AGENDA

ENVIRONMENTAL MANAGEMENT COMMITTEE

Monday 23 February 9.30 am

NORTHLAND REGIONAL COUNCIL ENVIRONMENTAL MANAGEMENT COMMITTEE

Agenda

Meeting to be held in the Council Chambers, 36 Water Street, Whangarei on Monday, 23 February 2015 commencing at 9:30am

MEMBERSHIP OF THE ENVIRONMENTAL MANAGEMENT COMMITTEE

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

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Procedural

Apologies Declarations of Conflicts of Interest

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ISSUE: Confirmation of Minutes – 8 December 2014

To: Environmental Management Committee, 23 February 2015

From: Tony Phipps, Operations Director

Date: 12 February 2015

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

Executive summary:

The purpose of this report is to present the minutes of the Environmental Management Committee meeting held on 8 December 2014 **(attached)** for confirmation.

Legal compliance:

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

Recommendations:

That the minutes of the Environmental Management Committee meeting held on 8 December 2014 be received.

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NORTHLAND REGIONAL COUNCIL ENVIRONMENTAL MANAGEMENT COMMITTEE

Minutes of the Environmental Management Committee Meeting held in the Council Chamber, Northland Regional Council, 36 Water Street, Whāngārei, on Monday 8 December 2014, commencing at 9.30 am

Present:

Northland Regional Council

Cr Joe Carr (Chairman) Cr Craig Brown (Deputy Chairman) Cr Paul Dimery

Far North District Council Cr Ann Court

Whangarei District Council Cr Tricia Cutforth

Department of Conservation Ms Sue Reed-Thomas

Farming Community Mr Alan Clarkson

Māori Interests Mr Keir Volkerling

Environmental Interest Groups Martin Hunt

In Attendance:

NRC Staff - Full Meeting:

Chief Executive Officer Operations Director Consents/Monitoring Senior Programme Manager Land/Rivers Senior Programme Manager Biosecurity Senior Programme Manager Rivers Team Administrator

NRC Staff - Part Meeting:

Environmental Monitoring Programme Manager Council Secretary Rivers Team Programme Manager Policy Development Programme Manager Policy Specialist – Water Compliance Monitoring Senior Programme Manager Biodiversity Specialist

The Chairman declared the meeting open at 9.38 am. He welcomed Martin Hunt, as the newly appointed committee member representing Environmental Interest Groups on the Environmental Management Committee.

Apologies

Moved (Carr/Brown)

That the apologies from Cr Bill Shepherd (ex officio), Richard Booth and Geoff Gover for non-attendance be received.

Carried

Declaration of Conflict of Interest

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

Secretarial Note: The committee sustained a minutes silence in respect of the recent passing of Committee Secretary, Peternel McLean.

Confirmation of Minutes: Environmental Management Committee Meeting – 13 October 2014 (Item 1.0) Report from Tony Phipps, Operations Director. ID: A708165

Moved (Clarkson/Carr)

That the minutes of the Environmental Management Committee meeting held on 13 October 2014 be confirmed as a true and correct record.

Carried

Matters arising from 1.0:

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

Waiora Northland Water Progress (Item 2.0)

Report from Natalie Glover, Waiora Northland Water Project Manager A703530

Moved (Brown/Dimery)

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

Carried

Matters arising from 2.0:

Mr A Clarkson confirmed he would contact NRC's media staff to arrange for a public statement to announce NRC's award at the 2014 New Zealand River Awards for achieving 4th place relating to one of the most improved rivers on a regional basis (Mangere Stream, Northland).

Regional Plans Review Update (Item 3.0) Report from Ben Lee, Programme Manager – Policy Development. A703782

Moved (Clarkson/Cutforth)

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

Carried

Community wastewater treatment plant discharges – current compliance status (updated) (Item 4.0)

Report from Tess Dacre, Compliance Monitoring Senior Programme Manager. A668068

Moved (Brown/Dimery)

That the report Community wastewater treatment plant discharges – current compliance status (updated) from Tess Dacre, Compliance Monitoring Senior Programme Manager and dated 10 November 2014 be received.

Carried

Stock in Streams Update (Item 5.0)

Report from Tess Dacre, Compliance Monitoring Senior Programme Manager. A702388

Moved (Brown/Court)

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

Carried

Environment Fund & Farm Water Quality Improvement Plan Update (Item 6.0)

Report from Bruce Howse, Land/Rivers Senior Programme Manager. A704123

Moved (Brown/Clarkson)

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

Carried

River Management Update (Item 7.0)

Report from Joseph Camuso, Rivers Programme Manager. A702257

Moved (Reed-Thomas/Brown)

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

Carried

Matters arising from 7.0:

The CEO confirmed he would arrange a meeting between Jackie Hori-Hoult, Journey Manager - NZTA and NRC staff to ascertain NZTA's position in terms of how it relates specifically to the Otiria-Moerewa area and State Highway 1.

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Review of Regional Pest Management Strategies Update (Item 8.0) Don Mckenzie, Biosecurity Senior Programme Manager A702752

Moved (Brown/Clarkson)

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

Carried

Biosecurity Responses Update (Item 9.0)

Report by Don Mckenzie, Biosecurity Senior Programme Manager. A703263

Moved (Brown/Clarkson)

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

Carried

Environmental Monitoring for the period 25 September – 31 October 2014 (Item 10.0)

Report by Colin Dall, Consents/Monitoring Manager. A703719

Moved (Dimery/Volkerling)

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

Carried

National Environmental Monitoring and Reporting Project (EMaR) and LAWA website update (Item 11.0) Report by Tony Phipps, Operations Director. A706040

Moved (Carr/Dimery)

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

Carried

Climate Update For Summer 2014/2015 (Item 12.0) Report by Dale Hansen, Water Resources/Hydrology Programme Manager. A704893

Moved (Brown/Clarkson)

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

Carried

Agenda items for next Environmental Management Committee meeting – 8 December 2014 (Item 13.0) Report from Tony Phipps, Operations Director. A708169

Moved (Brown/Carr)

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

Carried

Matters arising from 13.0:

List of Environmental Management Committee dates for Year 2015 to be circulated to Committee members.

Suggested topics included:

- Presentation from Martin Hunt re CPCAs
- Presentation from Keir Volkerling re RP lwi Values
- Presentation from Alan Clarkson re TB Free

Northland Conservation Management Strategy – presentation (Item 14.0) Report by Tony Phipps, Operations Director. A708168

Moved (Brown/Carr)

- 1. That the introductory report and presentation from Northland Conservation Board be received.
- 2. That this Committee recommends to Council that the Northland Conservation Board be permitted to have a representative on the Whangarei Harbour Catchment Liaison Group.

Carried

Waimate North Landcare Trust – presentation (Item 15.0) Report by Tony Phipps, Operations Director. A708167

Moved (Brown/Carr)

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

Carried

Matters arising from 15.0:

The Chair requested the Biosecurity Senior Programme Manager to liaise with Darryl Way, Chairperson of Waimate North Landcare Trust to investigate how to keep these groups viable.

Go Slow – presentation (Item 16.0)

Report by Tony Phipps, Operations Director. A708166

Moved (Brown/Carr)

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

Carried

Matters arising from 16.0:

The CEO confirmed he would write to NDHB on behalf of the Environmental Management Committee requesting further investigation into "Go Slow".

Conclusion

The meeting closed at 12.53 am.

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ISSUE: Waiora Northland Water Progress

To: Environmental Management Committee, 23 February 2015

From: Natalie Glover, Waiora Northland Water Project Manager

Date: 10 February 2015

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

Executive Summary:

The purpose of this report is to provide an update on progress with Waiora Northland Water and contributing programmes between 8 November 2014 and 10 February 2015.

Legal compliance and significance assessment:

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

Recommendations:

1. That the report Waiora Northland Water progress by Natalie Glover, Waiora Northland Water Project Manager and dated 10 February 2015, be received.



Report:

NATIONAL POLICY STATEMENT FOR FRESHWATER (NPS FM) IMPLEMENTATION

New Regional Plan

The review of the three regional plans is now complete. The review documents are available on the council website here: <u>http://www.nrc.govt.nz/Your-Council/Council-Projects/New-Regional-Plan/10-year-review-of-the-regional-plans/</u>

The next step is to develop a new regional plan. Staff expect to take until around mid-2016 to prepare the draft regional plan. Key milestones include:

Milestone	Timeframe
1. Committee confirms detailed project plan	March 2015
2. Committee confirms structure of regional	April 2015
plan and section 32 report template ¹	
3. Committee workshops seeking approval /	April 2015 – June 2016
direction for plan content and section 32	
4. Committee approves draft regional plan	July/August 2016
and section 32 report for public feedback	

A paper will be presented to the April 2015 Environmental Management Committee meeting providing more detail about the process for preparing the draft new regional plan (i.e. once confirmed by the Regional Policy Committee).

Freshwater Management Units (FMU)

Staff are making good progress in defining FMU for lakes, rivers, wetlands and aquifers – the water bodies, multiple water bodies or any parts of water bodies determined by the regional council as the appropriate spatial scale for setting freshwater objectives and limits and for freshwater accounting and management purposes.

In summary, lakes, rivers and wetlands are likely to be classified or grouped based on key natural environmental factors that influence their ecology and state (e.g. climate and catchment topography and geology). Narrative and numeric freshwater objectives would then be applied to these natural groupings of water bodies (I.e. the objectives for steep hard bottom streams are likely to be very different to those for lowland soft sediment streams).

However Northland's surface and groundwater catchments will form the base units for the purposes of water quality and quantity accounting and management. This means there are likely to be multiple objectives applying within some catchments to reflect the variation in water body types.

This approach provides the degree of resolution required to reflect Northland's varied environment while enabling a workable application of the NPS FM. It is also well aligned with current monitoring regimes and is consistent with the way that water is managed in other jurisdictions.

¹ Section 32 refers to the section of the RMA that sets out how the provisions of a plan must be analysed and justified.

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The main challenges associated with carrying out this work include accurately classifying water bodies, delineating catchment boundaries and integrating water quality and quantity management. We are working with some national experts to assist us with these matters and to ensure that the FMU will form a robust framework for future water management in the region.

Water Allocation

Key actions and outcomes relating to water allocation work being undertaken are:

- Looking at ways that can be used to assess water availability that considers the connection between groundwater and surface water in Northland catchments. A method is being trialled in four catchments. The outcome of this work will be reported to the Environment Management Committee Meeting in April 2015.
- Developing a revised water allocation calculator for assessing the level of allocation of both groundwater and surface across Northland catchments. Level of allocation will be based on a comparison of current allocation against total water available for use. The calculator will provide an updated picture of areas where high consented allocation exists. The calculator is due to be completed by April 2015.
- Assessing the relationship between suitable habitat for fish species and river flow in the Waitangi, Mangere and Hatea catchments. The assessments have been completed and the results will be presented to collaborative stake holder groups to assist in the decision-making process on minimum flow requirements for maintaining ecological values.
- Reassessing the Aupouri aquifer to determine how much water can be allocated in specific areas/zones along the peninsula. This work is due to be completed in March.

MPI Joint Venture

A series of projects are being progressed in a joint venture between council and the Ministry for Primary Industries. The following two projects have been fully scoped and contracts let:

- Identifying the potential economic costs and environmental outcomes of meeting sediment objectives and limits in freshwater and estuarine environments.
- Assessment / identification of tangata whenua values and interests regarding freshwater in Northland and an associated suite of cultural indicators (attributes)

Liaison with the Ministry for the Environment

Following a meeting with members of the MfE NPS FM implementation team on 20 November, MfE staff have been invited to attend Waitangi and Whangarei catchment group meetings and engage with more Waiora Northland Water personnel during the same visit. Staff are also participating in the development of collaborative tools, processes and guidance for water management nationally, along with government and regional council representatives from other parts of New Zealand.



PRIORITY CATCHMENTS

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

The priority catchment groups held the following events during the reporting period:

Doubtless Bay	November workshop
	January meeting
Mangere	November workshop
	January meeting
Whangarei	November fieldtrip to forestry operatons
	December meeting
	February meeting
Waitangi	November workshop
	December fieldtrip to riverside flood affected land
Pouto	November workshop
	December fieldtrip to Pouto Lakes
	February fieldtrip to forestry operations
	February meeting

Northland Conservation Board

The Northland Conservation Board has indicated they would like to wait until an environmental interests' representative vacancy on the catchment groups arises to be considered for any such vacancy.

Doubtless Bay Dung Beetle proposal

Encouraged by support from the Doubtless Bay catchment group, Dr Jenny Dymock has received funding from the Hine Rangi Trust, which funds Northland Agricultural Research for two dung beetle releases and monitoring this season. Together with funding from Landcorp Ltd for top-up release of the dung beetle species *D. gazella* at Rangiputa Station (Karikari Peninsula), this will mean three releases of 500 beetles per site in the Doubtless Bay catchment.

Lake Rototuna

Council's Water Resource Analyst undertook a preliminary hydrogeological assessment of upper and lower Lake Rototuna to narrow down likely factors contributing to the lake levels. He found that the main cause for the decreasing trend in Upper Rototuna Lake water levels from 2005 onwards is likely to be the increase in the area covered by mature pine trees within the Upper Rototuna Lake Catchment. He also concluded that the breaching of the Lower Rototuna Lake natural embankment in the 1970's could have caused a decrease in Upper Rototuna Lake water levels shortly after the breach event, however it seems highly unlikely that the decreasing trend in lake levels from 2005 onwards was caused by the embankment breach.

