

AGENDA

ENVIRONMENTAL MANAGEMENT COMMITTEE

Monday 7 December 2015 9.30am

**NORTHLAND REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE**

Agenda

Meeting to be held in the Council Chambers, 36 Water Street, Whangarei on Monday 7 December 2015 commencing at 9:30am
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MEMBERSHIP OF THE ENVIRONMENTAL MANAGEMENT COMMITTEE

Cr J Carr, Chairman

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

OPEN MEETING

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ISSUE: Confirmation of Minutes – 27 October 2015

ID: A801547

To: Environmental Management Committee, 7 December 2015

From: Nola Sooner, Committee Secretary

Date: 10 November 2015

Report Type:	<input checked="" type="checkbox"/> Normal operations	<input type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input checked="" type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> Not Triggered	

Executive summary:

The purpose of this report is to present the minutes of the Environmental Management Committee meeting held on 27 October 2015 (**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 27 October 2015 be received.

**NORTHLAND REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE**

Minutes of the Environmental Management Committee Meeting
held in the Council Chamber,
Northland Regional Council, 36 Water Street, Whangārei, on
Tuesday 27 October 2015, commencing at 9.30 am

Present:

Northland Regional Council

Cr Joe Carr (Chairman)
Cr Craig Brown (Deputy Chairman)
Cr Bill Shepherd (ex officio)
Cr Paul Dimery
Cr Monty Knight

Whangarei District Council

Cr Tricia Cutforth

Farming Community

Alan Clarkson

Department of Conservation

Ms Sue Reed-Thomas

Māori Interests

Keir Volkerling

Environmental Interest Groups

Martin Hunt

Forest Industry

Geoff Gover

In Attendance:

NRC Staff - Full Meeting:

Group Manager Environmental Services
Chief Executive
Committee Secretary

NRC Staff - Part Meeting:

Group Manager – Regulatory Services
Biosecurity Manager
Compliance Monitoring Manager
Natural Hazards/Rivers Officer
Policy Specialist
Coastal Monitoring Manager
Policy Development Manager
Land Manager
Rivers and Natural Hazards Manager
Resource Management Planning and Policy Manager
Waiora Northland Water Project Manager
Farm Monitoring Manager
Environmental Monitoring Officer – Farm Waste

The Chairman declared the meeting open at 9.30 am.

Apologies

Moved (Brown/Cutforth)

That the apologies from Richard Booth and Ann Court for absence be received.

Carried

Declarations of Conflict of Interest

It was advised that councillors should make declarations item-by-item as the meeting progressed.

Confirmation of Minutes: Environmental Management Committee Meeting – 31 August 2015 (Item 3.0)

Report from Nola Sooner, Committee Secretary.
A782026

Moved (Brown/Clarkson)

That the minutes of the Environmental Management Committee meeting held on 31 August 2015 be confirmed as a true and correct record.

Carried

Waiora Northland Water Progress (Item 4.0)

Report from Natalie Blandford, Waiora Northland Water Project Manager.
A780580

Moved (Dimery/Cutforth)

1. That the report 'Waiora Northland Water Progress' by Natalie Blandford, Waiora Northland Water Project Manager, and dated 1 October 2015, be received.
2. That council approve one further community interests' seat on the Ngunguru catchment group.
3. That council approve a Forest and Bird Protection Society of NZ seat for the Ngunguru catchment group.
4. That council approve the following additional nominations for the Ngunguru catchment group:

Nominee	Seat
Cr Paul Dimery	Northland Regional Council
Cr Greg Martin	Whangarei District Council
Willie Wright	Northland Conservation Board
Darlene Buckley	Ngunguru Sandspit Protection Society
Chris Robertson	Tutukaka Coast Ratepayers and Residents Association
Hayley Sharp and Kristi Henare (alternate)	Forest and Bird Protection Society of NZ Inc

Carried

Environment Fund and Farm Water Quality Improvement Plan Update (Item 5)

Report from Duncan Kervell, Land Manager, and Bruce Howse, Group Manager Environmental Services.

A778192

Moved (Brown/Hunt)

That the report 'Environment Fund and Farm Water Quality Improvement Plan Update' by Duncan Kervell, Land Programme Manager, and Bruce Howse, Group Manager Environmental Services, and dated 5 October 2015, be received.

Carried

Soil Conservation Programme Update (Item 6.0)

Report from Duncan Kervell, Land Manager.

A784804

Moved (Carr/Clarkson)

That the report 'Soil Conservation Programme Update' by Duncan Kervell, Land Manager, and dated 2 October 2015, be received.

Carried

River Management Update (Item 7.0)

Report from Joseph Camuso, Rivers and Natural Hazards Manager.

A782834

Moved (Brown/Carr)

1. That the report 'River Management Update' by Joseph Camuso, Rivers and Natural Hazards Manager, and dated 28 September 2015 be received.
2. That the minutes of the following River Liaison Committee meetings be received:
 - a. Awanui River Liaison Committee, 9 September 2015; and
 - b. Awanui River Liaison Committee, 24 September 2015.

Carried

**Environmental Monitoring for the Period 1–30 September 2015
(Item 8.0)**
**Report from Colin Dall, Group Manager Regulatory Services.
A784080**

Moved (Brown/Clarkson)

That the report 'Environmental Monitoring for the Period 1–30 September 2015' from Colin Dall, Group Manager Regulatory Services, dated 2 October 2015, be received.

Carried

**Community Wastewater Treatment Plant Discharges – Current
Compliance Status (Updated) (Item 9.0)**
**Report from Tess Dacre, Compliance Monitoring Manager.
A784964**

Moved (Hunt/Clarkson)

That the report 'Community Wastewater Treatment Plant Discharges – Current Compliance Status (Updated)' from Tess Dacre, Compliance Monitoring Manager, dated 2 October 2015, be received.

Carried

Recreational Swimming Water Quality Programme (Item 10.0)
**Report by Colin Dall, Group Manager Regulatory Services and Pania Te Whaiti,
Environmental Monitoring Officer - SOE.
A779042**

Moved (Carr/Clarkson)

1. That the report 'Recreational Swimming Water Quality Programme', prepared by Colin Dall, Group Manager Regulatory Services, and Pania Te Whaiti, Environmental Monitoring Officer - SOE, dated 24 September 2015, be received.
2. That the programme for 2015/16 as outlined in the report be supported taking into consideration advice received from Mr McBride at the meeting.

Carried

Biosecurity Update (Item 11.0)

**Report from Don Mckenzie, Biosecurity Manager.
A785514**

Moved (Brown/Hunt)

That the report 'Biosecurity Update' by Don Mckenzie, Biosecurity Manager, and dated 2 October 2015, be received.

Carried

Update on Coastal Hazard Assessments for Northland (Item 12.0)

**Report by Bruce Howse, Group Manager Environmental Services, and
Toby Kay, Natural Hazards Advisor.
A784920**

Moved (Carr/Volkerling)

That the report on 'Coastal Hazard Assessments for Northland' by Bruce Howse, Group Manager Environmental Services, and Toby Kay, Natural Hazards Advisor, and dated 5 October 2015, be received.

Carried

Update on Rainfall and Water Resources (Item 13.0)

**Report by Jason Donaghy, Water Resources/Hydrology Manager.
A786083**

Moved (Reed-Thomas/Brown)

That the report 'Update on Rainfall and Water Resources' by Jason Donaghy, Water Resources/Hydrology Manager, and dated 5 October 2015, be received.

