consent Reference No.	Name	Description	Notes	Environmental Impact
18/03/2014	REG.031508.01	Matariki Forests	Activities associated with harvesting of plantation forests @	<ul style="list-style-type: none"> <li>Insufficient sediment controls and structural failure of tracks and landings in</li> </ul>	Significant

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			Glenbervie, Puhipuhi, Tutukaka, Mokau, Maungatapere, Topuni & Tinopai	Mokau forest resulted in potential discharges to an adjacent wetland and high value river.	
01/04/2014	REG.026692.01	Hancock Forest Management NZ Ltd - Mangatawa Forest	Earthworks & associated activities @ Mangatawa Forest	<ul style="list-style-type: none"> <li>Insufficient sediment controls resulted in potential for uncontrolled discharges from tracks.</li> </ul>	Moderate

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

Classification	Date	Project	Notes
<b>Air Quality</b>	2/04/2014	Marsden Point Airshed - Ambient Air Monitoring	<ul style="list-style-type: none"> <li>Continuous ambient air monitoring results for PM<sub>10</sub> at Bream Bay College, Ruakaka, indicated compliance with the National Environmental Standard during March and April 2014.</li> <li>Routine monthly audit calibration of PM<sub>10</sub> monitor at Marsden Point, Ruakaka.</li> </ul>
	3/04/2014	Whāngārei Airshed - Ambient Air Monitoring	<ul style="list-style-type: none"> <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 March and April 2014.</li> <li>Routine monthly audit calibration of particulate, sulphur dioxide and carbon monoxide monitors at Robert Street, Whāngārei.</li> </ul>
<b>Coastal - Water</b>	14/04/2014	Kaipara Harbour Water Quality Programme	<ul style="list-style-type: none"> <li>Nine water quality sites sampled in the Kaipara Harbour.</li> <li>Results pending.</li> </ul>
<b>Groundwater</b>	14/04/2014	Mangawhai – Nitrate Investigation	<ul style="list-style-type: none"> <li>Routine groundwater monitoring at Mangawhai.</li> </ul>
	15/04/2014	Taipā – Aquifer Investigation	<ul style="list-style-type: none"> <li>Routine groundwater monitoring at Taipā.</li> </ul>
	17/04/2014	Maungakaramea – Nitrate Investigation	<ul style="list-style-type: none"> <li>Routine groundwater monitoring at Maungakaramea.</li> </ul>
	17/04/2014	Whatitiri – Nitrate Investigation	<ul style="list-style-type: none"> <li>Routine groundwater monitoring at Whatitiri.</li> </ul>

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<b>Local Water Quality Monitoring Network (LWQMN)</b>	1/04/2014	Kai Iwi Lakes	<ul style="list-style-type: none"> <li>• Routine water quality monitoring of Lakes Kai Iwi, Taharoa and Waikare.</li> <li>• Water levels were very low in each lake.</li> <li>• Water clarity was very good in Lakes Waikare and Taharoa.</li> </ul>
	8/05/2014	Aupouri Lakes	<ul style="list-style-type: none"> <li>• Routine water quality monitoring of Lakes Carrot, Heather, Ngatu, Ngakapua North, Ngakapua South, Rotoroa, Rotokawau, Waiparera, Waihopop, Waipara, Morehurehu, Te Kahika and Waihoropita.</li> <li>• Additional samples were taken to test for plankton.</li> <li>• Lake levels were the lowest observed for the past five years when undertaking sampling runs.</li> <li>• Clarity in Lake Te Kahika has improved.</li> </ul>
<b>Regional Water Quality Monitoring Network (RWQMN)</b>	16/04/2014	RWQMN – Western	<ul style="list-style-type: none"> <li>• Routine water quality monitoring of Kaihu, Waipoua, Waimamaku, Punakitere, Utakura, Mangakahia and Opouteke Rivers.</li> <li>• Clarity was good in most rivers due to low water levels.</li> <li>• All rivers had excessive periphyton/algae growth, including cyanobacteria.</li> </ul>
	16/04/2014	RWQMN – Eastern	<ul style="list-style-type: none"> <li>• Routine water quality monitoring of the Waitangi, Waipapa, Kerikeri, Waiharakeke, Waiotu, Ngunguru, Hātea and Whakapara Rivers, the Mangahuru Stream, and two new sites just north of Puketona Junction.</li> </ul>
<b>Sediment Sampling</b>	23/04/2014	Wairua – Purua	<ul style="list-style-type: none"> <li>• Automated instream water sampler triggered.</li> <li>• Samples sent to NIWA for TSS analysis.</li> </ul>
	23/04/2014	Mangakahia – Titoki	<ul style="list-style-type: none"> <li>• Automated instream water sampler triggered.</li> <li>• Samples sent to NIWA for TSS analysis.</li> </ul>