Fish barrier survey

State of Environment team staff undertook a survey of natural and man made barriers to fish passage during January 2015, in the Mangere catchment and in five rivers and streams in the Whangarei catchment. In addition to mapping and evaluating possible mitigation options for fish passage barriers encountered, riparian cover and stock exclusion along the watercourses were also documented. The results will assist the Mangere and Whangarei catchment groups with formulating their catchment-specific objectives for freshwater management.



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Upcoming catchment group milestones

Priority catchment groups have all completed the identification of their uses and values, with particular maori uses and values to be fine-tuned more over the coming year. All catchment groups are working to the same core work plan content, with additional agenda items scheduled to suit their individual needs. The final goal is a catchment management plan, which for some groups should be achieved by November 2015. The catchment groups are taking an adaptive management approach, meaning that proactive actions can be achieved in many cases without having all the scientific information first.

Milestones for the next six months include:

- Freshwater objective setting: matching freshwater values to indicators and describing goals
- Options to achieve objectives: different actions or policy measures to achieve goals
- Cost benefit analysis: various options evaluated from an economic, environmental, social and cultural perspective

CONTRIBUTING PROGRAMMES

Kai lwi Lakes



Guided snorkelling at Kai Iwi Lakes Open Day 2015

The Kai Iwi Lakes Open Day was held Sunday 1 February 2015 to tie in with World Wetlands Day, and aimed to engage people through fun activities that give them a sense of ownership and inspire them to help protect the lakes and the wider ecosystem/catchment.

Key messages at the Kai Iwi Lakes Open Day were:

- Always Check Clean Dry between waterways;
- Anything that we put in the lakes stays in the lakes; and
- Always be water safe in the lakes.



100% of people surveyed at the event said they had learnt actions they could do to help look after the lakes and would tell others what they'd done and learnt.

The event attracted over 150 people of all ages from Far North, Kaipara, Whangarei, Auckland and overseas, along with many volunteers working with the activities. Participants enjoyed free guided snorkelling and walks, waka ama, water skiing, and pest and weed identification activities.

Taharoa Domain Reserve Management Plan (RMP) Review

The Taharoa Domain RMP Review Steering Group met 8 December 2015 and now have a draft of the plan for the consultation phase, which began in January 2015.

Kaipara Catchment Integrated Kaipara Harbour Management Group (IKHMG)

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

Lakes Strategy Implementation

Following a meeting in early December between key staff and prominent lakes scientists, a wider group of staff working with lakes and wetlands management have teamed up to consider and advance implementation options suggested in the Lakes Strategy Parts 1 and 2 prepared by NIWA. The outcomes of their collaborative efforts will inform the draft content for the new regional plan and catchment management plans.

Council has also commissioned analysis of satellite imagery of lakes going back to 2000, and is considering obtaining older satellite imagery that will help pinpoint historical landuse change, once the value of post 2000 imagery has been proven.

Land Management

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

Industry liaison

Drystock industry

The formation of a drystock industry group is underway. The group will provide NRC with feedback and industry recommendations on stock exclusion policy, good management practices for preventing and minimising nutrient losses to water in lake catchments, and losses of sediment to water generally.

A draft terms of reference has been distributed for feedback to potential drystock stakeholders on the group, including Federated Farmers, Beef and Lamb NZ (B&LNZ), independent drystock farmers, Iwi representatives and Landcorp Ltd. Initial meetings are planned for April/May 2015.

B&LNZ are hosting an environment conference 12 - 13 February in Wellington for their members involved with catchment groups. At least one Waiora Northland Water catchment group drystock representative has been funded by B&LNZ to attend. One of the aims of the conference is to understand what support drystock representatives on catchment groups need from their industry body.



Dairy Industry Liaison Group (DILG)

A meeting is to be scheduled tentatively for March 2015, with a discussion of Farm Dairy Effluent to feature prominently on the draft agenda. Outcomes of the discussion about last year's monitoring programme results and measures that would improve future compliance will be reported to the April EMC.

Collaboration with DairyNZ

A workshop with dairy industry design professionals is mooted to consider the design of dairy sheds and effluent systems that will achieve the most effective compliance outcomes for farmers.

Major stakeholders such as Fonterra and DairyNZ have been working with Council on a draft agreement for water metering. DairyNZ is planning extension activities with farmers that include meetings on farms that already have water meters installed. DairyNZ is also investigating a proposal by Council staff to produce a decision matrix tool that would simplify the meter procurement process for farmers.

DairyNZ has committed to assist with funding of lakes nutrient studies to understand nutrient budgets in lakes catchments, with a focus on those with a dairy landuse. Council is assisting DairyNZ and University of Auckland post graduate students on one such study, in which seismic surveys and sampling of lake sediments in the Pouto catchment will be carried out. This work will build up an historical record of selected lakes, which are to be chosen for study on the basis of making a comparison between lakes of high quality and those having a degraded state.

Forestry

A NZ Forestry Industry seminar "the science behind forestry as a landuse" with scientific presenters from Scion and Landcare Research was hosted at Council on 17 November 2014. The event was followed up with a fieldtrip and attracted council staff, scientists and industry stakeholders.

The forestry industry group met 20 January 2015 and discussed national legislation that the forestry industry is operating under, including Health and Safety requirements. The group also talked over the importance of harvest planning to address environmental risks, and advocated the use of wetlands as a mitigation tool in forestry operations.

Field visits have been arranged with selected Council personnel to aid understanding of forestry issues as they relate to environmental compliance, and in particular the tethering technic, which is a new tree harvesting technology involving tracking that is designed to save lives. As a consequence, Council staff aim to update the section of the Northland Forestry Guidelines that deals with tracking.

NZ River Awards

Chairman Bill Shepherd collected Mangere catchment's award for best phosphorus reduction in Northland at the 2014 New Zealand River Awards in November 2014. Cr Shepherd has in turn presented the award to the Mangere Catchment Group co-chairs at their January 2015 meeting. In order to promote effective water management actions in the catchment, the group has proposed that the co-chairs could showcase the award at an upcoming Kokopu School assembly and the award could then be hosted by the school for a few months.



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ISSUE: Environment Fund & Farm Water Quality Improvement Plan Update

ID: A722875

To: Environmental Management Committee, 23 February 2015

From: Duncan Kervell, Land Programme Manager and Bruce Howse, Land/Rivers Senior Programme Manager

Date: 2 February 2015

Report Type:	~	Normal operations		Information		Decision
Durnasa		Infrastructure		Public service		Regulatory function
Purpose:		Legislative function	✓	Annual\Long Term Plan		Other
Significance:		High		Moderate	✓	Low

Executive Summary:

- Year to date over 100% (\$701,353.45) of the Environment Fund budget has been allocated (to a total of 140 projects).
- An estimated \$80k \$100k in additional projects is forecast between now and end of the financial year, which will require approval to fund from the Land Management Reserve.
- Year to date a total of 65 FWQIP's have been commenced, 45 FWQIP's have been completed, with a further 30 in progress.
- Funding approval is sought for a project to test cat traps for national standards in terms of its safety, animal welfare and humaneness.
- Approval is sought for changes to the Environment Fund criteria for 2015/16, which were previously supported in principle by the committee.

Legal Compliance and Significance Assessment:

The activities detailed in this report are provided for in the council's 2012-2022 Long Term Plan and as such are in accordance with the council's decision-making process and sections 76-82 of the Local Government Act 2002.

In relation to section 79 of the Local Government Act 2002, this issue is considered to be of low significance.

Recommendations:

- 1. That the report Environment Fund & Farm Water Quality Improvement Plan Update by Duncan Kervell, Land Programme Manager and Bruce Howse, Land/Rivers Senior Programme Manager, and dated 2 February 2015 be received.
- 2. That the Committee recommends to Council the approval of \$8,803.45 of funding from the Land Management Reserve to cover the year to date unfavourable variance.

- 3. That the Committee approves Mr Stephen Allan's application for \$13,000 for the testing of the new trap design for wild cat control and recommends to Council that this funding be provided from the Land Management Reserve.
- 4. That the Committee approves the proposed changes to the Environment Fund criteria, as per Attachment 1, with changes to take effect from 1 July 2015.

Environment Fund Update

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

Year to date \$701,353.45 of the Environment Fund budget has been allocated (to a total of 140 projects). The December 2014 delegated authority approvals are attached. It is recommended that the Committee recommends to Council the approval of \$8,803.45 of funding from the Land Management Reserve to cover the year to date unfavourable variance.

Delegated Authority	Land/Biosecurity	NO of Projects	AII	ocation	Buc	lget
1 – July 2014	Land	19	\$	58,883.90		
2 – Aug 2014	Land	45	\$	166,083.25		
3 – Aug 2014	Land ¹	2	\$	16,900.00		
3 – Aug 2014	Biosecurity	42	\$	92,550.00		
4 – Sept 2014	Land	21	\$	80,251.90		
5 – Oct 2014	Land	16	\$	81,804.50		
6 – Nov 2014	Land	20	\$	76,556.70		
7 – Dec 2014	Land ²	1	\$	5,000.00		
8 - Dec 2014	Land	17	\$	69,300.20		
Soil Conservation			\$	36,650.00		
Balance CoastCare)		\$	17,373.00		
Allocation to date			\$	701,353.45		
Budget	Land				\$	600,000
	Biosecurity				\$	75,000
	Biosecurity – approved	d from Land Ma	anag	ement	\$	17,550
	Reserve					
Total Budget					\$	692,550
Less Allocation To	Date		(\$7	01,353.45)		
Variance Year To D	Date				-\$	8,803.45

Table 1. Environment Fund funding allocation to date.

¹ Sunvalley Livestock fencing project (\$9,900) and Portland Farms fencing project (\$7,000). ² Native Bird Recovery Centre \$5,000.

Biosecurity - Exceptional project funding stream - A new trap design for wild cat control. Applicant: Mr Stephen Allan of Kaitāia

Many Landcare communities in Northland are faced with trying to prevent the damaging effect that wild cats have on native fauna and while there are a suite of control tools specifically available for the control of other pests such as stoats, possums and rats the techniques to control wild cats are more limited and often less effective. Wild cats are known to target a wide range of native fauna including birds, lizards, their eggs and offspring and insects, and in Northland young kiwi are particularly vulnerable. Northland studies show that native geckos and skinks are also consumed by cats.

Over the last four years a northland trapper has developed a purpose built wild cat trap specifically designed to ensure a humane quick kill. Biosecurity staff have been observing the development and progress over the last four years and have been impressed with the design and initial testing results. What is now required is funding to test this new technology at the Landcare Research facilities in Lincoln with the aim of quantifying the effectiveness of the design and humane action of the trap. This trap could provide an essential tool in the battle against wild cats in Northland however it is important that any new design meets national standards in terms of its safety, animal welfare and humaneness. It is not expected that this trap will ever be commercially available as demand is limited and each trap is hand crafted however biosecurity staff are aware that there is a specific demand from pest control groups in the region to use this trap on private land and testing would confirm its effectiveness. The cost of the testing has been estimated at \$13000 and this would pay for specific trials and a report on the findings.

Approval of Proposed Changes To Environment Fund

The Environmental Management Committee, at its meeting of 13 October 2014, resolved to support in principle proposed changes to the Environment Fund criteria, with any changes to be confirmed by the Committee following the outcomes of Council LTP workshops, and with any changes not to commence until after 1 July 2015.

The proposed changes to the Environment Fund criteria for 2015/16 are provided in Attachment 1. These changes the same as that supported by the committee at its meeting of 13 October 2014.

It is recommended that these proposed changes now be approved by the committee, taking effect on 1 July 2015. This will enable forward planning to take place with land owners for next year's funding allocation, with certainty for both the NRC and applicants as to the funding criteria.

Farm Water Quality Improvement Plans (FWQIP)

Year to date a total of 65 FWQIP have been commenced, 35 FWQIP have been completed, with a further 30 in progress from this year and previous years, as per Table 3.

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Status of FWQIP	Farm Type	Far North	Kaipara	Whangarei	Total
Plans	Drystock	29	5	17	51
Commenced :	Lifestyle	3		2	5
1 July 2014 to	Dairy	3		6	9
2015		35	5	25	65
Plans	Drystock	20	5	13	38
Completed:	Lifestyle	2		1	3
1July 2014 to	Dairy			4	4
2015		22	5	18	45
	Drystock	13	3	6	22
Plans still in	Lifestyle	1		1	2
Progress	Dairy		3	3	6
		14	6	10	30

Table 3. Farm Water Quality Improvement Plans (FWQIP) from 1 July 2014 to 28January 2015

Attachment 1 – I	Proposed Environment Fund criteria for 20	15/16				
	Farm properties - water quality improvement and biodiversity ³	Outstanding waterbody	Soil conservation/	CoastCare	Biosecurity	Exceptional projects
	Farm water quality improvement plan priority actions, plus high priority biodiversity restoration/protection	protection & Top Wetlands	erosion control - poplar poles and willows			
Recommended	Dairy farm waterway fencing 30%; funding	50% via delegated	50% provision of materials (i e	100% provision of	100% provision of	Up to 100% for projects
	Dry stock waterway fencing 50%;	authority, or	poles provided at	materials	materials	but of exceptional
	-funding of up to \$10,000 for 199 ha or less sized farm:	up to 100% with EMC	\$4 each)			environmental merit, subiect to EMC
	-funding of up to \$15,000 for 200 ha to 599	approval				approval
	ha sized farm; -funding of up to \$20,000 for 600 ha or					
	greater sized farm.					
Land owner	Balance of cost of works or labour and/or ma	aterials	Plant material	Labour	Labour	N/A
contribution			purchased at 50% cost			

Attachment 2 – Current Environment Fund criteria.