Carried

Farm Dairy Effluent Volume Reduction Project (Item 14.0)

**Report by Dennis Wright, Farm Monitoring Manager.
A785170**

Moved (Knight/Clarkson)

That the report 'Farm Dairy Effluent Volume Reduction Project' by Dennis Wright, Farm Monitoring Manager, and dated 5 October 2015, be received.

Carried

MPI – Presentation (Item 15.0)
Report by Nola Sooner, Committee Secretary.
A788142

Moved (Hunt/Clarkson)

That the verbal presentation from Ministry of Primary Industries be received.

Carried

Agenda items for next Environmental Management Committee Meeting – 7 December 2015 (Item 16.0)
Report by Nola Sooner, Committee Secretary.
A790003

Moved (Carr/Brown)

That the Environmental Management Committee members suggest agenda items for inclusion into the agenda for the next Environmental Management Committee meeting on 7 December 2015.

Carried

Conclusion

The meeting closed at 12.42 pm.

ISSUE: Waioira Northland Water Progress

ID: A795263

To: Environmental Management Committee, 7 December 2015

From: Natalie Blandford, Waioira Northland Water Project Manager

Date: 13 November 2015

Report Type:	<input checked="" type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input checked="" type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> Not Triggered	

Executive Summary:

The purpose of this report is to provide an update on progress with Waioira Northland Water and contributing programmes between 1 October to 11 November 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 2015-2025 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.

Recommendation:

1. That the report Waioira Northland Water progress by Natalie Blandford, Waioira Northland Water Project Manager and dated 6 November 2015, be received.
2. That Council approve the following additional nominations for the Ngunguru catchment group:

Nominee	Representing
Mike Churcher	Community
Cecil Burke	Community
Paulette Wellington	Ngunguru Marae

Report:

Waioira Northland Water is council's programme to implement the National Policy Statement for Freshwater Management (NPS FM) and progressively improve water management in Northland. The programme comprises three core elements as follows:

- Regional planning
- Catchment planning (Priority catchments)
- Operational programmes.

REGIONAL PLANNING

NPS Freshwater Implementation Programme

As a result of the changes to the NPSFM in 2014, council is required to review and revise its current programme to implement the NPS FM, which was developed in 2012. The revision is required by Policy E1 of the NPS FM 2014 but is also an opportunity to reflect progress since 2012.

The 2012 implementation programme has been reviewed and revised by staff – a draft of the revised implementation programme is attached (**Attachment 1**). Key features are as follows:

- Builds on current/established initiatives (regulatory and non-regulatory).
- Retains region-wide and catchment-specific approaches.
- Provides for additional catchment plans if needed.
- Plan change 2020–2025 to provide for 'adjustments' and any further changes to NPSFM.
- Implementation complete by 2025.

The draft programme is to be put to the Council meeting of 17 November 2015 for adoption. The implementation programme is to be publicly notified before 31 December 2015, but is not open for consultation.

Industry and Council Liaison for regional plan development

Industry Group	Meeting date	Outcomes	Next meeting
Dairy Industry Liaison Group	15 October 2015		TBC, 2016
Drystock Industry Liaison Group			TBC, 2016
RMA Northland Forestry Development Group	15 September 2015	Cancelled	17 November 2015

CATCHMENT PLANNING

The table below provides an outline of the key steps in the development of catchment plans in the five priority catchments and alignment with the development of the new regional plan.

Key Milestones	Description	Indicative timing
Knowledge building	<ul style="list-style-type: none"> • Catchment descriptions • Collation of monitoring data • Understanding the science 	Complete (all 5 established groups)
Identify uses & values	<ul style="list-style-type: none"> • Identify in-water values • Identify uses of water 	Complete (all 5 established groups)
Draft objectives	<ul style="list-style-type: none"> • Draft objectives (outcomes sought): • What? Where? And by when? 	In progress
Test & confirm objectives	<ul style="list-style-type: none"> • Consistency with RPS and NPS FM • Cost / benefit analysis • Revise as needed 	December – February 2016

Test need for catchment specific provisions in draft regional plan	<ul style="list-style-type: none"> • Compare catchment objectives with draft regional plan • Cost / benefit analysis • Identify any additional regulatory measures required 	March 2016
Draft catchment plan	<ul style="list-style-type: none"> • Draft catchment plan approval • Draft catchment plan released for comment / feedback. 	April - June 2016
Incorporate catchment provisions in regional plan	<ul style="list-style-type: none"> • Revise as needed and finalise catchment plan • Final catchment plan approved • Catchment specific provisions included in notified regional plan (as needed) • Catchment plan implementation (ongoing) 	Mid-2017

Draft catchment plan

A draft catchment plan template has been distributed so far to Mangere, Doubtless Bay and Waitangi catchment groups. Catchment groups and staff will populate the templates over the coming months.

Ngunguru Catchment – Update

- Mike Churcher and Cecil Burke are the two Ngunguru locals recommended to represent community interests on the new Ngunguru catchment group.
- Paulette Wellington from Ngunguru Marae is the first representative to be nominated to represent Tangata Whenua.
- The drystock farmers are yet to agree their nomination.

Membership of the Ngunguru catchment working group to date is as follows:

Member/Nominee	Seat
Cr Paul Dimery	Northland Regional Council
Cr Greg Martin	Whangarei District Council
Paulette Wellington	Tangata whenua (3 positions)
Mike Churcher and Cecil Burke	Community (2 positions)
Andy Warren and Jeremy Waldegrave	Forestry (2 positions)
Matt Long	Farming (2 positions)
Willie Wright	Northland Conservation Board
Darlene Buckley	Ngunguru Sandspit Protection Society
Chris Robertson	Tutukaka Coast Ratepayers and Residents Association
Hayley Sharp and Kristi Henare (alternate)	Royal Forest and Bird Protection Society of NZ Inc

- A total of 26 members of the community (including catchment group members) attended the inaugural Ngunguru catchment group meeting held 11 November 2015 at Ngunguru Hall.
- The community indicated their preference for an approach that considers all contaminants affecting water quality.

- The group intend to gather for a fieldtrip in early December 2015, in order to discuss their freshwater quality issues and opportunities for Ngunguru catchment.
- Meetings to be convened from February 2016 to convey catchment information.
- Catchment group members to be supported by both staff and community members with particular catchment management knowledge.

OPERATIONAL PROGRAMMES

Kai Iwi Lakes Open Day 2016

- Next year's open day is likely to be held in early January (pending confirmation by Taharoa Domain Governance Committee) in order to avoid clashing with TokaFest and to take the opportunity to target campers.

Integrated Kaipara Harbour Management Group (IKHMG).

- IKHMG are currently finalising the details for two new flagship sites (under the workplan funded by the Ministry for the Environment there is an undertaking to have a second industrial site and a marine site). Nga Kaitiaki O Nga Wai Maori will be joining IKHMG at the February quarterly hui and will create an opportunity to work more closely to develop a whole of catchment approach to catchment management.
- Te Uri O Hau and Manaaki Whenua- Landcare Research organised a workshop on *Modelling Tools for iwi environmental planning and decision making*. This was held at NRC council chambers and was attended by scientists from Landcare Research, Agresearch, NIWA, and ESR. Feedback on the day was very positive.
- IKHMG are holding Maturanga Maori workshops presently with flagship Multiple owned Maori farms and will finish the first stage by Christmas.