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**ENVIRONMENTAL INCIDENTS**

Date	Reference No.	Description	Notes	Environmental Impact
8/04/2014	REQ.573505	Spraydrift @ Ody Rd, Taurikura	<ul style="list-style-type: none"> <li>Roadside weed spraying undertaken in windy conditions resulting in spraydrift to neighbouring properties.</li> <li>Incident investigation confirmed non-compliance under RAQP.</li> <li>Formal enforcement action taken against parties responsible for the spraying.</li> </ul>	Moderate
8/04/2014	REQ.573502	Tractor on mangroves @ Taiharuru Estuary, Pataua South	<ul style="list-style-type: none"> <li>Unconsented fence erected in CMA.</li> <li>Tractor tracks on foreshore more than minor disturbance.</li> <li>Formal enforcement action taken.</li> </ul>	Moderate
10/04/2014	REQ.573546	Smoke nuisance @ Smeatons Dr, Whangarei	<ul style="list-style-type: none"> <li>Incident investigation confirmed non-compliance under RAQP.</li> <li>Warning letter to person responsible advising rules on burning.</li> </ul>	Moderate
18/04/2014	REQ.573712	Smoke nuisance @ SH14, Maungatapere	<ul style="list-style-type: none"> <li>Incident investigation confirmed prohibited burning of items under the RAQP.</li> <li>Warning letter to person responsible advising rules on burning.</li> </ul>	Moderate
22/04/2014	REQ.573607	Smoke nuisance @ Mangakahia Rd, Maungatapere	<ul style="list-style-type: none"> <li>Incident investigation confirmed open burning of waste at industrial premises.</li> <li>Repeat offender.</li> <li>Formal enforcement action taken.</li> </ul>	Moderate
28/04/2014	REQ.573668	Sewage odour @ Kerikeri Rd, Kerikeri	<ul style="list-style-type: none"> <li>Odour nuisance was confirmed beyond property boundary.</li> <li>Formal enforcement action taken.</li> </ul>	Moderate
30/04/2014	REQ.573695	Burning of prohibited material @ Waimate North Rd, Kerikeri	<ul style="list-style-type: none"> <li>Incident investigation confirmed the burning of tyres in conjunction with vegetation.</li> <li>Burning of tyres is prohibited under the RAQP.</li> <li>A warning letter will be sent to the person responsible.</li> </ul>	Moderate
8/05/2014	REQ.573769	Unauthorised mangrove removal @ Ruakaka	<ul style="list-style-type: none"> <li>Mangroves removed from non-consented area.</li> <li>Formal enforcement action taken.</li> </ul>	Moderate

**ISSUE: Shellfish Decline at Mair Bank update**

**ID:** A646103

**To:** Environmental Management Committee, 23 June 2014

**From:** Ricky Eyre, Monitoring Programme Manager - Coastal

**Date:** 22 May 2014

<b>Report Type:</b>	<input type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
<b>Purpose:</b>	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input checked="" type="checkbox"/> Other
<b>Significance:</b>	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low

**Executive Summary**

This report provides an update to the committee on the recent progress on the closure of the Mair Bank pipi fishery. As was previously reported (14 April 2014), the Mair Bank pipi stock previously supported a large commercial and recreational fishery and also plays an important role protecting the entrance of the harbour and Marsden Point from coastal erosion. The committee moved to support a request to the Ministry of Primary Industries (MPI) for urgent closure to the fishery.