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³ Focused on supporting water quality and biodiversity initiatives on farm properties, supporting the Farm Water Quality Improvement Plan programme. ⁴ Funding to ensure that qualifying pest control projects outside the Community Pest Control Area programme are assisted.

							ITEM: 3 Page 6 of 6
	arm properties - water quality improvement and biodiversity ⁵	Top wetlands	NPS priority catchments/ lakes and community groups ⁶	Soil conservation - poplar poles and willows	CoastCare	Biosecurity	Exceptional projects
Recommended subsidy up to	Dairy farm waterway fencing 30%; funding range \$1000 to 55000. Dry stock 50%; funding range \$1000 to \$7000.	50%	Up to 100%	50% provision of materials (i.e. poles provided at \$4 each)	100% provision of materials	100% provision of materials	Up to 100% for projects not fitting the criteria but of exceptional environmental merit, subject to EMC approval
Land owner contribution	3alance of cost of works or labou	ir and/or mater	ials	Plant material purchased at 50% cost	Labour	Labour	N/A

⁵ Focused on supporting water quality and biodiversity initiatives on farm properties, supporting the Farm Water Quality Improvement Plan

programme. ⁶ Supporting water quality initiatives within NPS Freshwater Priority Catchments/Lakes and for supporting other community-group based land management initiatives. ⁷ Funding to ensure that qualifying pest control projects outside the Community Pest Control Area programme are assisted.

			Delegate	ed Autho	rity Recon	nmendation	s - Decembe	r 2014				
EFD No.	FWQIP	NRC STAFF MEMBER	Applicant	Previous Funding Year(s)	Previous Funding Amount(s)	Farm Type	Funding Stream	Priority Catchment	District	Brief Project Description	Amount Recommende	g
APP.037287	66	DEJ	Hamish Finlayson	2013	\$ 5,000.00	Dairy	Water Quality		Whangarei	Fencing	\$ 2,6	594.00
APP_151716,03.01	59	DEJ	Grant A Matson	2013	\$ 4,380.00	Dairy	Water Quality		Whangarei	Fencing	\$ 2,0	00.750
				2012	\$ 5,330.00							
APP.037279	43	DUK	Waiaua Bay Farm Limited	2013	\$ 4,665.00	Drystock	Water Quality		Far North	Fencing	\$ 6,7	748.00
APP 036559 02 01	207	DUK	Blue Orb Trust	2013	\$ 5,485.00	Drystock	Top Wetland		Far North	Fencing	\$ 4,3	360.00
APP.036540.02.01	208	DUK	Michael Cook	2013	\$ 5,000,00	Dairy	Water Quality	Waitangi	Far North	Fencing	\$ 5,0	00.000
APP.037228	282	DUK	Flintoff Holdings Limited	N/A		Drystock	Water Quality	Waitangi	Far North	Fencing & Planting	\$ 2.5	516.00
APP.037283	287	DUK	Northern Water Co Ltd	N/A		Drystock	Water Quality		Far North	Fencing	\$ 1,3	360.00
APP.037333	289	DUK	Grant Douglas & Carla Maree McLean	N/A		Dairy	Water Quality		Whangarei	Fencing	\$ 5,0	00.000
APP.037341	303	DUK	Te Kura o Hato Hohepa Te Kamura School	N/A		Drystock	Water Quality		Far North	Fencing & Planting	\$ 1,9	384.50
APP.037111	188	ROD	Mrs Penelope Lynne Brown	N/A		Dairy	Water Quality		Whangarei	Fencing	\$ 5,0	00.000
APP.037112	231	ROD	PL Brown Farms Limited	N/A		Dairy	Water Quality		Whangarei	Fencing	\$ 4,2	236.00
APP.037332	280	ROD	Rehford Farms Limited	N/A		Dairy	Water Quality		Whangarei	Fencing	\$ 1.9	326.00
APP.037319	288	ROD	Luke Goodin	N/A		Lifestyle	Water Quality		Whangarei	Fencing	\$ 3,3	325.00
APP_037345	290	10D	Opara Heights Ltd	N/A		Drystock	Water Quality		Far North	Fencing	\$	760.00
APP_037213	181	ASE	Johnny Jones	N/A		Drystock	Biodiversity		Far North	Fencing	\$	960.00
APP_037349	300	ASE	Aratoro Farm Limited	N/A		Drystock	Water Quality		Far North	Fencing	\$ 7,0	00.000
APP_037348	301	ASE	P K S Herekino Farming	N/A		Drystock	Water Quality		Far North	Fencing	\$ 1,4	\$73.00
APP.037352	302	ASE	Ngakahu Whanau Whenua	N/A		Drystock	Water Quality		Far North	Fencing	\$ 6,9	320.70
										TOTAL	\$ 69,3	300.20

Approved Under Delegated Authority

2 A

Bruce Howse Land & Rivers Senior Programme Manager

Date: 15/12/14

Summary Sighted by Councillor

Bill Shepherd Chairman - Northland Regional Council

Date:

Environmental Management Committee 23 February 2015

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ISSUE: River Management Update

ID: A721912

To: Environmental Management Committee, 23 February 2015

From: Joseph Camuso, Rivers Programme Manager

Date: 30 January 2015

Report Type:	I	Normal operations	$\mathbf{\nabla}$	Information	Decision
Durnaca	1	Infrastructure		Public service	Regulatory function
r uipose.		Legislative function		Annual\Long Term Plan	Other
Significance:		Triggered	\checkmark	Not Triggered	

Executive Summary:

The Kotuku Street dam construction is approximately four weeks behind schedule. However, the contractor is confident they can accelerate the programme once the foundation work is completed. A decision on whether to complete the dam in one season or two will need to be made in late February.

Resource consent for the Kerikeri River spillway has been lodged, and we anticipate lodging a resource consent for the lowering of the Whangatane Spillway in February.

Works programmes are progressing well and on track for the Awanui, Kaihu, Kaeo-Whangaroa and Whangarei river catchments as well as minor river works.

Legal compliance and significance assessment:

The council activities detailed in this report are provided for in activities described in the council's Long Term Plan and as such are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002. This matter is considered to be of low significance, as the report is only provided to be received for information.

Recommendation:

- 1. That the report Rivers Management Update by Joseph Camuso, Rivers Programme Manager and dated 30 January 2015 be received.
- That the minutes of the following liaison committee meetings be received:
 a. Kaihu River Liaison Committee, 21 January 2015

Whangarei Kotuku Dam Update

Work is progressing with the Kotuku Street Dam foundation, service spillway and the left emergency spillway as part of the main work items. A landslip and site ground conditions at the service spillway outlet have required some additional geotechnical investigation and re-design.

Since the December update, it is forecast that an additional \$505,762 in construction and supervision costs will be incurred beyond the construction tender sum of \$2,698,713 and contingency sum of \$270,000. In addition to this it is considered prudent to add a further \$150,000 contingency sum to the overall project to address any further as yet unrealised variations that may arise with the remaining construction elements. There are still some unknown's and hence risks, these include ground conditions under the stream and the left embankment which have not yet been excavated.

This would mean an overall increase in the project budget of \$655,762, taking the total revised project budget to \$9,874,718 (before revenue from property sales is realised).

We are proposing to progress with construction on the basis of completing this in one season. The contractor has sent through revised production figures and work days, showing construction is still considered feasible in one season.

We will continue to monitor the construction progress, with a further review point (as to 1 or 2 seasons) to be late February when the contractor is anticipating having the dam fill completed to RL53 (being 2-metre above the service spillway pipe).



Concrete placement for the service spillway inlet – Kotuku Street Dam 30 Jan. 2015

Whangarei Rivers Maintenance Works

Works have been tendered and will commence in February 2015.

Awanui

Resource consent applications for modifying the intake for the Whangatane Spillway is being prepared with the intention to lodge by the end of February. The modifications involve lowering part of the intake and raising the remainder to form a spilt level intake weir to the spillway. This will allow earlier and later flood flow into the spillway with only minor increase to peak flow.

Annual scheme maintenance work is approximately 40% complete, with longreach digger work nearing completion on the lower Awanui. Tarawhataroa grade control work is to start following completion of the lower Awanui work. Spraying is approximately 50% complete, with flood gate inspection, maintenance and replacement progressing.



Work on the Lower Awanui Stopbanks, fascines to protect toe scour and undercutting

Kaeo-Whangaroa

The tidy-up and completion works for the Stage 1 Kaeo flood scheme are mostly complete.

Annual maintenance works in the Whangaroa Streams catchments is underway with work identified for Taupo Bay, Totara North, Pupuke, Te Ngaere and Tauranga Bay.

Kerikeri-Waipapa

Tree removal along with the footpath and culvert realignment upstream of the SH-10 bridge have been completed, which will enable improved flood flow through the bridge.

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Resource consent applications have been lodged for the Kerikeri River Flood Scheme, which incorporates a diversion spillway and stopbanks downstream of the SH-10 bridge. Consent applications have been lodged with both NRC and FNDC. A designation for the works has also been sought from FNDC, which is the lead consenting authority for this application. Discussions have continued with affected land owners where NRC needs to acquire interests in land for the works. The formal land acquisition process will be commenced during early February.

Resource consent for a high level spillway downstream of Cobham Road Bridge has been lodged. This is designed to reduce flooding on 16 properties. Works on the spillway will be undertaken this season, pending timing of the resource consent approval.

A report on the prefeasibility investigation, design and cost estimation of a dam on the Kerikeri River is expected in February. The dam site is located upstream of the Waipapa industrial estate, with the design considering multipurpose use for water storage and flood detention.

Waitangi

Dead willows from the targeted drill and kill programme have been removed and burnt from the Waitangi River.

The resource consent to enable landowners to undertake stream bank erosion protection works between SH-1 and SH-10 on the Waiaruhe River was lodged.

Kawakawa - Taumarere

A meeting was held with NZTA, FNDC and NRC highlighting the SH-1 and route security issues in Northland with regards to flooding, and looking into opportunities where there may be synergies between the parties.

We are currently not progressing with Otiria Spillway and resource consenting works as previously planned. The results from the modelling showed limited benefit as previously reported to the EMC. However, we are re-inspecting the river channels and overland flow-paths for obstructions and plan to complete any work identified under the minor rivers programme.

In addition a follow-on meeting has been scheduled with FNDC engineering staff for March to discuss Otiria/Moerewa flooding and stormwater issues and to further consider other potential mitigation options.

Kaihu

The 2014-15 maintenance works programme is underway, the contract is approximately 50% complete. Staff along with the Liaison Committee have identified additional work including spraying and gravel extraction at the Kaihu Woods Road Bridge that will be added to this year's works programme.

The Kaihu River Management Liaison Committee meeting was held on 21 January 2015. Minutes are **attached**.

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Longreach cleaning of the Kaihu River

Ngunguru

Several landowners are proposing to work under NRC's resource consent for gravel extraction. The targeted willow drill and kill programme work is scheduled for mid-February.

Minor Rivers

The table below summarises the scheduled minor river works programme.

River	Description of Work Programmed for Current Season	Proposed Start Date/Status
	Clean Drains	May-15
Awanui - Bells Hill Drains	Reprofile cutoff drain	Completed
	Inclinometer read March 2015	Mar-15
Pawarenga Streams	Minor clean -up (vegetation/sediment removal)	Mar-15
Rotokakahi @ Pawarenga Bridge	Follow up maintenance for Groynes if required (contingency)	Hold
Mangonuiowae/Broadwood	Stream bank protection	Completed
Waihou/Rahiri-Rangiahua	Lower Berm Rahiri Settlement Rd	Feb-15
Panguru and Lower Waihou	Gravel management around bridges	Mar-15
Waitangi	Gravel management at Lily Pond	Mar-15
waitangi	Willow spraying/removal	Completed
	Channel maintenance	Mar-15
Waima	Lodge resource consent for gravel management	Completed
Awapokonui/Pakanae	Follow up spraying of Arundo Donax	Completed
Waimamaku	Gravel works at Wekaweka Road and Mason Dwelling	Completed
Otiria	Test pit investigations	Not to progress
Otina	Lodgement for spillway resource consent	Not to progress
Helena Bay	Tree / Gravel management	Mar-15
Naunauru	Gravel management resource consent	Completed
Ngungunu	Gravel extraction / Willow poison	Feb-15
Kawakawa	Tree felling at Tirihonga and willow drill and kill Waiomio	Feb-15
Otaika	Tree removal follow-up / poison	Feb-15
Mangaturoto	Tree poisoning / removal	Feb-15

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Rotokakahi River @ Pawarenga Bridge. Before groyne construction, clearly showing outside scour, toe erosion, bank failure and possible outflanking of the Bridge.