Northland Applied Freshwater Economic Studies Project

- Whāngārei Harbour Sediment/*E.Coli* study – economic modelling work coming to completion; updated sediment load estimates have been integrated; presentation made to Whāngārei Harbour Catchment Group workshop in October.
- Dune Lakes –development of a conceptual model that can be used to assess the costs and benefits of nutrient reductions across a variety of lake systems is in progress.

Northland Strategic Water Infrastructure Study

- This region wide overview study of irrigation demand/water availability, jointly funded by NRC and MPI, is coming to a conclusion at the end of November. It will contain recommendations on areas for further detailed investigation into potential options for storage and community consultation that needs to occur.

Te Mana o Te Wai Fund Application

- Te Hiku O Te Ika Iwi Development Trust was successful in reaching Stage 2 of the Te Mana o Te Wai Funding round.
- Ministry for the Environment are now carrying out due diligence on their application, which includes actions to improve water quality at Lakes Split, Waiparera, Wahakari and Rotoroa.
- Staff are providing advice and background information to the Trust to assist with this process.

Biosecurity - Kai iwi Lakes

- Staff are undertaking ongoing weed and pest animal control throughout the Taharoa Domain and monitoring biodiversity and pest animals with the help of Northtec students.

- The Biosecurity Team provide a full update on their activities in a separate item in this agenda.

Hydrology

Water Allocation Calculator

- The revised Water Allocation Calculator is currently being used to compare the level of water allocation with different objectives and allocation limit scenarios.
- The outcome of this work will be presented to the Regional Planning Committee on the 30 November as part of the Water Quantity Objectives and Limits presentation.

Catchment Specific Dam Assessment

- The revised methodology for accounting for dam water takes have been applied to dams in the highly allocated catchments and included in the water allocation modelling referred to above.
- The methodology will be applied to all dams in the next six months.

WaiRestoration resource development

- On 6 October, a Toimata Foundation contractor met with the Enviroschools Northland team to further the development of a printed and electronic resource for the WaiRestoration project.
- It is intended that this resource will demonstrate ways to implement the project and highlight Northland school communities as case studies.
- The resource will be made available throughout New Zealand to schools and councils involved in the Enviroschools Programme.

ISSUE: Change to Recreational Swimming Water Quality Programme

ID: A798468

To: Environmental Management Committee, 7 December 2015

From: Colin Dall, Group Manager Regulatory Services

Date: 18 November 2015

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

Executive Summary:

The report details the change that is proposed to the recreational swimming water quality programme (RSWQP) following the presentation made at the Committee's 27 October 2015 meeting by Graham McBride, NIWA's Principal Scientist – Water Quality.

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 2015/25 Long Term 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.

Recommendations:

-
1. That the report "Change to Recreational Swimming Water Quality Programme", prepared by Colin Dall, Group Manager Regulatory Services, dated 18 November 2015, be received.
 2. That the proposed change to the programme as outlined in the report be supported.
-

Existing Programme

Under the RSWQP the Northland Regional Council (NRC) has been collecting samples for bacteriological testing from swimming sites regardless of weather conditions, other than when sampling could not be done safely. This is consistent with the following provision of D.2 and E.2 of the Ministry for the Environment/Ministry of Health "Microbiological Water Quality Guidelines For Marine and Freshwater Areas ("the Guidelines"), which states:

"The guidelines recommend a systematic random-sampling regime. Generally this means samples should be collected weekly, regardless of the weather. There may be exceptions if conditions present a health and safety hazard, in which case samples should be collected as soon after the programmed time as possible."

The committee has questioned the merits of sampling sites during wet periods, particularly flood events. The information presented to the committee by Graham McBride, NIWA's Principal Scientist – Water Quality relating to the use of *E coli* as an indicator of faecal contamination and the application of the Guidelines confirmed that there are grounds to change the sampling protocol historically followed by the RSWQP.

Proposed Change to Sampling Protocol

Based on Mr McBride's presentation and response to the committee's questions on the issue, Mr McBride was asked to comment on the following change proposed to the sampling protocol. His comments are underlined:

River Samples

The sampler will no longer collect a sample from a site:

1. with flood flow (when water has overtopped its banks) at the time of sampling; or
2. close to flood flow with water level still rising, unless the sampler is unsure if the water level is still rising; or
3. within 48 hours of a flood flow ceasing, unless the sampler is unsure if the flood flow ceased within the previous 48 hours.

In case of 2. and 3., the sampler needs to take a sample and photographs of the site. An assessment will be made as to whether or not the sample should be analysed when the sampler returns to Whangarei, which will be based on the photographs and rainfall/river flow information from the council's hydrometric network. Practical approach; good idea

It is considered, and Mr McBride agreed, that the above change would not compromise our assessment of swimming site suitability, even though, on the face of it, the change is not supported by other sections of the Guidelines, namely:

"Sampling after wet weather [H3]

The guidelines relate to samples taken throughout the total bathing season irrespective of weather conditions. Results influenced by rainfall should not be excluded: people do swim shortly after a rainfall event, and it is important to sample when people are likely to be swimming. This may be particularly so for freshwater lakes and rivers."

Mr McBride noted that:

"The wording (in the Guidelines) isn't all that clear on this point. I recall that it was introduced to counteract the view-and-practice of some, that sampling should be restricted to dry-weather only. I think you can rely on "...it is important to sample when people are likely to be swimming).

You could also appeal to [H2]: Where to sample: “Water-quality samples should be taken from the area where swimming occurs”. Implies that the interest is also in conditions when swimming occurs.”

Representatives of the Northland District Health Board, Whangarei, Far North and Kaipara District Councils were advised of the proposed change to sampling protocol during the pre-season meeting for the 2015/16 RSWQP on 13 November 2015.

ISSUE: Sustainable Land Management Update

ID: A794335

To: Environmental Management Committee, 7 December 2015

From: Duncan Kervell, Land Manager and Bruce Howse, Group Manager
Environmental Services

Date: 9 November 2015

Report Type:	<input checked="" type="checkbox"/> Normal operations	<input type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input checked="" type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> Not Triggered	

Executive summary:

- Year to date **\$898,652.10** of the Environment Fund budget has been allocated to a total of **180** projects for land management, biodiversity and biosecurity projects (Inclusive of a \$100K over allocation to be met from the Land Management Reserve).
- Year to date (31st of October) a total of 57 FWQIPs have been commenced, 31 FWQIPs have been completed, with a further 85 still in progress.
- This report summarises progress on sediment modelling tools and progress on the soil conservation nursery.

Legal compliance and significance assessment:

The activities detailed in this report are provided for in the council's 2015-2025 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.

Recommendation(s):

That the report Sustainable Land Management Update by Duncan Kervell, Land Programme Manager and Bruce Howse, Group Manager Environmental Services, and dated 9 November 2015 be received.

Environment Fund Update 2015/16

Year to date \$898,652.10 of the Environment Fund budget has been allocated (to a total of 180 projects).