**Report**

Northland Regional Council facilitated a meeting between representatives from MPI, Patuharakeke Te Iwi Trust Board, Northport Limited, Refining NZ and commercial fishers on 14 May 2014. The purpose of this meeting was to discuss the ongoing management of Mair Bank, including options for immediate closure of the bank's pipi fishery.

MPI proposed that, due to the current state of the fishery, they would look to issue a closure notice, by way of gazetted notice, under the sustainability measures (s11) of the Fisheries Act 1996. This closure would reduce any further risk from fishing that would further exacerbate the decline or affect recovery of the fishery until such time as it is deemed appropriate to re-open the fishery. This process requires MPI to undertake consultation with affected parties which they committed to undertaking urgently.

Patuharakeke representatives requested the inclusion of the adjacent Marsden Bank (which has also seen a similarly drastic decline in pipi) in this closure; it is currently under a customary initiated closure under s186A of the Fisheries Act 1996.

It was agreed all parties were (in principle) supportive of a closure under the sustainability measures of the Act with the present representatives to report to their respective organisations, where required. A joint letter of support from the Northland Regional Council, Refining NZ, and Northport has been provided to MPI.

It is anticipated that this notice be in place by next summer.

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**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 under council policy because the report does not seek a decision other than that information be received.

**Recommendation:**

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That the report Shellfish Decline at Mair Bank update by Ricky Eyre, Monitoring Programme Manager - Coastal dated 22 May 2014, be received.

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**ISSUE:     Enviroschools Northland update**

**ID:**             A648754

**To:**             Environmental Management Committee, 23 June 2014

**From:**          Susan Karels, Environmental Education Officer /  
                    Enviroschools Regional Co-ordinator

**Date:**           6 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input checked="" type="checkbox"/>	Information	<input type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input checked="" type="checkbox"/>	Annual\Long Term Plan	<input checked="" type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input type="checkbox"/>	Moderate	<input checked="" type="checkbox"/>	Low

**Executive Summary:**

Enviroschools is an action-based approach to education through which children and young people plan, design and implement sustainable projects and become catalysts for change in their families and the wider community.

Three significant Enviroschools Northland actions took place during April and May 2014:

- Project Possum – stage 1 skills camps
- WaiRestoration professional development day for schools
- WaiFencing skills workshops

**Report:**

**Project Possum – stage 1 skills camps**

During April, three two-day Project Possum – stage 1 camps were recently held at Trefoil Park, near Kaikohe. Now in year four of the project, we are strong in delivering valuable place-responsive education centred on eradicating the possum pest in a community-friendly manner.

This year, 68 senior students and 15 teachers from 11 schools from throughout Northland took part in the training provided by the Biosecurity and Community Relations teams. The learning outcomes incorporated five NCEA unit standards totalling 23 credits. The unit standards relate to machine plucking, hand plucking and skinning for possum fur recovery, using traps to control possums and possum biology and environmental impact. The students caught 77 possums, six rats and one hedgehog.

The feedback from students and teachers demonstrates an appropriate calibre of student, quality training and a genuine interest in the possum industry as a business choice. The students will return at the end of June to be assessed on their practical Unit Standards and hand in their theoretical assessment and learning logs.

### **WaiRestoration professional development day for schools**

The WaiRestoration Northland pilot project aims to support farmers and engage young people and local communities in the restoration of waterways and biodiversity. The project is a joint venture between Northland Regional Council, Papa Taiao Earthcare and The Enviroschools Foundation.

This year's professional development day welcomed new schools to WaiRestoration and incorporated practical workshops, presentations of school case studies and planning the project forward. The workshops, led by Land Management and Biosecurity team members, and community groups, covered five of the seven components of WaiRestoration, namely: WaiNurseries, WaiPlanting, WaiMonitoring, WaiMaintenance and Save a Species.

Fifty five teachers, principals, caretakers, community members and representatives from organisations such as Fonterra and the Department of Conservation took part in the day.