Rotokakahi River @ Pawarenga Bridge. After groyne construction, stable banks and building toe protection.
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ATTACHMENTS:

Attachment: Minutes of the Liaison Committee Meetings a)Kaihu River Liaison Committee, 21 January 2015

DRAFT Minutes of the meeting of the Kaihu River Liaison Committee held on Wednesday, 21 January 2015 at The Town Hall, Dargaville commencing at 10.00am

Present – Committee Members:

Cr John Bain	Committee Chair
Boyd Parker	Ratepayer representative Area 3 (Class F Catchment)
Des Subritzky	Te Houhanga Marae representative
Mike Lyford	Ratepayer representative Area 2 ((Class B Floodplain)
Sharon Murray	Te Roroa Iwi representative
lan Lupton	Ratepayer Representative Area 2 (Floodplain – Rotu Bottleneck to Dargaville)

In Attendance:

NRC Rivers Programme Manager
NRC Area Manager - Dargaville
Member of public
Ratepayer
Ratepayer
Ratepayer

Chairman Bain welcomed new committee members to their first meeting.

1. APOLOGIES

Bruce Howse	NRC Senior Programme Manager – Land/Rivers
MOVED:	Apologies be accepted.
Moved: Seconder:	Des Subritzky John Bain (c)
2. WORKSHOP NOTE	S OF PREVIOUS MEETING

Notes of previous workshop reviewed. All items will be carried forward to today as the Quorum has been met.

3. MATTERS ARISING FROM NOTES

None

4. BUDGET UPDATE

Mr Camuso spoke on the budget update, which has a surplus at this stage. It was suggested that the surplus be held, and the rates will not increase with the inflation as a means to reduce the surplus.

5. WORKS PROGRAMME UPDATE

Mr Treadgold reviewed the current works programme. The cleaning on the lower part of the river is completed. The digger is now working upstream of Parore Road. There is an issue with the Giant Reed being invasive. Much of this is being removed, however farmers are looking for alternatives to help stabilize the river banks. Research is needed to find suitable native plants to stabilise the river banks.

Action: NRC Biodiversity team to investigate and make some recommendations to the committee.

Various discussions ensured regarding cleaning methodology and particular sites on the river were discussed. Mr Subritzky presented some photos of Poplar or Willow branches being used to strengthen river banks which could be useful at some locations (willow or popular poles driven vertically into the river bank with willow slash tied-in horizontally behind the poles).

Mr Parker suggested Kykuyu being a good river bank protector in some situations.

As part of this years' Work Programme, the river at Kaihu Wood Road needs some maintenance. Shingle has built up on the inside of the river bend putting a lot of erosion energy onto the left true bank. Mrs Murray also expressed concern that the bridge's central piles were not very secure.

<u>MOVED</u> :	The shingle be moved to maintain the river channel near the centre of the river bed. Also that KDC and NZTA be contacted to discuss bridge stability and security of the central piles. Once engineers have recommended protection works for the bridge, a regular maintenance procedure should be put in place.
Moved:	Des Subritzky
Seconder:	Ian Lupton

MOVED: That Ricegrass spraying in the lower reaches of the river be approved, with a works budget of \$5,000.00.

Moved:	Des Subritzky
Seconder:	lan Lupton

6. GENERAL BUSINESS

BITTERNS

Mr Lupton raised the issue of Bitterns nesting on the Kaihu river bank near the north end of his farm. It was suggested that Mr Lupton communicate with DOC and Forest & Bird to find out how best to support the Bittern habitat and that river clearance in this area is not carried out this season.

NEXT MEETING: TBA

MEETING CLOSED: 11.10am

ISSUE: Natural Hazard Management Update

ID: A72	2349

To: Environmental Management Committee, 23 February 2015

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

Date: 30 January 2015

Report Type:	Normal operations	Information		Decision
Durnaca		Public service		Regulatory function
Purpose:	Legislative function	Annual\Long Term Plan	V	Other
Significance:	🗌 High	Moderate	$\mathbf{\nabla}$	Low

Executive Summary:

The purpose of this report is to provide an update on Council's Natural Hazards Programme with respect to river flooding and coastal erosion/flooding hazards.

Legal compliance and significance assessment:

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

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

Recommendation:

That the report Natural Hazard Management Update by Bruce Howse, Land/Rivers Senior Programme Manager and Toby Kay, Natural Hazards Advisor and dated 30 January 2015, be received.

Introduction

Natural hazard management aims to identify, assess and provide information, including mapping, on natural hazards and associated risks, along with the preparation and implementation of risk reduction plans (e.g. River Management Plans).

The Proposed Regional Policy Statement (PRPS) for Northland contains objectives, policies and methods that aim to minimise of the risk and impacts of natural hazards on people, communities, property, natural systems, infrastructure and our regional economy. More specifically, the PRPS contains a number of policies in relation to development and land use in flood and coastal hazard areas, and methods that require that district plans to incorporate new flood and coastal hazard maps into district plans. Council's natural hazard management programme is primarily responsible for the development and provision of the flood and coastal hazard maps.

The current priority focus of Council's natural hazard management programme is assessing river flooding and coastal hazards and the development of hazard maps; these hazards being the priority natural hazards addressed through the PRPS. An update on this work is provided in the following.

River Flood Hazard Mapping/Model Development

Significant effort has gone into developing river models. Council typically commissions the development of the models, which are developed in either Infoworks RS or DHI Mike software. The models provide a hydraulic representation of the river network, based on the catchment, floodplain (derived from LiDAR elevation data), river network (derived from channel cross sections) and design storm events (rainfall intensity/duration profiles representative of the catchment area). The models enable different return period flood events to be simulated, from which flood maps are able to be produced. In addition to the flood maps, the river models are also used to test the effectiveness of different flood risk reduction options as part of the Council River Management Programme.

River flood hazard mapping has been completed for the majority of priority catchments with flood hazard maps available online via GIS: <u>http://www.nrc.govt.nz/Your-Council/Council-Projects/Priority-Rivers/Flood-maps/</u>

Flood hazard maps for Awanui are due to be released in March 2015.

New river model development is planned for Waipu and Paparoa, following requests from District Councils to have better information to manage the risk. Further consideration is being considered to extending the Kaihu River model to ensure all of the Dargaville township is covered by the flood model.

Flood Level Surveys

Flood level surveys are undertaken following large flood events to collect accurate information on flood levels.

During 2014/15 flood level surveys were undertaken at:

- June 2014 Kaihu & Waimamaku
- July 2014 Kaeo, Kerikeri, Waitangi, Otiria/Moerewa & Hikurangi
- August 2014 Kerikeri

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This information is provided to developers/engineers upon request and is used for validating flood models. The validation of flood models is an important step in the model development process, as it enables the accuracy of the model to be assessed against real flood data. To achieve this rainfall data from an actual flood event is simulated in the model, and the resultant model flood level results are then compared to gauged river levels (from Councils hydrometric network) and flood level survey results to determine accuracy. This enables issues to be identified in the model, which can then be addressed and then further validation runs undertaken to recheck model accuracy.

Coastal Flood Hazard Assessment

A new coastal flood hazard project was initiated in January 2015. The project covers 61 coastal areas, including all areas of LIDAR survey adjoining the open coast, harbour and estuarine areas. Most of the 29 sites covered under the Coastal Erosion Hazard Assessment are also included under the Coastal Flood Hazard Assessment. The Coastal Flood Hazard Assessment will assess future storm surge risk in 50 and 100 years time (2065 and 2115 respectively), and incorporate an allowance for sea level rise based on the latest available information. The last release of coastal flood hazard zones was undertaken in 2005, but this only covered a limited number of settlements, and the mapping pre-dated LIDAR survey.

The new assessment will cover the major centres of Whangarei, and Dargaville, as well as expansive low lying rural areas which have not previously been assessed for coastal inundation risk, such as Ruawai, the Lower Wairoa, and the Lower Awanui The expected completion date for this project is August 2015.

Coastal Erosion Hazard Assessment

Coastal erosion hazard was assessed for 29 priority sites during 2014, with the final reports received in October 2014. The results from this assessment have been subject to a workshop with District Council staff during late 2014. It was previously intended that land owners with land affected by the revised coastal erosion hazard zone setback lines would be notified by letter of the results in late 2014, and at the same time the revised results be made available online via GIS. However, given the current coastal flood hazard assessment work, and noting that many of the properties that will be assessed as flood risk will also be assessed as erosion risk, it is considered more appropriate to wait until the coastal flood hazard assessments at that time. This is likely to be during late 2015.

Beach Profiling

Beach profile surveying continues to be undertaken at priority sites twice yearly, with the aim to monitor changes in shoreline position and beach slope. The survey data are used in the coastal erosion hazard assessment, and are provided to developers/engineers upon request.

Land Elevation Data (LiDAR)

Accurate land elevation data is required to assess and effectively map flood risk, and is also used in coastal erosion hazard zone assessments. These data are collected using aerial LiDAR survey.

Over the past ten years, Council has been actively acquiring LIDAR data for hazard mapping purposes. To date 1,400km² of land area has been surveyed, representing approximately 10% of the region's land area. A total of 74 settlements have been

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surveyed, including the major centres of Whangarei, Dargaville, Kaitaia, Kaikohe and Kerikeri.

LIDAR survey currently under contract but not yet delivered includes two areas in Kaipara District: Paparoa and the Wairoa River flood plain between Te Kopuru (on the Poutu Peninsula) and Hoanga.

Future acquisition of LIDAR for Natural Hazards mapping will continue to be driven by the need to map areas at risk of flooding. Survey of low lying coastal areas will continue to be a priority to define areas potentially at risk of future sea level rise. The Priority Rivers project included a ranking of river catchments by risk, and this will be used to prioritise capture of LIDAR survey. In some cases LIDAR survey will also need updating. The first survey undertaken in 2003 for the Awanui will soon require re-survey to update land surface.



ISSUE: Update on Northland TB free Committee

ID:	A723393				
То:	Environmental Management Committee, 23 February 2015				
From:	Don Mckenzie, Biosecurity Senior Programme Manager				
Date:	3 February 2015				
Report Type:	✓ Normal operations		Information	$\mathbf{\Lambda}$	Decision
Burnasa	Infrastructure		Public service		Regulatory function
Pulpose.	Legislative function		Annual\Long Term Plan	$\mathbf{\nabla}$	Other
Significance:	High	$\mathbf{\nabla}$	Moderate		Low

Executive Summary:

A Northland TB free committee meeting was held in Whangarei on 19 November 2014

Relevant issues are recorded below and the full minutes are attached to this item.

- The current National TB Strategy expires in July 2016 and plans for the review are underway- the timing and process for this has yet to be finalized.
- Researchers are investigating ways to measure the biodiversity benefits of pest control which TBfree carries out.
- The issue of "Go Slow" disease in working dogs was raised and a description of the affects discussed with the committee. Funding from Tb free NZ (OSPRI) to further the research was requested.
- A report was requested on the wild animal surveillance undertaken in Kaitaia and results since the TB breakdown. This report to be presented at the next meeting.
- A suspect "TB infected possum" from Kaitaia was autopsied and declared free of the disease by the TBFree veterinarian.

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, "Update on Northland TB free committee meeting" by Don Mckenzie, Biosecurity Senior Programme Manager and dated 3 June 2014 be received.
- 2. That the Committee note the information.

Northland TBfree Committee Meeting Wednesday 19 November 2014

IN ATTENDANCE

Members Neil MacMillan QSM (Chair) Matt Long Wayne Ward Marty Roest Alan Clarkson Winston Kake Grant Soich Denis Anderson Bruce Parris (Auckland) Advisors

Alan Gardiner Jenna Hoverd Sara Muti Don McKenzie Dave Clay

CARRIED

Minutes Jenna Hoverd

1 WELCOME & INTRODUCTION

The Chairman welcomed everyone to the meeting and introduced Bruce Parris to the group. Bruce is a member of the Auckland TBfree Committee and will be attending Northland TBfree Committee meetings to remain informed as the Auckland TBfree Committee has reduced to meeting once a year.

Seconded: Grant Soich

2 APOLOGIES

Apologies were received from Keith Kelly, Bill O'Connor, Jane Sinclair and Frank Pavitt.

Moved: Wayne Ward

3	MINUTES OF THE LAST MEETING	G
3		U

Minutes circulated with the agenda. Taken as read.

Moved	I: Alan Clarkson	Seconded:	Wayne Ward	CARRIED

4 MATTERS ARISING

Nil

CORRESPONDENCE

Nil

5

6 CHAIRMAN'S REPORT

Neil gave a verbal report at the meeting.

Neil attended the OSPRI meeting on 5 November. Points to note:

- TBfree funding review: Regional Councils may not collect levy on behalf of TBfree in the next financial year as the funding review is not yet complete. There is a proposal to put a levy on the export cattle industry.
- The National Pest Management Strategy is also due for review.
- NAIT update: As of 1 July 2015, Traka and Management tags will no longer be available when ordering new tags. Birth tags and replacement tags will be available instead. All capital stock must be tagged by 1 July 2015.
- Researchers are investigating ways to measure the biodiversity benefits of pest control which TBfree carries out. Researchers are also working on epidemiological modelling.
- The decision has been made not to allow a '2 in 1' tag under the NAIT Act.
- Neil explained the TB control obstacles that the UK experience in relation to politics and badger populations.