Table 2. Environment Fund funding allocation for 2015/16

Delegated Authority	Land/ Biosecurity	NO of Projects	Allocation	Budget
1 – June 2015	Land	22	\$ 114,380.67	
2 – June 2015	Biosecurity	44	\$ 138,166.00	
3 – July 2015	Land	42	\$ 171,613.60	
4 – August 2015	Land	28	\$ 143,593.50	
5 – September 2015	Land	18	\$ 98,464.30	
6 – October 2015	Land	21	\$ 188,541.03	
7 – October 2015	Land	5	\$ 18,893.00	
8 – Wild Cat Traps	Biosecurity		\$ 13,000.00	
Funded from Land Management Reserve				\$ 13,000
Soil Conservation			\$ 25,000.00	
Allocation to date			\$ 898,652.10	
Budget	Land			\$ 825,000
	Biosecurity			\$ 75,000
Total Budget				\$900,000.00
Less allocation to date				\$ 898,652.10
Balance Remaining				\$ 1,347.90

Note: EMC meeting 10th August 2015: Approval was given to over allocate the 2015/16 Environment Fund budget by up to \$100,000. In the event that withdrawals are less than the budget, then the budget deficit would need to be met from the Land Management Reserve and an adjustment made to the following years (2016/2017) budget allocation.

Farm Water Quality Improvement Plans (FWQIP) 1 July 2015 to 31 October 2015

Year to date a total of 57 FWQIPs have been commenced , 31 FWQIP's have been completed, with a further 85 still in progress.

Status of FWQIP	Farm Type	Far North	Kaipara	Whāngārei	Total
Plans commenced : 1 July 2015 to 31 October 2015	Dairy	1	0	2	3
	Drystock	19	15	7	41
	Lifestyle	7	1	5	13
		27	16	14	57
Plans completed: 1 July 2015 to 31 October 2015	Dairy	3	1	2	6
	Drystock	8	7	6	21
	Lifestyle	2	0	2	4
		13	8	10	31
Plans still in progress	Dairy	2	9	4	15
	Drystock	25	22	10	57
	Lifestyle	7	1	5	13
		34	32	19	85

SEDNETNZ (Sediment River Network NZ Modelling Tool)

In July 2015, NRC commissioned this sediment modelling tool at a regional scale from Landcare Research. This model has now been delivered to NRC (November 2015).

Work has begun implementing the SEDNETNZ model on a number of Northland catchments and initial analysis is proving very useful at highlighting dominant sediment sources and relating proportions of sediment yield to land use types and different properties.

Catchment delineation of sediment sources and sediment yields by land use and farm business property has currently started on the Waitangi, Ngunguru and Taumarere catchments by Landcare Research and NRC. This information is being shared with community and catchment groups.

Example of SEDNETNZ outputs:

Table One: Land use and sediment yields in Ngunguru catchment

Land use type in Ngunguru catchment	% Coverage of catchment per land use type	Square kilometres per land use type	Thousand tonnes of Sediment per year per land use type	Percentage of sediment yield from catchment per land use type.
Whole Catchment	100%	86 km ²	12.9	100%
Pasture	30%	26 km ²	6.47	50%
Exotic forestry and harvested areas	22%	18.9 km ²	2.36	18%
Native Vegetation	45%	38.4 km ²	3.74	30%
Other	3%	2.7 km ²	0.35	2%

Please Note: Streambank erosion yields have not been modelled for the Ngunguru catchment. Estimates between 20-40% over and above the total load, have been considered reasonable for some Northland catchments.

NRC Soil Conservation Nursery Update

The Flyger Road nursery third block development phase was completed September 2016. At present the total nursery area covers 6.31 hectares, including waterways access, roads and site yard.

The established rows cover 9,752 linear meters, comprising 78% poplars and 12 % willows.

The nursery, as it stands, consists of 3 blocks cycling on a two year rotation. The first harvest will begin in winter 2016 on block 1, with a target of of 5000 3m poplar poles and 3000 1m willow stakes. With similar predicted outputs for years 2 and 3 as the recently planted phases mature. However, these outputs depend on the nursery coppicing response after first harvest.

There is currently a new initiative request for the 2016-2017 Annual Plan to continue establishment and increase the capacity of the nursery and complete a fourth block. This is to secure sufficient planting materials to support growth of councils soil conservation programme, including the Kaipara Hill Country Erosion Project.



Figure 1 Block 1 willow and poplar plantings, this block will be first to harvested in 2016/2017.

ISSUE: River Management Update

ID: A797239

To: Environmental Management Committee, 7 December 2015

From: Joseph Camuso, Rivers and Natural Hazards Manager

Date: 16 November 2015

Report Type:	<input checked="" type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input checked="" type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> Not Triggered	

Executive Summary:

- Resource consents for the Kerikeri River spillway project have been granted.
- We have received a favourable staff report from the NRC for the Whangatane Spillway Weir Lowering. We expect a staff report from FNDC shortly.
- The Kotuku Street Dam earthworks have reached finish elevation with the wave wall placement, true left hand emergency spillway tie-in and general tidy up remaining.
- Works for the Awanui, Kerikeri and Kaihu maintenance programmes are underway.
- Minor river work programme is underway.
- Awanui River Flood Hazard Maps are scheduled for public distribution in December, this will complete the Priority Rivers flood mapping project

Legal compliance and significance assessment:

The council activities detailed in this report are provided for in activities described in the council's 2015-2025 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 River Management Update by Joseph Camuso, Rivers and Natural Hazards Manager and dated 16 November 2015 be received.
 2. That the Committee supports the public distribution of the Awanui River Flood Hazard maps.
-

Report

Whangarei Kotuku Dam Update

The contractor has completed the final elements of the true right hand spillway. The work will focus on placing the pre-cast wave-wall sections and completing the final grading and tidy up of the site.

The following is required to complete the Kotuku Dam:

- Install precast wave wall on top of dam embankment.
- Install services to 22 and 24 Kotuku Street (Road access, sewer, electricity, telecom etc.
- Re-design and install barriers true left spillway, due to keeping 22 and 24 Kotuku Street for rental properties.
- Long term monitoring programme – following from dam management plan.
- Safety Barrier fencing above the retaining walls.
- Throttle Plate installation on the inlet structure.



Kotuku dam 15 November 2015, final grading work continuing dam embankment.

Awanui

A favourable staff report was received for the Whangatane Spillway weir lowering. All submitters concerns have been resolved and a hearing is not required.

The annual scheme maintenance tender was awarded to Kaitaia Contractors Limited. The tenders for a stock crossing bridge and Whangatane spillway weir lowering closed 12 November and were opened 16 November. Staff will be evaluating the

tenders with the intention to award late November with the start of construction planned for after the Christmas holiday.

Awanui flood mapping has been completed and it is recommended that this information be distributed to the public. Letters will be sent to all landowners that have affected property located within the flood zones. This is a statutory obligation for council to make the information available to the public and follows the same procedure we have followed for the other 26 priority river catchments.

Kaeo-Whangaroa

Staff are scheduled to meet with Liaison Committee members on the 17 November to visit the Whangaroa rivers to confirm the proposed maintenance works programme. This will be presented to the full Committee at the 18 November meeting.

Kerikeri-Waipapa

The resource consents and notice of requirement for the Kerikeri Spillway proposal have been granted. We are now in the appeal period and staff expect the landowner where the spillway is located to appeal this decision. Negotiations with this landowner are continuing.