### **WaiFencing skills workshops**

WaiFencing is a component of the WaiRestoration project. In May, 71 senior students and 11 teachers from 10 schools from throughout Northland took part in three one-day workshops provided in part by the Land Management and Biosecurity teams.

Course content covered the benefits of fencing off waterways and six NCEA Uunit standards centred around building and repairing fences. The students will return in August to be assessed in their practical unit standards, hand in their learning logs and to complete a closed book assessment.

### **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. As such, it does not trigger any criteria in council's significance policy and therefore is considered to be of low significance.

### **Recommendation:**

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That the report Enviroschools Northland update by Susan Karels, Environmental Education Officer/Enviroschools Regional Co-ordinator and dated 6 June 2014, be received.

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# Enviroschools **NORTHLAND**

## Project Possum – stage 1



TB talk



Trapline retrieval and dispatch



Raised sets protect Kiwi



Success for Tauraroa Area School

## WaiFencing



Working together



One of the winning crews



Strainer assembly

## WaiRestoration Professional Development for schools



WaiMaintenance workshop - identifying and controlling animal and plant pests



Cr Samuels and teachers check out the resource pack



WaiMonitoring workshop - testing and tracking water quality

**ISSUE: Severe Weather Event – 8-10 June 2014**

**ID:** A649843

**To:** Environmental Management Committee, 23 June 2014

**From:** Dale Hansen, Water Resources/Hydrology Programme Manager

**Date:** 16 June 2014

<b>Report Type:</b>	<input checked="" type="checkbox"/>	Normal operations	<input checked="" type="checkbox"/>	Information	<input type="checkbox"/>	Decision
<b>Purpose:</b>	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input checked="" type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
<b>Significance:</b>	<input type="checkbox"/>	High	<input type="checkbox"/>	Moderate	<input checked="" type="checkbox"/>	Low

**Executive Summary:**

On 8 June 2014 the MetService issued a severe weather warning for Northland, in fact, for most of the North Island and Northern South Island, as an active low pressure system moved slowly from the Tasman Sea onto New Zealand, bringing with it a most northeast airflow. The low was expected to move slowly, over two days, from the northern and north eastern areas of Northland and intensify as it continued southward to the mid and lower areas of Northland.

Not since Ex Tropical Cyclone Wilma in January 2011 had Northland experienced such a severe rainfall event.

The following report provides a summary of the event's impact on the region.

**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:**

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That the report Severe Weather Event – 8-10 June 2014 by Dale Hansen, Water Resources/Hydrology Programme Manager and dated 16 June 2014, be received.

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## **Report**

The MetService initially forecast that Northland should expect 100-150mm over a 24 hour period on 9 June. The warning was subsequently upgraded early on 9 June to expect a further 100-180mm on what had already fallen.

## **Response to MetService Warning**

- Warning formation disseminated in conjunction with available weather models and further information provided by the MetService. Personal warnings were also issued to those in the usual flood prone areas of Northland.
- Rainfall and river flow monitoring schedule using the council's extensive telemetry network schedule was upgraded to capture data at more frequent intervals.
- Regular updates were to be provided to Civil Defence Emergency Management.

## **Event Rainfall**

- The rainfall over the 36 hours from midday 8 June to midnight 9 June was heavy (70 to 109mm) around the central and eastern Northland areas such as Kaikohe, Lake Omapere, Opouteke/Twin Bridges, Puhipuhi and Hikurangi Swamp.
- Elsewhere for the same period 15 to 60 mm.
- Rainfall eased overnight then intensified on 9 June for most of that day.
- Rainfall rates were steady at 8 to 12 mm/hour increasing to 30mm/hr in localised areas, mainly in the high altitude areas of the Mangamuka Hills, Waima and Tutamoe Range, Puketū Forest, Kaikohe/Lake Omapere, Eastern Hills from Kerikeri to Whangarei, Ruakaka Forest and Brynderwyn Hills.
- This was a period of intense prolonged rain and was wide spread throughout central and southern Northland.
- Rainfall totals in these high altitude areas reached over 200mm over 60 hours with Puhipuhi receiving 296mm.
- Kaipara areas, where rainfall has been very low over the past eight month received 8 to 150 mm.