Moved: Neil MacMillian QSM

Seconded: Grant Soich

CARRIED

7 ADVISORS REPORTS

Area Disease Manager – Jane Sinclair

Taken as read.

Sara spoke to this report.

Additional points were:

- Special Testing Areas have been approved by the Board to be removed 1 March 2015 in the Northland region.
- There is currently one infected deer herd in New Zealand.

Don Mackenzie requested a report on the wild animal surveillance and results since the breakdown in Kaitaia. Sara agreed to ask Jane for this report to be presented at the next meeting.

Don Mackenzie added that the possum which had been handed to the Northland Regional Council as 'suspicious of TB' was clear of the disease. Don asked that in the next TB Action a note be included that any 'suspected of TB' animals can be taken to the Northland Regional Council.

Regional Report – Jenna Hoverd

Taken as read.

Jenna added the Annual Chairs Meeting will be held on the 14 and 15 April 2015. Venue is to be confirmed.

Vector Management – Phil Dawson

Taken as read.

NAIT – Dan Schofield

Taken as read

Sara spoke to this report.

Additional points were:

- The NAIT and On Farm Services team is currently undergoing a restructure. The North Island and South Island Compliance roles are being merged into a National Compliance Manager role and two other positions are being created. These are a Tag Specialist role and a Key Relationships Manager role.
- The contact centre staff are now trained across both programmes.

Compliance – Bill O'Connor

Taken as read.

• Neil MacMillan QSM commented that sale yard compliance was impressive in the region.

AsureQuality – Dave Clay

Dave gave a verbal report.

Main points:

- Dave touched on Health and Safety as mentioned in the Compliance Report. He explained that AsureQuality requires testers to do an assessment of the testing facilities before carrying out the test. Working alone has been identified as a risk and is managed. Quad bikes are also a Health and Safety risk and testers who are expected to 'double' on farmers' bikes to reach the yards are not permitted to do so.
- AsureQuality have a management plan in place for the overdue tests reported on in the Compliance Report. They plan to have all of the '90 days and over' overdue tests carried out by Christmas and at 28 October 2014, all of the '60 days and over' overdue tests had been scheduled to be completed by Christmas. These goals depend largely on farmers being able to test on scheduled dates.
- Cattle testing is the priority in Northland. Deer testing is secondary at this point. The next deer testing window is in March 2015 and the cost of the accreditation was noted. It was thought there are approximately 29 deer farms in the Northland Region.

Motion: To write a letter on behalf of the committee to Stu Hutchings that the costs incurred by the TB testing organisations for no shows etc. be passed on to landowners.

Vloved: Neil MacMillan QSM Seconde	d: Wayne Ward	CARRIED
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Alan Gardiner – Department of Conservation

Alan gave a verbal report.

He reported:

- His team are currently carrying out perimeter fence inspections.
- Two reported escape events in 2014.
- DOC are involved in the Awanui pig surveys.

Northland Regional Council – Don McKenzie

Don gave a verbal report about the Northland Regional Councils plans for the 2015-16 year.

8 MEMBERS ACTIVITIES

Nil

9 GENERAL BUSINESS

Alan Clarkson spoke about the research being done on a condition which has been named 'go-slow'. This is a condition hunting dogs contract from pigs and it causes them to become unnaturally fatigued within 20-30 minutes and can be fatal. The condition was first recognized 15 to 20 years ago in Northland but was reported again until the last 12 months.

- Cases have mainly been in Northland but cases in the King Country, Gisborne, Wairarapa and Christchuch have also been reported.
- A hunter fed his dogs a wild pork carcass and put the remains in the freezer. His dogs got 'goslow' and some cases were fatal. One year later, with a new pack of dogs, the hunter got the carcass from the freezer, boiled it for at least three hours and fed it to his dogs. Once again, this pack showed symptoms of 'go-slow'. This case shows that the condition is unlikely to be a living organism as it would not have survived the cooking or freezing processes.
- Two hunters may have also contracted the condition as their blood profiles were similar to affected dogs. It is suspected this was from eating wild pork.
- On post-mortem of affected dogs, brodificoum residue was found in one dog but has not been detected in any others. Brodificoum is known to reside in the body for up to 15 months.
- Organic phosphate and chloride test results have been inconsistent to date.
- A Massey University student is doing a PhD on muscle myopathies and is looking for a cause of this problem. She is looking to see if any of the pesticides or their metabolites may be implicated as many pig hunters are blaming them. It is in the best interests of pest control operators to ascertain a likely cause. She has been seeking funding to look into toxin breakdown in the environment and if this could be related to the 'go-slow' condition. The Northland Regional Council is applying for \$15000 from the environmental research fund for this study. Any grant from OSPRI would be greatly appreciated. Toxin testing costs \$400-600 for each test.
- Dr Jenni Petersen of Norvet Services in Okaihau, Bay of Islands is doing a lot of the field work for this study and is to give a presentation of the disease to the EMC of the Northland Regional Council on the morning of Monday 8 December. The invite has been extended to OSPRI staff.

At the next meeting the members of the committee would like to have a NAIT focus. Jenna will try to get a Tru-Test representative to come along to the meeting to explain how the technology they offer ties into the NAIT system.

10	ACTION POINTS

- **Sara** Request a report from Jane about the wildlife surveillance in the Northland region since the Kaitaia breakdown.
- Jenna In the next newsletter include the guidelines of becoming an accredited deer tester.
- **Neil** To send a letter on behalf of the committee regarding recuperation of costs for TB testing be passed on to landowners when scheduled times are not met.

The meeting closed at 12.10pm.

ISSUE: Biosecurity Responses

To: Environmental Management Committee, 23 February 2015

From: Don Mckenzie, Biosecurity Senior Programme Manager

Date: 2 February 2015

Report Type:	✓ Normal operations		Information	V	Decision
Durnacai			Public service		Regulatory function
Purpose.	Legislative function		Annual\Long Term Plan	V	Other
Significance:	🔲 High	V	Moderate		Low

Kai iwi lakes

Animal pest control has continued and the traps provided to the camp manager have resulted in more than 50 wild cats being caught over the last two months and over 100 possums. As predicted, wild pigs are in very low numbers following last year's intensive hunting programme and work will continue to remove any remaining survivors. Removal of wilding pines and an evaluation of herbicide control methods is also underway.

Pest fish control work is underway and the fish trap has caught six feral goldfish in the past month, including one pregnant female. Now that the water temperature has peaked, the fish are more active in the dams and are more likely to be caught within the trap.

In accordance with the Kai Iwi Lakes Pest Control programme, permanent groundwater bores were installed around Lakes Kai Iwi and Waikare as part of the ongoing nitrogen study to determine if the invasive Sydney Golden wattle (*Acacia longifolia*) is contributing unwanted nitrogen to the lakes. Second year measurements are also being taken as part of the Acacia regeneration study around the lakes.

Kauri dieback

Work has focused on installing cleaning stations at key visitor locations and staff have met with WDC parks management to initiate upgrading the current signage, and installing cleaning stations in Whangarei district council reserves at Mair Park, A.H. Reed and Mt. Manaia car park. Updated Kauri Dieback signs warning visitors of the risk of spreading the disease have also been placed at Mt. Tiger where the Northland Regional Council owns a pine plantation with pockets of native forest containing kauri.

Staff have also met with Matakohe museum staff to initiate a Kauri Dieback partnership, this has led to vehicle cleaning kits being produced for distribution at the museum and plans to install larger cleaning systems at the museum.

Kauri suspected to have Kauri Dieback disease were inspected in Tangowahine, however the investigation concluded it was most probably stock damage and unless root trampling can be prevented there is little hope for kauri faced with this kind of land

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management practice. Kauri Dieback soil sampling was also undertaken in Pukenui, Frank Holman Reserve in Mair Park and QEII properties in Turiwiri and Awarua.

Mediterranean fanworm

The owners of Marsden Cove Marina have been directed (by a notice issued under the Biosecurity Act) to reduce fanworm numbers within the marina. This direction comes after lengthy discussion with the affected parties and an increasing population of fanworm which is being left uncontrolled. Commercial divers undertook fanworm removal in stage 1 of Marsden Cove around the vessel berths during December and January. They found a significant increase in fanworm numbers with over 5800 recovered during ten days of diving and the seafloor has yet to be checked.

If left unmanaged it is certain that fanworm will spread beyond the marina infecting all other structures in Whāngārei harbour. Vessels using the marina need to be mindful of the risks of infection and ensure their hulls are regularly checked and have recent antifoul to avoid fanworm colonising their hulls.

Divers also completed fanworm removal at Port Nikau to check the areas where a small number of residual fanworm were located on the last dive round in October. Although numbers increased slightly in a portion of the structure numbers overall were down and another round of diving will occur within the next few months. The density at all sites in Whāngārei harbour other than Marsden cove is now very low due to diver removals and regular monitoring will be undertaken to update any future population growth.

Summer hull checks

The annual summer hull check campaign started in early November 2014 and approximately 300 hulls have been surveyed for Mediterranean fanworm, of the seven vessels infected, one was found in Whangaroa harbour, another in Whangarei and the remaining five in the Bay of Islands, all of which had originated from Auckland. So far seven notices of direction to clean vessel hulls have been issued during the summer survey. Compliance with council rules has been encouraging and awareness of the marine pest rules is high. All owners have immediately slipped their vessel and cleaned their hull upon the directive being issued.

The hull checks will be completed by mid-February 2015 and vessels in all east coast harbours will have been surveyed.

Brown marmorated stink bug

MPI are raising awareness around this high risk pest and warning that there is a strong likelihood of it establishing in New Zealand within the next twelve months.

The stink bug is a native of china, Japan, Korea and Taiwan and has recently become invasive in the United States where it has established in 40 states. It overwinters as an adult preferring to occupy houses and indoor environments causing widespread public nuisance and there damage to fruit trees, field crops and forest trees can be significant. The insect is also a vector of phytoplasma disease.

Vectors for the bug include ships arriving from the United States, imported used cars and other equipment from America, Japan and other parts of Asia or in luggage luggage carried by passengers from these destinations.

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Controls for this pest involve the use of strong insecticides and biosecurity staff are liaising with MPI to understand how the regional council can improve the chances of early detection with the hope that arrival and establishment of this pest in Northland is delayed for as long as possible. Further information on the brown marmorated stink bug can be found at

http://www.biosecurity.govt.nz/pests/brown-marmorated-stink-bug

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, "Biosecurity responses" by Don Mckenzie, Biosecurity Senior Programme Manager and dated 2 February 2015 be received.
- 2. That the Committee note the information.

ISSUE: Environmental Monitoring for the period 1 November 2014 – 31 January 2015

ID: A723142

To: Environmental Management Committee Meeting, 23 February 2015

From: Colin Dall, Consents/Monitoring Manager

Date: 3 February 2015

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

Executive Summary:

The purpose of this report is to provide an update on council's monitoring and compliance work for the period 1 November 2014 - 31 January 2015. It concludes with the recommendation that the report be received.

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

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

Legal Compliance and Significance Assessment:

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

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

Recommendation:

 That the Environmental Monitoring report for the period 1 November 2014 – 31 January 2015 from Colin Dall, Consents/Monitoring Manager, dated 3 February 2015 be received.





ABBRE	EVIATIONS I	KEY						Att	tachment 2	t to Item 08 Page 4 of 15
	Whāngārei	District Council	FNDC	Far North Distric	ct Council	KDC Kai	para District Council	DOC Depar	tment of Con	servation
NPC	Northland F	ort Corporation	NZRC	NZ Refining Cor	mpany N	Noi Noi	thland Regional Council	FNHL Far No	orth Holdings	Ltd
СН	Consent Hc	older	STS	Sewage Treatm	ent System F	Poi	nt of Discharge	PA Permi	tted Activity	
ESCP	Erosion and Control Plar	d Sediment n	RAQP	Regional Air Qu	ality Plan	Regentiated Kee	gional Water and Soil Plar	for Northland		
RC	Resource C	Consent	CMA	Coastal Marine	Area F	Rei Rei	gional Coastal Plan for No	rthland		
DISCH/ WATER COAST	ARGES TO , ? TAKES – ^N .al activit	AIR – No significa Vo significant non- TIES	nt non-cc compliar	ompliant events v nt events were re	were recorded d	uring the peric	ud 1 November 2014 – 3 wember 2014 – 31 Janu	1 January 2015. ary 2015.		
	Date	Consent Reference No.		Name	Desci	ription	ž	otes	Envi	ironmental impact
1/11	11/2014	REG.007161.01	Resto	Mangawhai oration Society	Dredging of establishme Mangawh	channel and nt of dyke @ ai Harbour	 No self-monitoring No update in regs period provided. Formal enforceme 	g data submitted ird to the dredgir ent action taken.		nwown
DISCH/	ARGES TO	WATER OR LANI	0							
	Date	Consent Reference No.		Name	Desci	ription	Ŭ	otes	Envi	ironmental impact
27/1	11/2014	REG.004756.01	Poul	tō Papakainga Trust	Discharge trea sewage to land Po	ated communa I @ Poutō Roa utō	 d, Communal sew; over a number of Sewage dischart 	age system failu of years. ge to land.	nre M	oderate

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Formal enforcement action taken.

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Sewage discharge to land.