Tenders for the Cobham Road spillway (Kerikeri-Waipapa) and Kaihu River maintenance and tree clearance works have closed. In both cases the tendered amounts are over the budgeted amount; however Council has approved to advance funds from the respective river reserves to cover this work.

Work is now progressing in both catchments.

Kawakawa – Taumarere

A report to the Committee is included in the agenda recommending the establishment of a Taumarere Flood Management Liaison Committee.

Kaihu

The Kaihu River model upgrade is progressing. NRC has now provided all survey datasets for project completion. Model calibration results have been delivered and staff are in the process of reviewing them.

Annual River Maintenance and Tree Removal works are now underway.

Minor Rivers Works

Work is underway in catchments where ground conditions are suitable. The table of minor river works for 2015/16 is shown below.

River	Description of Work Programmed for Current Season	Completion Status
AWANUI	Awanui - Bells Hill Drain installation	November
	Awanui - Bells Hill Modelling revision and management option report	Completed
	Awanui - Bells Hill Drain Cleaning/Inclinometer reading	Completed
WAITANGI	Waitangi - Lilly Pond Large Pines, Puriri, Willows	Jan/Feb
WAIARUHE	Waitangi - Willow Planting on Waiaruhe River Bank adjacent to Pt OLC 4	Completed

ITEM: 7
Page 4 of 4
Completed

	Waiaruhe - Tree Removal adjacent to Puketona junction near Top Energy depot	Completed
KAIKOHE	Kaikohe - Willow Blockage Removal, Kaikohe	December
WAIOMIO	Waiomio - Willows/Debris Removal	Underway
OTIRIA MOEREW	Otiria/Moerewa - Willow removal upstream Pokapu Bridge - mulch/prune sides of high pass spillway	Completed
	Otiria/Moerewa - Bund and vegetation removal @ KiwiRail Yard	Underway
OHURI	Ohuri - Machine clean weeds 300 meters downstream of Duddy's Road	Completed
MANGATOA STREAM	Mangatoa - SH12 Kaikohe, outside bend sediment extraction	On hold
	Mangatoa-Remove Timber along SH 12 breaching roadside stopbanks	Dec/Jan
WAIMA	Waima - Open Left Span of SH Bridge	Jan/Feb
OMANAIA STREAM	Omanaia Vegetation Removal	Completed
AWAPOKANUI	Awapokanui - Weed Spraying	Jan/Feb
NGUNGURU	Ngunguru - Willows/Debris Removal	Completed
OTAIKA	Otaika - Willows/Sediment Removal	November

ISSUE: Establishment of a Taumarere Flood Management Liaison Committee

ID: A792908

To: Environmental Management Committee, 7 December 2015

From: Joseph Camuso, Rivers and Natural Hazards Manager

Date: 29 October 2015

Report Type:	<input checked="" type="checkbox"/>	Normal operations	<input type="checkbox"/>	Information	<input checked="" type="checkbox"/>	Decision
Purpose:	<input type="checkbox"/>	Infrastructure	<input checked="" type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input checked="" type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
Significance:	<input type="checkbox"/>	Triggered	<input checked="" type="checkbox"/>	Not Triggered		

Executive Summary:

The purpose of this report is to advise the committee on the establishment of a liaison committee to assist in refining and implementing a flood risk reduction plan for the Tamuarere catchment. It concludes with the recommendation that a Taumarere Flood Management liaison committee be established.

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 2015-2025 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 Establishment of a Taumarere Flood Management Liaison Committee prepared by Joseph Camuso, Rivers and Natural Hazards Manager dated 29 October 2015, be received.
 2. That the Taumarere Flood Management Liaison Committee is established and nominations for representatives called for, to be confirmed by Council.
 3. That Councillor Joe Carr is nominated as Chair of the Taumarere Flood Management Liaison Committee.
-

Introduction

River management plans have been developed for the 27 river catchments identified as having the highest flood risk in Northland through the council's Priority Rivers flood risk reduction project. The river management plans are being used to guide the prioritisation and implementation of river flood risk reduction measures. The Taumarere Catchment is one of these 27.

Flood management committees have been established for Awanui, Kaeo-Whangaroa Catchment, Kaihu, Urban Whangarei Rivers, Kerikeri-Waipapa, Waitangi and Ruakaka. These have demonstrated benefits in enabling improved communications with the various stakeholders and affected residents when investigating and implementing flood risk reduction measures. The review, refinement and implementation of flood risk reduction measures identified in the Taumarere management plan would benefit from the establishment of a liaison committee.

Council has received submissions during past consultation from Taumarere stakeholders requesting Council undertake further investigation and management of flooding associated with the Taumarere River and surrounding catchment. Staff have also previously met with NZTA, Kiwi Rail and FNDC to discuss flooding in the Otiria – Moerewa area and the identification of a number of conceptual flood mitigation options.

Taumarere Management Plan

The Taumarere management plan covers the following:

- Catchment description/soil conservation
- Flood modelling and mapping
- Flood risk management
- Flood risk reduction options

Engineered and non-engineered flood risk reduction options, developed to the conceptual stage, have been identified within the management plan. The development and implementation of these options would benefit from close coordination with the local community via a liaison committee structure.

Liaison Committee Representation/Terms Of Reference

A draft terms of reference is **attached**, outlining the composition of the proposed committee, administration, functions and tasks.

Should the establishment of the committee be approved, it may either directly appoint people to fill vacancies or it may invite nominations from which it will appoint committee members.

The proposed liaison committee would be a sub-committee of the NRC's Environmental Management Committee and, as with the other flood management liaison committees, would be chaired by a regional councillor.

As with the other liaison committees, the Taumarere Flood Management Liaison Committee would be an advisory body to the council and would have no delegated powers. Its primary role would be to facilitate communication and to ensure the council is fully briefed in respect of views and aspirations of the people of the catchment in respect of flood risk reduction.

The liaison committees are not intended to replace the Local Government Act (LGA) consultation process. Consultation with affected communities under the LGA process will still be required prior to making decisions on the establishment of flood control schemes and the setting of targeted rates to cover the funding of schemes.

Establishment Of The Committee

It is recommended that the committee is established in order to assist with prioritising the development of flood risk reduction options.

The first step in establishing the committee is to call for the nomination of representatives through advertising and direct approach to relevant stakeholders. It is anticipated that this can be completed within the next three months to enable reporting back to a subsequent council meeting to confirm representatives. The inaugural meeting of the liaison committee can then be scheduled thereafter, most likely during either April or May 2016.

As with the other liaison committees, it is recommended that the committee be invited to review its terms of reference at its first meeting and report back to the council should it have any changes it wishes to recommend.

TAUMARERE FLOOD MANAGEMENT LIAISON COMMITTEE

Draft Proposed Terms of Reference

Reporting to: The Environmental Management Committee of the Northland Regional Council.

Composition: The Liaison Committee is a sub-committee of and appointed by the Northland Regional Council and shall comprise:

One Regional Councillor appointed by the Northland Regional Council who shall be the chair of the Committee.

One Far North District Councillor as a representative of the Far North District Council.

Two (or more) iwi representatives, nominated by local iwi.

One representative of the local Business community.

One representative of the New Zealand Transport Agency.

One representative of KiwiRail.