## **River Levels and Flooding**

There were numerous rural and main road closures throughout the region resulting from rapidly rising rivers and streams. Flooding in various larger Northland rivers included;

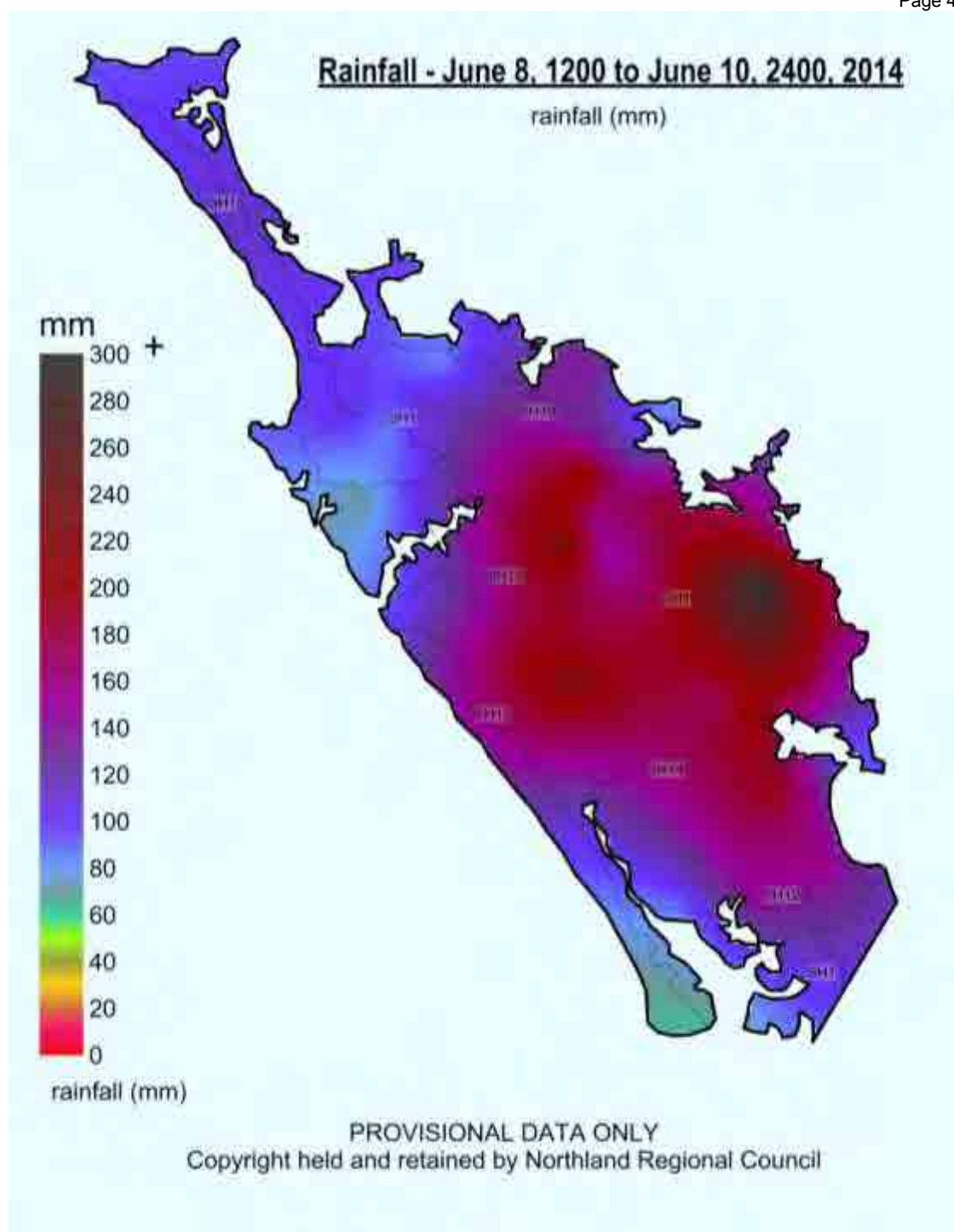
- The Kaeo River spilled over SH10 north of Kaeo with no threat to the town.
- The Punakitere River stopbanks overspilt closing SH 12 at Taheke.
- The Kaihu River at Kaihu reached a record level, equivalent to that reached during Cyclone Bola in March 1988 resulting in widespread flooding of the lower catchment and SH10.
- The Mangakahia River rose six metres at Twin Bridges and 13 metres at Titoki flooding vast areas of the lower catchment farmland and further south below the confluence with the Wairua River at Tangiteroria and Kirikopuni.
- The Whakapara River, major inflow to the Hikurangi Swamp, breached stop banks resulting in severe flooding of the Hikurangi Swamp and flooded SH 1 north of Whakapara.