	Environmental impact	Significant	uwouyuN	Moderate	Moderate	Significant	Moderate	Unknown	Significant	Moderate	Significant	Significant
	Notes	 The water quality test results were outside RC limits. 	 Dead stock, uncovered, in and close to water. 	 The water quality test results were outside RC limits. 	 Untreated effluent from an underpass discharged to land and to water. 	 The water quality test results were outside RC limits. 	 Effluent discharged through the pond embankments to water. 	 Untreated effluent from a sump and a standoff area discharged to land. 	 Untreated effluent from a sump, standoff pad and wintering barn discharged to water. 	 Effluent discharged to water when conditions were suitable for land application. 	 Effluent from an irrigator caused excessive ponding and overland flow. 	 Untreated effluent from a sump discharged to land and to water. Uncovered offal pit within 50m of water.
	Description	FDE 8420 at Marlborough Road, Tutāmoe	FDE 8401 at State Highway 12, Aranga	FDE 8574 at Pukehuia Road, Pukehuia	FDE 8246 at Avoca Road, Waihue	FDE 8259 at Middleton Road, Waihue	FDE 8243 at Waihue Road, Dargaville	FDE 8275 at Waimata Road, Waihue	FDE 8326 at Opanake Road, Dargaville	FDE 8330 at Frith Road, Mamaranui	FDE 3506 at Mangakahia Road, Poroti	FDE 3518 at Wharekohe Road, Poroti
ES – CONSENTED	Name	Marshall Dairy Enterprises Ltd	Waikarakia Trust	Beejay Stud Ltd	Rigside Farms Ltd	Munn D R	Waimata Farm Ltd	Russek Ltd	Ross & Elizabeth Pocklington Family Trust	West Coast Dairy Investments Ltd	Gentil M C & S L	White K R & S E
LUENT DISCHARGE	Consent Reference No.	REG.013057.01	REG.012199.01	REG.014340.01	REG.011612.01	REG.008835.01	REG.010892.01	REG.011376.01	REG.012240.01	REG.009475.01	REG.011444.01	REG.010501.01
FARM DAIRY EFF	Date	17/10/2014	20/10/2014	21/10/2014	21/10/2014	21/10/2014	21/10/2014	23/10/2014	23/10/2014	23/10/2014	24/10/2014	24/10/2014

Attachment 2 to Item 08 Page 5 of 15

nent 2 to Item 08 Page 6 of 15	Environmental impact	Significant	Significant	Significant	Moderate	Significant	Moderate	Significant	Moderate	Moderate	Significant	Unknown	Moderate
Attachn	Notes	 Silage waste had been deliberately discharged to water. 	 Untreated effluent from a sump discharged to water. The water quality test results were outside RC limits. 	 The water quality test results were outside RC limits. 	 The water quality test results were outside RC limits. 	• The water quality test results were outside RC limits.	 The water quality test results were outside RC limits. 	 The water quality test results were outside RC limits. 	 The water quality test results were outside RC limits. 	 The water quality test results were outside RC limits. 	 Untreated effluent from an entry/exit race discharged to water. 	 Effluent discharged through a pond embankment to water. 	 Effluent from the ponds discharged to water when conditions were suitable for land application.
	Description	FDE 8488 at Tangowahine Valley Road, Avoca	FDE 8490 at Tangowahine Valley Road, Tangowahine	FDE 8555 at State Highway 14, Tangiteroria	FDE 8565 at Paradise Road, Tangiteroria	FDE 2044 at Ody Road, Whāngārei Heads	FDE 2025 at Kerr Road, Whāngārei Heads	FDE 2734 at State Highway 1, Mata	FDE 8606 at Pukehuia Road, Tangiteroria	FDE 620 at Mangamuka Road, Mangamuka	FDE 689 at Motukiore Road, Hōreke	FDE 853 at Picadilly Road, Kaikohe	FDE 820 at Ninihi Road, Kaikohe
	Name	Tangowahine Land Trust	Sayles Family Trust	Beatty M A & J D	Riverglen Farms Ltd (McKay C J & D C)	Jagger Family Trust T/A Manaia View Farms Ltd	Wilson A A & J C	D J & F J Lynch Ltd	Drinnan S R & E R P	River Round Farms Ltd	Lee B R & S C	M J & C M Pinny Ltd	Luond K D & J M Trust
	Consent Reference No.	REG.012840.01	REG.023578.01	REG.036752.01	REG.008756.01	REG.013107.01	REG.011766.01	REG.009718.01	REG.021655.01	REG.012416.01	REG.009983.01	REG.037071.01	REG.011372.01
	Date	29/10/2014	29/10/2014	30/10/2014	30/10/2014	03/11/2014	03/11/2014	04/11/2014	04/11/2014	05/11/2014	06/11/2014	07/11/2014	11/11/2014

1ent 2 to Item 08 Page 7 of 15	Environmental impact	Moderate	Unknown	Significant	Unknown	Moderate	Significant	Significant	Unknown	Moderate	Moderate	Moderate	Significant
Attachn	Notes	 Untreated effluent discharged via a stormwater bypass to water. 	 Untreated effluent from a standing area was likely to discharge to water. 	 The water quality test results were outside RC limits. 	 Maintenance was inadequate. Effluent from an irrigator had discharged directly to water. 	 The water quality test results were outside RC limits. 	 Effluent from a pump, irrigator and an open pipe caused excessive ponding and overland flow, and discharged to water. 	 The water quality test results were outside RC limits. 	 Effluent was likely to discharge to water via the stormwater bypass. 	 Treated effluent discharged to water when conditions were suitable for land application. 	 Cow numbers had increased by 20%. The water quality test results were outside RC limits. 	 The water quality test results were outside RC limits. 	Untreated effluent from a feedpad
	Description	FDE 476 at State Highway 10, Waipapa	FDE 2114 at Hoban Road, Whareora	FDE 457 at Martin Road, Kaeo	FDE 494 at Waiare Road, Kerikeri	FDE 910 at Wakelins Road, Puketona	FDE 7599 at Mason Road, Maromaku	FDE 7623 at Maromaku Road, Maromaku	FDE 7604 at Tipene Road, Mōtatau	FDE 867 at State Highway 12, Kaikohe	FDE 912 at McIntyre Road, Oromahoe	FDE 738 at Gorge Road, Waiotemarama	FDE 775 at State Highway 12,
	Name	Perrin I & K	Ngahura Mara Ltd	Orcada (2011) Ltd	Koropewa Farm Ltd	Te Ngaio Farms Ltd	Campbell Farms Maromaku Limited	Campbell Farms Maromaku Limited	Tipene W	Grazing North Limited	Simpson A W & D M	Parlane J R & K L A	Fife K J & V A
	Consent Reference No.	REG.002354.01	REG.009309.01	REG.009614.01	REG.007256.01	REG.002067.01	REG.011774.01	REG.011773.01	REG.010772.01	REG.010466.01	REG.008937.01	REG.009399.01	REG.012465.01
	Date	11/11/2014	11/11/2014	11/11/2014	12/11/2014	12/11/2014	13/11/2014	13/11/2014	13/11/2014	17/11/2014	18/11/2014	19/11/2014	19/11/2014

ttachment 2 to Item 08 Page 8 of 15	Environmental impact		re Significant	Moderate	Moderate	ed to Moderate able	ed to Moderate able	Significant	ged to Significant	significant	significant	re Significant	Unknown
Α	Notes	discharged to water.	The water quality test results were outside RC limits.	 Effluent discharged over a pond embankment to land. The water quality test results we outside RC limits. 	 The water quality test results were outside RC limits. 	 Effluent from the ponds discharge water when conditions were suits for land application. 	 Effluent from the ponds discharge water when conditions were suits for land application. 	 Untreated effluent from a race discharged to water. Effluent leaked through a pond embankment to water. 	 Effluent from an irrigator dischar, water. 	 The water quality test results were outside RC limits. 	The water quality test results were outside RC limits.	The water quality test results were outside RC limits.	Effluent from an irrigator caused
	Description	Whirinaki	FDE 729 at State Highway 12, Waimamaku	FDE 814 at Renwick Road, Otaua	FDE 836 at Rakauwahia Road, Kaikohe	FDE 7490 at Haile Road, Towai	FDE 7455 at Paiaka Road, Towai	FDE 7489 at Wallace Road, Paiaka	FDE 7499 at Rusk Road, Hikurangi	FDE 7429 at Paiaka Road, Hukerenui	FDE 7086 at Otakiarangi Road, Riponui	FDE 7003 at Otakairangi Road, Otakairangi	FDE 2433 at Tavinor Road,
	Name		Hook J G & C A	Rogers & Rogers Ltd	Haynes Family Trust	Coates J & H Ltd	Glynderm Farms Ltd	Philip Bayly Family Trust	Glenhope Farms Ltd	The Philip Bayly Family Trust	King D B	Ringrose L J	Jackson K M & A J
	Consent Reference No.		REG.009173.01	REG.012179.01	REG.012349.01	REG.008852.01	REG.009236.01	REG.010489.01	REG.011711.01	REG.011239.01	REG.001888.01	REG.009487.01	REG.009382.01
	Date		19/11/2014	20/11/2014	20/11/2014	24/11/2014	25/11/2014	25/11/2014	25/11/2014	25/11/2014	27/11/2014	27/11/2014	28/11/2014

				Attachn	1601 2 to Item 08 Page 9 of 15
Date	Consent Reference No.	Name	Description	Notes	Environmental impact
			Otaika Valley	excessive ponding and overland flow.	
28/11/2014	REG.008786.01	Olsen R C	FDE 7052 at Heaton Road, Hikurangi	 The water quality test results were outside RC limits. 	Significant
18/12/2014	REG.009721.01	SOS Co Limited	FDE 3011 at Kokopu Road, Kara	 Silage leachate discharged to roadside drains. 	Unknown
28/01/2015	REG.002512.01	Lion Heights Farms Ltd	FDE 463 at Matauri Bay Road, Kaeo	 The water quality tests results were outside RC limits. 	Moderate

	Environmental impact	Significant	Significant	Significant		Minor	Unknown	Moderate	Unknown
	Notes	 Effluent from two separate ponds discharged through and over the embankments to water. 	 Untreated effluent had discharged via a stormwater bypass to water. 	• Effluent discharged to water without RC.	 Effluent from an irrigator caused excessive overland flow to water. 	 Effluent discharged to water without RC. 	 Effluent discharged through a pond embankment to water. 	 Effluent from an irrigator caused excessive ponding and overland flow. 	 Effluent discharged to water without RC.
	Description	FDE 8662 at Bee Bush Road, Dargaville	FDE 8638 at Mititai Road, Okahu	FDE 8635 at Neck Road, Okahu		FDE 8203 at Baylys Coast Road, Mangatara	FDE 3821 at State Highway 14, Whāngārei	FDE 7023 at Apotu Road, Hikurangi	FDE 8582 at Pukehuia Road, Dargaville
ES - NON-CONSENTED	Name	Ridgeview Farms Ltd	Clear Ridge Station Ltd	Mathews E A & C A		Welsh M & K	Johnstone L	Bleakley R A Holdings Ltd	Burgess L K
LUENT DISCHARGE	Consent Reference No.	REG.804118.01	REG.864683.01	REG.801008.01		REG.800886.01	REG.804326.01	REG.850172.01	REG.800988.01
FARM DAIRY EFF	Date	30/09/2014	30/09/2014	21/10/2014		28/10/2014	30/10/2014	03/11/2014	04/11/2014

nent 2 to Item 08 Page 10 of 15	Environmental impact	Significant	Moderate	Unknown	Unknown	Moderate	uwouyuN	Unknown	uwouyuN	Significant	Unknown	Significant	uwouyuN	uwouyuN
Attachr	Notes	 Effluent discharged to water without RC. 	 Effluent from an irrigator discharged to water. 	 The required storage volume upgrade had not been completed. 	 Effluent discharged to water without RC. 	 Untreated effluent from a race discharged to water. 	 Contingency storage was inadequate. 	 Contingency storage was inadequate. 	 Effluent discharged over a pond embankment to land and to water. 	 Untreated effluent from a sump discharged to water. 	 Effluent discharged to water without RC. 	 Effluent discharged to water without RC. 	 There was a large gap in the pond embankment. 	 Effluent leaked through a pond embankment to water.
	Description	FDE 8611 at Pukehuia Road, Pukehuia	FDE 485 at Stanners Road, Kapiro	FDE 505 at State Highway 10, Kerikeri	FDE 825 at Punakitere Road, Kaikohe	FDE 994 at Waitaheke Road, Õhaeawai	FDE 911 at Oromahoe Road, Oromahoe	FDE 737 at State Highway 12, Waimamaku	FDE 712 at State Highway 12, Waimamaku	FDE 802 at Puha Road, Waimā	FDE 833 at Rakauwahia Road, Kaikohe	FDE 7409 at Crows Nest Road, Hukerenui	FDE 7099 at Hukerenui Road, Hikurangi	FDE 8392 at State Highway 12, Aranga
	Name	Thornton M D & K R	Landcorp Kapiro	Bridgethorne Holdings Ltd	Byers Farms Ltd	Harvey J G & C M	Stanners G T	T W Trog Ltd	Begbie J	Pou A S J & Paki L M	Rood B C N	Beulah Farm Ltd	Richards P W	Fox G O & J
	Consent Reference No.	REG.800997.01	REG.700048.01	REG.800126.01	REG.804393.01	REG.800239.01	REG.700043.01	REG.800181.01	REG.804640.01	REG.800192.01	REG.800203.01	REG.800777.01	REG.800736.01	REG.800934.01
	Date	04/11/2014	11/11/2014	11/11/2014	11/11/2014	17/11/2014	18/11/2014	19/11/2014	19/11/2014	20/11/2014	20/11/2014	24/11/2014	26/11/2014	27/11/2014