Five representatives of the ratepayers of the river catchments, preferably representing a geographical cross-section of the catchment ratepayers from upper catchment areas through to lower catchment areas with one from each of the following catchments:

- Kawakawa
- Karetu
- Motatau
- Otiria/Moerewa
- Waiomio

And any other person that the Environmental Management Committee may from time to time appoint to the committee because of their particular skills or knowledge.

Appointment of Liaison Committee members

The Northland Regional Council shall call for nominations from the Far North District Council, iwi, local Business community, the New Zealand Transport Agency and KiwiRail for Liaison Committee representatives. The Council shall at the same time also call for nominations for the five ratepayer Liaison Committee representatives by way of public notice in newspapers circulating in the area.

The Northland Regional Council shall select the Liaison Committee ratepayer representatives from nominations received based on the experience and familiarity of the nominees with Taumarere and surrounding catchment management issues. If there are insufficient nominations to fill the ratepayer positions on the Liaison Committee, the Council shall invite appropriate landholders to join the Committee.

Appointments will be made for a term of three years, in sequence with the local government elections, or until earlier disqualification, death or resignation. Should any of the latter three events arise, replacement appointees may be made by the Northland Regional Council.

Meeting frequency: As required, but generally on one or two occasions per year. Meetings shall be advertised in local newspapers and shall be open to the public.

Standing Orders: Meetings will generally be run in accordance with New Zealand Standard Model Standing Orders (NZS 9202:2003).

Objective: To advise and make recommendations to the Northland Regional Council, via the Environmental Management Committee, on all matters pertaining to the development and implementation of the Taumarere Management Plan.

Functions: The Taumarere Flood Management Liaison Committee is an advisory committee of the Northland Regional Council and has no delegated authority or specific powers. Its functions are to:

1. Provide a stakeholder forum for the development of policies and plans for the reduction of river flood risk within the Taumarere catchment.
2. Enable stakeholders to participate in the ongoing management of river flood risk reduction within the Taumarere catchment.
3. Facilitate communications between the Northland Regional Council, which is ultimately responsible for the development and implementation of Management Plans to reduce river flood risk, and the residents and landholders within the Taumarere catchment.
4. Advise the Northland Regional Council on all matters relating to the development and implementation of the Taumarere Management Plan.

Specific tasks will include:

1. Assisting the Northland Regional Council to develop and refine a Management Plan for the reduction of flood risk in the Taumarere catchment.
2. Reviewing the implementation and effectiveness of other measures identified in the Management Plan to reduce flood risk, including policies and rules in Regional and District Plans, controls under the Building Act, or any other methods.

ISSUE: CoastCare Update

ID: A796965

To: Environmental Management Committee, 7 December 2015

From: Laura Shaft, CoastCare Co-ordinator

Date: 13 November 2015

Report Type:	<input checked="" type="checkbox"/> Normal operations	<input type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input checked="" type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> Not Triggered	

Executive Summary:

The purpose of this report is to provide an update on the Northland CoastCare programme and the 2015 planting season.

Legal compliance and significance assessment:

The council activities detailed in this report are provided for in activities described in the council's 2015-2025 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(s):

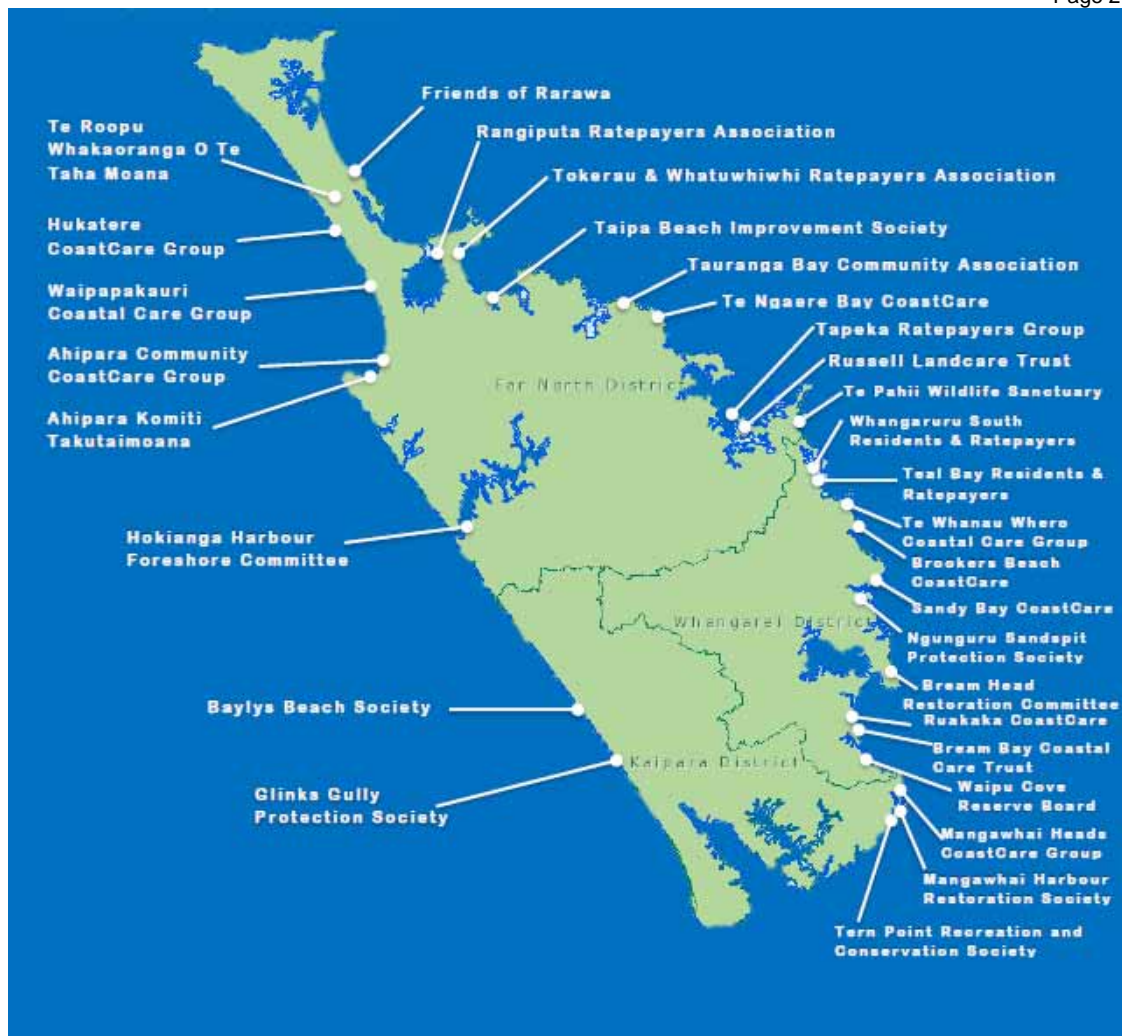
That the report CoastCare update by Laura Shaft, CoastCare Co-ordinator and dated 13 November 2015, be received.

Introduction

The NRC CoastCare programme was set up in 2005 to help protect and restore Northland's coastal sand dunes by supporting community groups to undertake dune restoration activities including planting, fencing, weed and pest control and education. The programme involves co-operation with other agencies including the Department of Conservation and district councils.

Community engagement

There are currently over 200 active members of the 30 groups working on CoastCare Northland dune restoration projects. In addition approximately 700 volunteers, including school groups, assist with CoastCare activities at planting days and other working bees.