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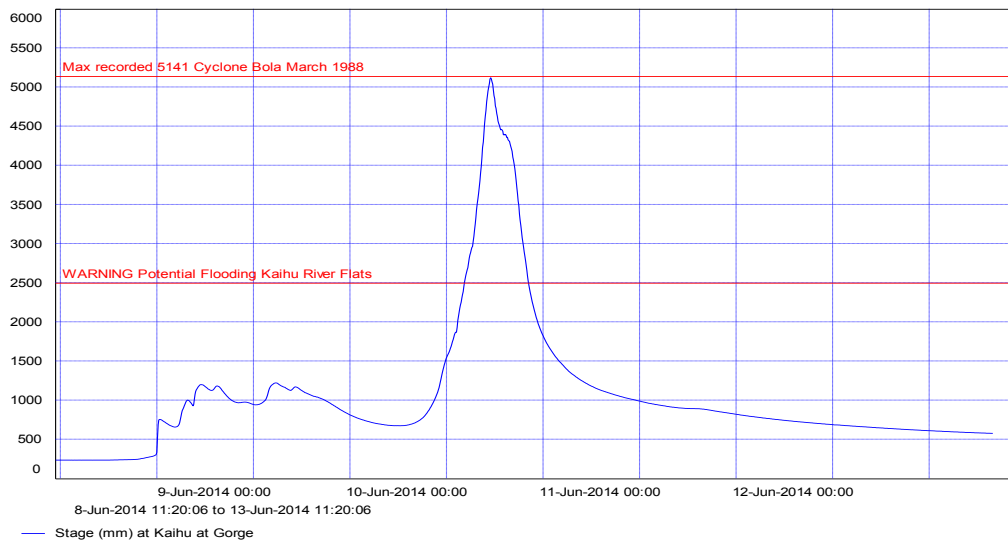
	Noon Sun 8 June - Midnight 9 June (36 hours)	Midnight 9 June – 7.30am 10 June (7.5 hrs)	7.30- 1.00pm (5.5 hrs)	1.00pm - midnight (11 hrs)	<b>Total rainfall (60 hrs)</b>
<b>Far North Districts</b>	<b>8 &amp; 9 June</b>	<b>10-Jun</b>	<b>10-Jun</b>	<b>10-Jun</b>	<b>mm</b>
Far North Peninsula					95
Ngataki					115
Oruru /Taipa	30.5	23.5	24.5	4.5	83.0
Sth Kaitaia ( Larmer Road)	45.5	22.5	17.5	18.5	104.0
Te Rore (upper Awanui River - NW Mangamuka Hills)	29	22.5	19.5	15.5	86.5
Mangakawakawa Trig (Upper Awanui River NE Mangamuka Hills)	45.5	25	32	15.0	117.5
Kaeo (Upper Kaeo River Western)	34.5	37.5	41.5	21.0	134.5
Touwai (Eastern Hills Kaeo)	29	37	51	23.5	140.5
Kerikeri	19	27.5	44.5	27.0	118.0
Rotokakahi (North Hokianga)	35	15	8.5	12.5	71.0
Wharuwharu (Waima Valley Sth Hokianga)	43	17	29	56.5	145.5
Ohaeawai	43.5	18.5	38	43.0	143.0
Kaikohe	108.6	23	55.8		187.4
Wiroa Road (Upper Waitangi River Eastern Lake Omapere)	105	21.5	46.5	36.5	209.5
Oromahoe	28.5	73	49.5	36.5	187.5
Opua Wharf	21	56.5	40.5	46.0	164.0
Otiria (West Moerewa)	31	27	48	31.5	137.5
Omapere/Opononi	36.5	16.5	15	27.0	95.0
<b>Whangarei Districts</b>					
Opouteke (Eastern Tutamoe Upper Mangakahia River)	87	24.5	36	54.5	202.0
Twin Bridges (Central - Mangakahia Road)	70	23.5	53.5	36.5	183.5
Oakura Bay	19	49	53	27.5	148.5
Motatau/Towai	33	42	42	52.5	169.5
Puhipuhi	98	42	81	75.0	296.0
Hikurangi Swamp	73	39.5	43.5	62.5	218.5
Glenbervie Forest	46	43.5	61.5	63.0	214.0
Ngunguru/Kaikatea Hills	24	66.5	43.5	33.5	167.5
Poroti	51	27	50	45.0	173.0
Whangarei NRC Water St	44	33.6	36.8	66.6	181.0
Whangarei Airport	32.6	33.8	38.8		105.2
Otaika at Cemetery Road (Maunu)	62	29.5	40	68.0	199.5
Marsden Point (Refinery Wharf)	13	34	24	20.0	91.0
Springfield (South Whangarei)	49.5	27.5	29	84.5	190.5
Brynderwyn Hills (Northern side)	82	20.5	26	26.5	155.0
<b>Kaipara Districts</b>					
Tutamoe Range	57	14.5	41.5	77.5	190.5
Dargaville	25	13.7	20.7	48.8	108.2
Ruawai	27.5	13	22	24.0	86.5
Maungaturoto	48	16.5	33	42.5	140.0
Paparoa	46.5	16	33	55.5	151.0
Topuni	17	22	23.5	53.5	116.0