ENVIRONMENTAL INCIDENTS

Environmental Management Committee 23 February 2015

nent 2 to Item 08 Page 11 of 15	Environmental Impact	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Attachn	Notes	Incident investigation confirmed dust nuisance beyond the property boundary. Warning letters sent to the property occupier and lime application contractor advising rules on burning under the RAQP.	Odour is causing concern when there is high usage of the facilities on the wharf and the boat pump-out facility is being used. Odour diaries are being kept by affected parties.	Incident investigation confirmed open burning at an industrial premise. Warning letter sent to the company responsible advising rules on burning under the RAQP.	Incident investigation confirmed open burning of polystyrene. Warning letter sent to the person responsible advising rules on burning under the RAQP.	Raw sewage up to 50 cubic metres discharged to the Hātea River following manual error of operators. Appropriate procedures have been instigated to avoid future incidents of this nature.	Sewage spills in multiple locations at Whāngārei due to high rainfall event.	Sample analysis confirmed concentrations of planktonic cyanobacteria (blue green algae) at the outlet of Lake Õmāpere and on Utakura River. FNDC and NDHB requested to erect appropriate signage. Cell counts and toxin levels are now back to normal.	Site investigation confirmed open burning of prohibited items.
	Description	Agricultural lime drift @ SH10, Waipapa	Sewage odour @ Paihia Wharf	Smoke nuisance @ Kioreroa Rd, Whāngārei	Burning polystyrene @ Pukeatua Rd, • Maungatapere	Sewage spill @ Whareora Rd, Whāngārei •	Sewage spills @ Whāngārei City (various)	Algae bloom @ Lake Ōmāpere, Ōkaihau •	Smoke nuisance @ Paranui Valley Rd, • Whāngārei
	Reference No.	REQ.575146	REQ.575212	REQ.575282	REQ.575305	REQ.575433	REQ.575625	REQ.575642	REQ.575741
	Date	3/11/2014	9/11/2014	18/11/2014	20/11/2014	3/12/2014	17/12/2014	29/12/2014	29/12/2014

			Attachm	ent 2 to Item 08 Page 12 of 15
			 Formal enforcement action taken. 	
5/01/2015	REQ.575672	Odour nuisance @ Õpua Marina	 Odour was causing concern when the boat pump-out facility had been used. Water needs to be flushed through the line daily to stop build-ups and odour problems. This has now been rectified. 	Moderate
22/01/2015	REQ.575891	Diesel spill @ Puketona Rd, Puketona	 Large diesel spill due to vandalism of machinery. Spill was contained on land and contaminated material removed to approved disposal facility. 	Moderate

LAND USE ACTIVITIES

Environmental impact	Moderate
Notes	 Discharge of diesel to land. No stabilisation on area of "Rhine Road". Unconsented quarry activity. Third significant non-compliance rating at site. Formal enforcement action taken.
Description	Gammons Forest @ Gammons Road, Mangakahia (Otaenga, Gammons, Waipunga & Galilee blocks)
Name	Hancock Forest Management (NZ) Limited - Gammons Forest
Consent Reference No.	REG.009529.01
Date	10/12/2014

SOE MONITORING – AIR, LAKES AND WATER

Notes	 Continuous ambient air monitoring results for PM₁₀ at Bream Bay College, Ruakaka, indicated compliance with the National Environmental Standard during October, November and December 2014. 	 Continuous ambient air monitoring results for PM₁₀ and carbon monoxide at the Robert Street site, Whāngārei, indicated compliance with the National Environmental Standard during October, November and December 2014. Three monthly calibration and annual servicing on particulate,
Project	Marsden Point Airshed – Ambient Air Monitoring.	Whāngārei Airshed — Ambient Air Monitoring
Date	5/11/2014	10/11/2014
Classification	Air Quality	

Environmental Management Committee 23 February 2015

Attachment 2 to Item 08 Page 13 of 15	sulphur dioxide and carbon monoxide monitors at Robert Street was carried out.	 Routine periphyton monitoring of RWQMN sites and priority catchments (40 sites in total). 	Northland Water – Waitangi Routine water quality monitoring of the Mania, Pekepeka, tchment Investigation Waiaruhe, Waipapa, Watercress and Waitangi Rivers.	Northland Water – Mangere Routine water quality monitoring of six sites along the Mangere tchment Investigation River and Mangapiu and Mangere Streams.	orthland Water – Whāngārei • Routine water quality monitoring of the Hātea, Mangakino, ur catchment investigation Waitaua, Waiarohia, Raumanga, Puwera and Otaika Rivers.	thland Water – Doubtless Bay Routine water quality monitoring of 10 sites along the Oruaiti, Kenana, Oruru and Peria Rivers and Stony, Paranui, Parapara and Aurere Streams.	ra Harbour Water Quality • Eight water quality sites sampled in the Kaipara Harbour. • Results Pending.	 Programme Sixteen water quality sites sampled in the Bay of Islands. Programme Results pending. 	 ārei Harbour Water Quality Ten water quality sites sampled in the Whāngārei Harbour. Mme – Harbour Boat Run Results pending. 	tiri – Nitrate Investigation Routine groundwater monitoring at Whatitiri.	ramea – Nitrate Investigation	vhai – Nitrate Investigation Routine groundwater monitoring at Mangawhai.	National Routine groundwater monitoring for IGNS programme. Anonitoring Project - IGNS	 Routine groundwater sampling for pesticides. 	sr Investigation – Taipā Aquifer ● Routine groundwater monitoring at Taipā.	ater Investination – Russell 🍡 Douting around the monitoring of Duron!!
		Perip	Waiora Nortl Catchr	Waiora Nortl Catchr	Waiora North Harbour ca	Waiora Northla Catchr	Kaipara H I	Kerikeri C I	Whāngārei Programm	Whatitiri –	Maungakaram	Mangawhai	Groundwater ¹	Groundwa	Groundwater In	Groundwater
		21/11/2014	4/11/2014	25/11/2014	25/11/2014	9/12/2014	5/11/2014	13/11/2014	13/11/2014	22/09/2014	22/09/2014	21/10/2014	10/12/2014	16/12/2014	18/12/2014	22/12/2014
		Biological Monitoring	Catchment Investigation				Coastal - Water			Groundwater		1	<u> </u>			

	23/12/2014	Groundwater Investigation – Ruāwai Aquifer	 Routine groundwater monitoring at Ruāwai.
Lake Water Quality Monitoring Network (LWQMN)	11/11/2014	LWQMN – Aupõuri Lakes	 Routine water quality monitoring of Lakes Carrot, Heather, Ngatu Ngakapua North, Ngakapua South, Rotoroa, Rotokawau, Waiparera, Waihopop, Waipara, Morehurehu, Te Kahika and Waihoropita. Water clarity in Lake Te Kahika was poor.
	25/11/2014	LWQMN – Poutō Lakes	 Routine water quality monitoring of Lakes Mokeno, Karaka, Wainui, Kahuparere, Kanono, Rotokawau, Humuhumu, Swan and Rototuna.
	11/12/2014	LWQMN – Kai Iwi Lakes	 Routine water quality monitoring of Lakes Kai Iwi, Taharoa and Waikare.
River Water Quality Monitoring	15/10/2014	RWQMN – Eastern	 Routine monthly water quality monitoring of Waitangi, Waipapa, Kerikeri, Waiharakeke, Waiotu, Ngunguru, Hātea and Whakapara Rivers and Mangahahuru Stream.
Network (RWQMN)	22/10/2014	RWQMN – Northern	 Routine monthly water quality monitoring of the Mangamuku, Awanui, Oruru and Kaeo Rivers.
	19/11/2014	RWQMN – Western	 Routine monthly water quality monitoring of the Kaihu, Waipoua, Waimamaku, Punakitere, Utakura, Mangakahia and Opouteke Rivers.
	19/11/2014	RWQMN – Southern	 Routine monthly water quality monitoring of the Ruakaka, Hakaru Manganui, Waipao, Waiarohia and Otaika Rivers, including two sites on the Mangere River.
Summer Recreational	24/11/2014	Recreational Bathing Programme – Week 1	 A total of 47 coastal and 13 freshwater sites sampled. One coastal site had unsuitable for swimming results.
Datming water Quality Surveys	01/12/2014	Recreational Bathing Programme – Week 2	 A total of 47 coastal and 13 freshwater sites sampled. One freshwater site had unsuitable for swimming results.
	08/12/2014	Recreational Bathing Programme – Week 3	 A total of 47 coastal and 13 freshwater sites sampled. One freshwater site and one coastal site had unsuitable for swimming results.

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Page 15 of 15	 A total of 47 coastal and 13 freshwater sites sampled. Seven freshwater and 12 coastal sites had unsuitable for swimming results. High bacteria levels were related to recent heavy rainfall. 	 A total of 47 coastal and 13 freshwater sites sampled. Three freshwater and four coastal sites had unsuitable for swimming results. High bacteria levels were related to recent heavy rainfall in the Far North. 	 A total of 47 coastal and 13 freshwater sites sampled. One freshwater site had unsuitable for swimming results. 	 A total of 47 coastal and 13 freshwater sites sampled. Two freshwater sites had unsuitable for swimming results. 	 A total of 47 coastal and 13 freshwater sites sampled. No sites had unsuitable for swimming results. 	 A total of 47 coastal and 13 freshwater sites sampled. No sites had unsuitable for swimming results. 	 A total of 47 coastal and 13 freshwater sites sampled. No sites had unsuitable for swimming results.
	Recreational Bathing Programme – Week 4	Recreational Bathing Programme – Week 5	Recreational Bathing Programme – Week 6	Recreational Bathing Programme – Week 7	Recreational Bathing Programme – Week 8	Recreational Bathing Programme – Week 9	Recreational Bathing Programme – Week 10
	15/12/2014	22/12/2014	29/12/2014	05/01/2015	12/01/2015	19/01/2015	27/01/2015

Attachment 2 to Item 08

ISSUE: Climate Update For Summer 2014/2015

A724196

To: Environmental Management Committee, 23 February 2015

From: Dale Hansen, Water Resources/Hydrology Programme Manager

Date:4 February 2015

Report Type:	A	Normal operations	Q	Information		Decision
Burneset		Infrastructure		Public service		Regulatory function
Purpose:		Legislative function	Q	Annual\Long Term Plan		Other
Significance:		High		Moderate	V	Low

Executive Summary:

- December was wetter than normal with all areas. By the end of 2014 all areas of Northland had received near to or above their mean annual rainfall amounts.
- January was exceptionally dry in parts of Northland/Auckland as well as many areas of the North and South Islands. The lack of rainfall contributed to soil moisture levels that were much lower than normal for this time of year.
- Groundwater levels were at their normal levels or slightly higher for this time of year, while river flows throughout the region, although below normal during January, are at least two to four weeks away from their mean annual low flows (MALFs).
- The 30 day map (January 2015) shows a greater part of Northland to be moderately dry but near normal conditions in western areas from South Hokianga Northwards through the Aupouri Peninsular.
- International guidance indicates that the probability of El Niño conditions developing over the next three months (February April 2015) is about 60%.
- The MetService outlook for February indicates that there is a hint of low pressure bringing wetter conditions for Northland and possibly also Auckland and Coromandel and a wetter February than normal for Northland.

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.
That the report Climate Update for Summer 2014/2015 by Dale Hansen, Water Resources/Hydrology Programme Manager and dated 4 February 2015, be received.

Report:

The purpose of this report is to provide an update on Northland's rainfall patterns, soil moisture conditions, groundwater levels and river flows since the last update to the Environmental Management Committee on 8 December 2014.

The report also refers to the MetService Outlook for February and the NIWA Seasonal Climate Outlook for Northland from February 2015 to April 2015.

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

Background

At the Environment Management Committee meeting dated 8 December 2014, it was reported in the Climate and Water Resources Update report that due to the unpredictability of forecasts and the historical prolonged dry spells that had developed from similar predictions and outlooks, a response and monitoring plan was implemented for the 2014/2015 summer.

Fortunately, rainfall during December was wetter than normal with all areas of Northland receiving above average rainfall. By the end of 2014 and after one of the wettest winters in decades all areas of Northland had received near to or above their mean annual rainfall amounts.

January was characterised by air pressures which were higher than normal over New Zealand. This pressure pattern resulted in an abundance of dry, warm and sunny weather during the month for most areas of New Zealand. As a result it was exceptionally dry in parts of Northland/Auckland as well as many areas of the North and South Islands. The lack of rainfall contributed to soil moisture levels that were much lower than normal for this time of year.