Map of Northland CoastCare Groups

Dune Restoration

The key species for dune planting are the native sand-binders spinifex (*Spinifex sericeus*) and pingao (*Ficinia spiralis*). These plants play a crucial role in the natural cycle of dune erosion and build-up, helping the dunes to recover more quickly from erosion events.

Backdune species such as wiwi (*Ficina nodosa*) and pohuehue (*Muehlenbeckia complexa*) can be planted landward of the spinifex and pingao as they provide a useful barrier between the foredune plants and the exotic grasses behind.

In the 2015 planting season 9800 spinifex, 4500 pingao, and 1150 back dune plants were provided to groups for planting at sites around Northland's coast through the NRC Environment Fund.

Aligned with the above a range of fencing to reduce the impact of traffic (vehicles and humans) and weed and pest control was carried out by the various groups and is done on annual basis or as required by each particular site.



CoastCare planting days in 2015 – clockwise from top left: Mangawhai Heads; Long Beach; Ahipara; and Baylys Beach

Other CoastCare Initiatives

Consideration is being given to applying for a resource consent to enable mechanical restoration of eroded dunes at priority Northland beaches. The consent would enable sand to be pushed from the intertidal beach area to the eroded dune toe speeding up the dune repair process.

Having a resource consent in place would enable Northland communities to be more proactive in addressing erosion issues and to minimise the costs and delays that would occur with individual applications being made on an “as required” basis. The proposed consent would assist facilitate the use of soft engineering solutions for mitigation of coastal erosion by Northland communities, which is the intervention approach preferred over hard engineering solutions as per the NZ Coastal Policy Statement. It is acknowledged that each specific situation is unique and soft engineering solutions will not be effective for all sites.

Education is also a key element of the CoastCare programme, this involves summer beach events promoting safe beach driving and promotion of CoastCare message and working with schools. A less obvious element of the educational aspect is working with communities affected by erosion so that they can understand the coastal process,

science and determine what may or may not be effective intervention measures to address erosion.

ISSUE: Update on Rainfall and Water Resources

ID: A797034

To: Environmental Management Committee, 7 December 2015

From: Jason Donaghy, Water Resources/Hydrology Manager

Date: 13 November 2015

Report Type:	<input checked="" type="checkbox"/>	Normal operations	<input checked="" type="checkbox"/>	Information	<input type="checkbox"/>	Decision
Purpose:	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
Significance:	<input type="checkbox"/>	Triggered	<input checked="" type="checkbox"/>	Not Triggered		

Executive Summary:

The climate conditions will start to change significantly from early November onwards through the summer period. A quick presentation (five minutes) will be provided to the committee giving an up to date summary of the region's current conditions, as opposed to submitting a report as an agenda item several weeks prior to the Environmental Management Committee meeting.

The presentation will cover:

- Current rainfall deficits, river flows, groundwater levels
- Areas of concern, covering town water supplies, consent compliance
- Action plan
- Climate outlook for summer

Legal compliance and significance assessment:

The activities detailed in this report are provided for in the council's 2015-25 Long Term Plan, and as such are in accordance with the council's decision-making process and Sections 76-82 of the Local Government Act 2002.

Recommendations:

That the report Update on Rainfall and Water Resources by Jason Donaghy, Water Resources/Hydrology Manager and dated 13 November 2015, be received.

ISSUE: Biosecurity Update

ID: A106922

To: Environmental Management Committee, 7 December 2015

From: Don McKenzie, Biosecurity Manager

Date: 7 November 2015

Report Type:	<input checked="" type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> Not Triggered	

Executive Summary:

This report describes progress on key biosecurity issues across the region and updates on Kai Iwi Lakes pest control and marine pests.

Legal compliance and significance assessment:

The council activities detailed in this report are provided for in activities described in the council's 2015-2025 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(s):

That the report Biosecurity Update by Don McKenzie, Biosecurity Manager and dated 7 November 2015 be received.

Report

Kai Iwi Lakes Pest Control

A possum control operation was undertaken during July and August using Cholecalciferol, a vitamin D based pesticide placed in bait stations. Post control monitoring showed possum populations had been reduced by a third and further reductions are needed before positive gains to vegetation and fauna are realised. Ongoing possum trapping is planned over the summer months and a second possum control operation is scheduled for next winter when a more intensive poisoning operation will be carried out.

Mustelid and feral cat traps have been established throughout the Taharoa Domain and surrounding area to protect nesting shorebirds and native fauna. These traps have been established by a professional trapper and will be serviced monthly in a joint funding agreement between NRC and KDC.

Wilding pine control around Lake Waikare and Taharoa has been carried out using Te Roroa contractors and the total treatment area is now over 66 hectares with more follow up and ongoing control planned for next year. Control of larger wilding pines behind Pine Beach campground is planned using a drill and (herbicide) fill technique which will kill the trees and leave them to break down slowly.

Removal of Acacia trees is being carried out around Lake Kai Iwi by KDC staff, contractors and volunteers. The lake is now clearly visible when driving into the domain with more work scheduled to continue over the coming year. Roadside weeds have also been removed under an agreement between NRC and KDC roading contractors on Kai Iwi lakes road around the main entrance to Taharoa Domain and to the ski club.

Following the discovery of argentine ants near the Promenade Point campground monitoring is scheduled to be carried out during November / December to determine the extent of the infestation. An argentine ant management plan will be developed to suppress the existing populations and prevent them colonising the main campgrounds.

A biodiversity monitoring plan is currently being developed by staff and Northtec students. This plan will develop baseline monitoring and establish methods aimed at building an understanding of biodiversity improvement over time.

Marine Biosecurity update

Northland Regional Council hosted three other northern regions during October as part of the "Top of the North" marine pest collective. Northland staff provided advice and training on the use of the Vessel Quarantine Facility (VQF), a portable floating dock designed to treat infected vessel hulls and staff from Auckland Council, Waikato and Bay of Plenty regional councils joined in. The team demonstrated how the VQF is deployed and followed up with an operational meeting also attended by Chris Galbraith from Far North Holdings who was representing the Marina Operators Association. Positive feedback on the training day from the other councils was received and a very constructive alliance is being formed between the Top of North regional councils.

Fanworm incidents

A number of larger commercial tug boats and barges have been found to be non-compliant over the last month with fanworm being transported on hulls to the Bay of Islands and Whangarei harbour. Owners of the vessels have received fines and directed to clean their hulls.

The Notices of Direction placed on the Marsden Cove Canals Management Limited and Marsden Maritime Holdings issued on areas inside "stage 1" have been lifted after the most recent audit results showed they had met the standards required.

The Notice of Direction for Stage two remains in place and staff are working with Marsden Cove Management to develop a long term strategy for managing fanworm into the future.

Vessel hull survey

A survey of vessel hulls will also be undertaken over the summer months with the primary aim of detecting fanworm. It is expected between 1500 and 2000 hulls will be checked between December and next April by contractors - these will include domestic and visiting craft. The survey has the support of marinas who have

introduced their own hull cleaning standards this summer as a berth requirement for visiting craft – this is also aimed at reducing the risks of spreading fanworm.

Biosecurity staff will be working closely with the Maritime team and will be ensuring vessel owners are compliant with marine pest rules as well as distributing information aimed at building marine pest awareness.