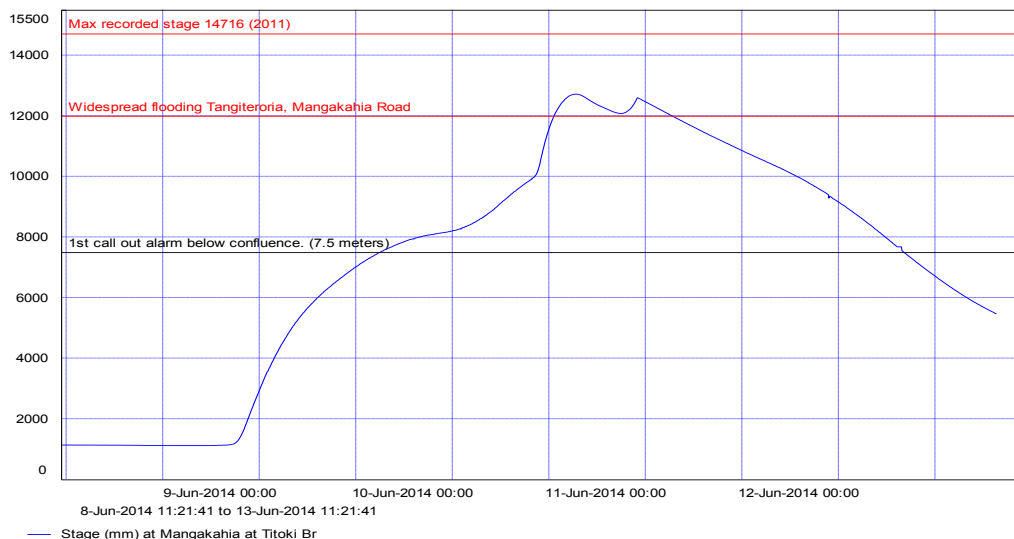


## Water Level Plots

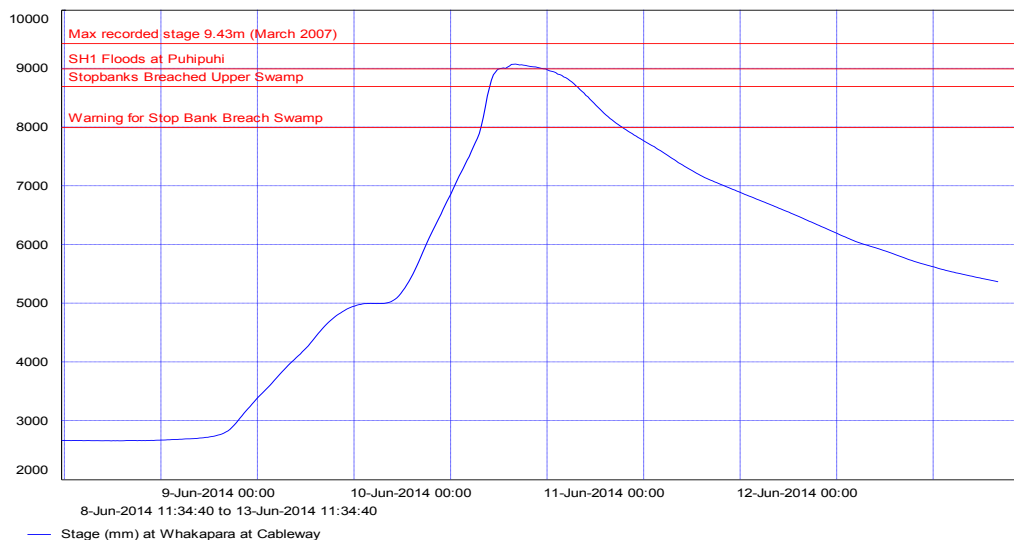
### Kaihu River at Kaihu



### Mangakahia River at Titoki



### Whakapara River at SH1 Whakapara





**ISSUE: Bay of Islands Maritime Park Inc – presentation**

**ID:** A649616

**To:** Environmental Management Committee, 23 June 2014

**Date:** 10 June 2014

<b>Report Type:</b>	<input type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
<b>Purpose:</b>	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input checked="" type="checkbox"/> Other
<b>Significance:</b>	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low

**Report**

In June 2012, the catchment care community group Living Waters Bay of Islands provided a presentation to the committee on its work in the Bay of Islands catchment.

A recent request for further representation has been received and granted.

Bay of Islands Maritime Park Inc. will give a short presentation on its work to restore biodiversity in the Bay of Islands through its two powerful public profiles Living Waters (catchment and freshwater management) and Fish Forever (marine environment management). The purpose is to inform, seek inquiry and engage support. Representing the society are Ruth Marsh and John Booth.

**Legal compliance and significance assessment:**

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

**Recommendation:**

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That the introductory report and presentation from Bay of Islands Maritime Park Inc be received.

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**ISSUE: The Weather and Climate of Northland –  
NIWA presentation**

**ID:** A647860

**To:** Environmental Management Committee, 23 June 2014

**Date:** 4 June 2014

<b>Report Type:</b>	<input type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
<b>Purpose:</b>	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input checked="" type="checkbox"/> Other
<b>Significance:</b>	<input type="checkbox"/> High	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Low

**Report**

NIWA have updated the old “blue book” publication, called “The Weather and Climate of Northland”. The previous edition was published in 1986 and was based on data from the 30-year period 1951-1980. The new publication includes completely updated figures and tables, based on the period 1981-2010. It has also been given a “face-lift”, with the use of modern graphics and the addition of some stunning scenery photos. Dr Andrew Tait will present the updated publication by quickly stepping through its contents. There will be some hard copies to be handed out, and the digital version will be presented to the council for further dissemination and (if desired) printing.

**Legal compliance and significance assessment:**

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

**Recommendation:**

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That the introductory report and presentation from NIWA on the Weather and Climate of Northland be received.

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