Rainfall, Ground Water and River Flows during December 2014 and January 2015

- As a result of a series of moderate to heavy rainfall events during mid December rainfall was well above average for the greater part of the region.
- Monthly rainfall amounts varied from 70mm 95mm in the Dargaville and Ruawai areas to 200mm – 330mm in eastern and central areas.
- Rainfall during January was completely the opposite with the region receiving less the 40% of the normal January rainfall.
- Daytime temperatures throughout January had been consistently high (in Whangarei averaging 25°C degrees and reaching over 28°C during mid January). Similar or higher temperatures may have been experienced over most of Northland.
- Soil moisture levels dropped to the very low levels.

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- At the end of January, groundwater levels were normal or slightly higher for the time of year.
- River flows throughout the region, although below normal during January, should reach their mean annual low flows (MALFs) in two to four weeks without further rain.

The Drought Index (refer to Fig: 16)

The Standardised Precipitation Index (SPI) is a simple measure of drought (and also of very wet conditions) and is based solely on the accumulated precipitation for a given time period (e.g. over the last 30 or 60 days). Because droughts vary greatly in duration, it is important to detect and monitor them at a variety of time scales

The NIWA generated 30 day and 60 day drought index maps show Northland to be in a better position at this time of year than in previous years.

The 30 day map (January 2015) shows Northland to be moderately dry but near normal conditions in western areas from South Hokianga northwards through the Aupouri Peninsular.

The 60 day map (December 2014 and January 2015) shows the whole of Northland to be in near normal conditions.

The MetService Outlook for February

Most places will receive more rainfall than was seen in January. However, February is traditionally a rather dry and warm month and the forecast is somewhat on the dry side. South westerlies and cooler temperatures dominate the first week of February and some useful showers are forecast. As we move into the second week of the month, the highs return to the South Island, with drier conditions expected there. There is a hint of low pressure bringing wetter conditions for Northland and possibly also Auckland and Coromandel. Temperatures are forecast to be above average over the South Island and the western North Island; closer to average elsewhere. This pattern is likely to continue through much of the second half of the month.

Overall, near average February temperatures are likely for many; possibly a hint warmer than usual for western parts of both Islands. A drier than normal February for the South Island, a wetter than normal for Northland, and near normal elsewhere.

NIWA Seasonal Outlook February – April 2015

Sea surface temperatures across the equatorial Pacific Ocean are borderline between neutral and weak El Niño conditions. However, as was the case over the past few months, the atmospheric circulation in the Pacific is still <u>inconsistent</u> with El Niño.

International guidance indicates that the probability of El Niño conditions developing over the next three months (February – April 2015) is about 60%.

The outlook for Northland from February to April 2015 indicates:

- Temperatures are most likely (50% chance) to be in the above average range.
- Rainfall totals are most likely (45% chance) to be in the near-normal range.
- Soil moisture levels and river flows are about equally likely (35-40% chance) to be in the near-normal or below normal range.

	Temperature	Rainfall	Soil moisture	River flows
Above average	50	35	25	25
Near average	30	45	40	35
Below average	20	20	35	40

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

During late January tropical Cyclone Ota formed near New Caledonia and tracked southward off the coast of Queensland then to the North Tasman Sea, north west of New Zealand. The remnant of this cyclone was expected to bring moderate rainfall amounts to the northern parts of the North Island on 4 and 5 February.

Staff will continue to implement the response and monitoring plan as reported to the Committee on 8 December 2014.

As the river flows are at least two to four weeks away from their mean annual low flows (MALFs) there should be no immediate issues with water takes. Monitoring of river and stream flows in the South Hokianga for the Far North District Council and the Kaihu River for the Kaipara District Council is being undertaken while the dry period continues.

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Fig 1: Monthly Rainfall from November 2014 to January 2015.









The highlighted areas (yellow) are the water levels recorded at the same time (3 February) in previous years. Apart from 2011, the current 2015 level is well above those for the same time in the past nine years.



Fig 4: Kaihu Low flow River Trends from 2009 to 3 February 2015.

The current flows (3 February) are well above those for the same time in the dry years of 2009, 2010, 2011, 2013 and 2014.





Fig 5: Kaitaia - Accumulative Rainfall Trends and Probabilities

Fig 6: Kaitaia - Soil Moisture Deficits



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Fig 7: Kaikohe - Accumulative Rainfall Trends and Probabilities

Fig 8: Kaikohe - Soil Moisture Deficits



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Fig 9: Kerikeri - Accumulative Rainfall Trends and Probabilities

Fig 10: Kerikeri - Soil Moisture Deficits



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Fig 11: Dargaville - Accumulative Rainfall Trends and Probabilities

Fig 12: Dargaville - Soil Moisture Deficits



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Fig 13: Whangarei - Accumulative Rainfall Trends and Probabilities

Fig 14: Whangarei - Soil Moisture Deficits



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Fig 15 : New Zealand Soil Moisture Map at 2 February 2015.









Fig 17: NIWA Seasonal Outlook Predictions – Temperature, Rainfall, Soil Moisture and River Flows

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ISSUE: Recreational Swimming Water Quality Programme – Interim Results 2014-15

ID: A725708

To: Environmental Management Committee, 23 February 2015

From: Colin Dall, Consents/Monitoring Manager and Jean-Charles Perquin, Environmental Monitoring Programme Manager

Date: 13 February 2015

Report Type:	Normal operations	☑ Information	Decision
D		✓ Public service	Regulatory function
Purpose:	Legislative function	Annual\Long Term Plan	Other
Significance:	High	Moderate	☑ Low

Executive Summary:

This report provides the Committee with a summary of the interim results of the 2014-15 recreational swimming water quality programme which was outlined at, and supported by the Committee, at its 13 October 2014 meeting¹.

The council has collected water samples from 47 coastal and 13 freshwater swimming sites throughout Northland at weekly intervals since 24 November 2014, with 12 sampling runs being completed by 10 February 2015. Sampling has now ceased at 34 sites and will be continued at the remaining 26 sites for a further four weeks.

The samples were tested for bacterial indicators of faecal contamination to indicate the risk to swimmers of contracting gastro intestinal illnesses and other infections. The results of each sampling run were published on the council's website² and the LAWA ("Land Air and Water Aotearoa) website³.

In general, microbiological water quality was good for swimming at the vast majority of coastal and most of the freshwater swimming sites either all or most of the time.

A total of 30 coastal sites met the guideline values considered acceptable for swimming 100% of the time. A further 14 sites had enterococci concentrations within the guideline values on all but one sampling occasion, and the remaining three sites on all but two sampling occasions. Overall, 544 out of 564 (96.5%) samples met the guideline values.

Four freshwater sites met the guideline values considered acceptable for swimming 100% of the time. Six sites had *E. coli* concentrations within the guideline value on all but one sampling occasion and two sites on all but two sampling occasions. The remaining site was classified as unacceptable (high risk) for swimming on four sampling occasions. Overall, 142 out of 156 (91.0%) samples met the guideline value.

¹ http://www.nrc.govt.nz/upload/18722/EMC%20Agenda%20-%2013%20October%202014.pdf

² http://www.nrc.govt.nz/Living-in-Northland/At-the-beach/Swimming-water-quality/Swimming-waterquality-results/

³ http://www.nrc.govt.nz/Environment/LAWA/

Legal compliance and significant assessment:

The activities detailed in this report are part of the council's day to day operations, which are provided for in the council's 2012-22 Long Term Plan and 2014-15 Annual Plan, and are therefore in accordance with the Council's decision making process and sections 76-82 of the Local Government Act 2002.

The programme also contributes to the council's statutory obligations under section 35 of the Resource Management Act 1991 for state of the environment and plan effectiveness monitoring and reporting.

Recommendation:

1. That the report Recreational Swimming Water Quality Programme – Interim Results dated 13 February 2015 prepared by Colin Dall, Consents/Monitoring Manager and Jean-Charles Perquin, Environmental Monitoring Programme Manager, be received.

Report

Testing

Water samples collected from coastal and freshwater swimming sites were tested for Enterococci bacteria (*Ent.*) and *Escherichia coli* (*E. coli*), respectively.

Guidelines and grading system

Test results were compared with the Ministry for the Environment (MfE) and Ministry of Health (MoH) *Microbiological Water Quality Guidelines (2003)* – Table 1.

Table 1: MfE, MoH microbiological guidelines for coastal and freshwater swimming water quality

	Freshwater	Coastal
Acceptable level (suitable for swimming)	<i>E. Coli</i> ≤ 260/100mL	<i>Ent.</i> ≤ 140/100mL
Alert level (potentially unsuitable for swimming)	260/100mL < <i>E. Coli</i> ≤ 550/100mL	140/100mL < <i>Ent.</i> ≤ 280/100mL
Action level (unsuitable for swimming)	<i>E. Coli</i> > 550/100mL	<i>Ent.</i> > 280/100mL

Summary of interim results for 2014-15

Tables 2 and 3 show the comparison of test results for each coastal and freshwater swimming site with the guidelines.

Many of the test results that exceeded guidelines values occurred around the time of rain events and are therefore attributed to faecally-contaminated stormwater runoff.

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Table 2: Comparison of test results	for coastal sv	vimmin	g sites	with th	e micro	biologi	cal wate	er quali	ty guide	elines			
	Week	1	2	3	4	5	9	7	8	6	10	11	12
		24/11	1/12	8/12	15/12	22/12	29/12	5/1	12/1	19/1	26/1	2/2	9/2
	Rain event	yes	ou	ou	yes	yes	ou	no	ou	ou	ou	ou	ou
Site Name													
Far North District Sites							_					_	
Ahipara @ beach off Kaka St (camp ground)													
Waipapa Kauri @ West Coast Rd motor cam	b												
Cable Bay @ East beach													
Cooper's Beach Foreshore @ Kanekane St n	nouth - east												
Maitai Bay @ south end of beach													
Matauri Bay @ Right of camp ground													
Taipa estuary @ beside Motor Camp													
Tokerau Beach @ Melissa Road													
Omapere @ Pioneer Walk Road													
Opononi Shoreline @ Hokianga Harbour) beli	ow hotel												
Rawene @ past ramp*													
Paihia @ Te Haumi River													
Paihia @ Waitangi Bridge (beach)													
Paihia @ in front of toilets													
Russell @ Mid North Moorings													
Kaipara District Sites													
Baylys beach @ Sea View Rd													
Glinks Gully @ Beach off Marine Dv													
Omamari Beach @ beach by stream													
Pahi @ 150 mtrs NW of jetty*													
Tinopai @ below shops*													
Tinopai @ Foreshore blw Puapua Creek*													

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Langs Beach @ Mid-way along beach.						
Mangawhai Harbour @ Picnic Bay*						
Mangawhai Heads @ Motor Camp foreshore*						
Whangarei District Sites						
One Tree Point east cliffs						
Mangawhai Heads @ open coast						
Ruakaka Beach @ Near surfclub						
Ruakaka River @ Below Motor Camp						
Uretiti Beach @ Tip Road						
Waipu Cove @ Beach						
Oakura Bay @ Beach - Nth end of bay						
Ohawini Bay @ Parutahi Beach Whangaruru						
Teal Bay @ Beach						
Church Bay @ Mid Bay						
Matapouri Bay @ Northern Bridge*						
Matapouri Bay @ Southern Bridge*						
Ngunguru Estuary @ Pakapaka Road*						
Ngunguru Estuary @ school						
Pacific Bay @ Beach						
Sandy Bay @ centre of beach						
Wellingtons Bay @ beach in front of northern car park						
Whananaki @ east beach						
Woolleys Bay @ centre of beach						
Ocean beach @ centre of beach						
Onerahi @ opposite play boat*						
Pataua South @ East end of beach						
Taurikura Beach (Whangarei harbour)						

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Table 3: Comparison of test results	tor freshwate	er swim	ming si	ites wit	h the m	icrobiol	ogical v	vater q	uality g	Juidelin	es		
	Week	1	2	8	4	5	9	7	8	6	10	11	12
		24/11	1/12	8/12	15/12	22/12	29/12	5/1	12/1	19/1	26/1	2/2	9/2
	Rain event	yes	ou	ou	yes	yes	ou	no	ou	ou	ou	no	ou
Site Name													
Far North District Sites													
Kerikeri River @ Rainbow Falls													
Kerikeri River @ Stone Store bridge													
Lake Ngatu @ South end													
Tirohanga Stream @ D/S 50 mtrs of FNDC	Take												
Victoria River @ DOC Reserve Crossing													
Waimamaku River @ Wekaweka Road bridg	в												
Waipapa River Waihou Valley @ Swimming p	pool												
Waipoua River @ Swimming hole at DOC HC	a												
Waitangi River @ Watea (NIWA Wakelins situ	(e)												
Kaipara District Sites													
Lake Taharoa @ Pump house													
Whangarei District Sites													
Lake Waro @ Launching Area, Hikurangi													
Raumanga Stream @ Swimming pool below	Falls												
Whangarei Falls @ above falls (Hatea River)													

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ISSUE:	Agenda items for next EMC Meeting – 28 April
	2015

ID: A727170

To: Environmental Management Committee, 23 February 2015

From: Tony Phipps, Operation Director

Date: 12 February 2015

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

Executive summary

The purpose of this report is to request committee members for agenda items for the next Environmental Management Committee meeting on 28 April 2015.

Legal compliance and significance assessment:

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

Recommendation:

That the Environmental Management Committee members suggest agenda items for inclusion into the agenda for the next Environmental Management Committee meeting on 28 April 2015.