ISSUE: Large-Scale Forests and Pest Management

ID: A796609

To: Environmental Management Committee, 7 December 2015

From: Don McKenzie, Biosecurity Manager

Date: 7 November 2015

Report Type:	<input checked="" type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> Not Triggered	

Executive Summary:

This report describes the biodiversity values of the regions large native forests, current pest impacts and what can be done to protect these regional assets.

Legal compliance and significance assessment:

The council activities detailed in this report are provided for in activities described in the council's 2015-2025 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(s):

That the report Biosecurity Update by Don McKenzie, Biosecurity Manager and dated 7 November 2015 be received.

Report

Background To Northland Forest Values

Large native forests characterize the landscape of Northland and comprise more than 130000 hectares. All are a mix of Department of Conservation (DOC) and privately owned forest and some like Warawara and Waipoua are subject to co governance arrangements with DOC and Iwi.

Twenty two forests larger than 1000 hectares are distributed throughout the region and include; Te Pahi, Herekino, (Raetia/Maungataniwha), Otangaroa/Te Karoa, Whangaroa, Omahuta, Puketi, Ōpua, Russell, Warawara, Mimiwhangata, Waima Mataraua, Kaihu, Waipoua, Marlborough, Tangihua, Houto, Mangakahia and Mareretu (Bream Head/Mt Manaia/Kauri Mountain) and the Brynderwyn range.

Forest Values

Northland's native forests are diverse. The region's subtropical climate, strong coastal association and historic periods of isolation from the rest of New Zealand have resulted in many unique habitats, in which plants and animals that are found nowhere else in New Zealand or the world occur.

Large forests are characterized by the presence of kauri and a mix of podocarp and hardwoods which include familiar Northland trees such as northern rata, rimu, tanekaha, karaka, kohekohe, taraire and pururi. Closer to the coast trees such as pohutukawa and tawapou are common. Kauri and the vegetation associated with these forests provide for a distinctive look and feel to Northland's forests. In addition to the special nature of Northland's flora the region's forests are acknowledged as the stronghold for North Island brown kiwi, they support kukupa and many other native forest birds.

Many of Northland's native plants only occur in the region. Of the approximately 2362 vascular plant species native to New Zealand, just over half (1233) are found on the Northland Peninsula. 804 species are only found in New Zealand and 152 species occur only in Northland. These include species such as North Cape karo, rātā Moehau/Bartlett's rātā (a large tree with white flowers), which is confined to several forest remnants around Te Pahi.

A high number of threatened and at risk endemic invertebrates also characterize our forests including land snails and insects, often with locally restricted distributions. Northland is home to all six species of northern giant land snail, which include pūpū harakeke commonly known as flax snails and pūpū rangi or kauri snails. Invertebrate sites with high levels of endemism include the offshore islands, Te Pahi/Aupouri Peninsula, western Northland forest blocks (Warawara, Waima, Waipoua), Cape Brett Peninsula and Bream Head.

Notable forest sites that support special species include Waipoua, Waima/Mataraua, Puketi/Omahuta and Maungataniwha forests. These sites (among others) contain populations of two threatened pekapeka or bat species: the northern short-tailed, and the long-tailed bat.

Forests along the east coast of Northland such as Mimiwhangata also support a significant population of at risk pāteke (brown teal).

Causes Of Forest Decline

Damage to forest habitats particularly plant species is being caused by widespread populations of possums, pigs and goats. Possums graze the upper forest canopy and selectively strip trees such as northern rata and kohekohe - they feed on flowers preventing the formation of seeds and also prey on birds eating their eggs and young. Goats destroy the understorey and a wide variety of vegetation - they can access steep terrain and graze over a wide range of habitat types often placing endangered plant species at risk. This combination effect of possums and goats ensures that preferred or "ice cream" species are selectively removed from all tiers of the forest changing the forest composition over time. As a consequence forests become more vulnerable to the impact of other introduced pests such as weeds and disease.

Weasels, ferrets, stoats, rats, mice and wild cats are also contributing to the decline of forest birds and are present throughout the region. As a consequence Northland

forests lack iconic bird species such as kaka, kakariki, kokako and brown kiwi are in serious decline in most Northland forests.

Extensive pest control has been carried in the past and 14 of the larger forests of Northland received pest control during the 1990's over a period of 9 years from 1990 to 1998 using aerially applied 1080. This was in response to growing public concern that the forests of Northland were suffering from severe possum damage. A combination of DOC administered land and surrounding private land was treated by the NRC and DOC using both aerial and ground based possum control methods. At the same time a Charitable Trust was formed aimed at protecting rata and pohutukawa forests from pests on private land. Aptly named "Project Crimson" this project remains a strong conservation organisation committed to action and education. <http://www.projectcrimson.org.nz/about-us/page.aspx>.

The control provided short term relief from possums and positive vegetation recovery was measured at Waipoua and other forests as a result. 1080 also targeted other pests such as stoats which are killers of young kiwi and birds and thus the projects had much wider pest control benefits to the forest. However, follow up control across these extensive forests has not been routine and although aerial 1080 has been used since by DOC in Waipoua and Waima and most recently at Warawara there is no long term plan to protect these forests from the suite of pest invaders which threaten them.

Recent video footage of widespread pest damage in Northland forests by forest and Bird representatives has again highlighted the plight of Northlands forests and stressed the need for urgent and extensive possum, rat and other pest control.

What can be done

Extensive control of possums and other pests is required and places like Whāngārei Heads have demonstrated what can be expected if pests like stoats and possums are controlled to low levels over several thousand hectares. The outcomes have been a national first resulting in high numbers of kiwi and other biodiversity benefits. Birds rarely seen on the mainland but common on offshore islands now frequent the heads and include kaka, bellbird and kakariki. This area is also the subject of biodiversity restoration plans and reintroductions of species such as tuatara and other rare native lizards and skinks as well as birds such as saddleback, robins and coastal seabirds are being planned.

Recent aerial control of pests using 1080 is a good way to provide an initial knock down of a wide suite of pests and can be repeated every 3-4 years. The cost of this kind of pest control is around \$25/hectare. This work needs to be accompanied with annual monitoring and a response plan aimed at targeting specific areas for intensive rat and stoat control at regular intervals. If goats are present then contract hunters are a proven way of keeping feral goat populations low.

Current and Future Projects

Working in partnerships to ensure sustained control of pests is the recommended way forward and a good example has been the joint agency and iwi project of Warawara forest. More than ten thousand hectares of private and DOC administered land has been treated in a four way partnership with Reconnecting Northland, Iwi, DOC and NRC. This project now needs a plan for the future whereby pests can be monitored and trends in biodiversity improvement can be measured over time. Restoration of Warawara is iwi led and the community takes pride in the restoration actions which have been achieved. Local people engaged with the project also gain valuable

knowledge of pest control methods and have an opportunity to witness the biodiversity gains first hand when large scale forest restoration is sustained. A long term monitoring plan for Warawara is in development with key stakeholders and progress on this will be brought back to the Committee in the New Year.

Staff are also in discussion with Ngatiwai and the Landcare Trust regarding the need for the control of pests in Russell forest and adjoining margins. The aim is to begin the control of pests in the current year or early next year which will match pest control undertaken along the eastern seaboard from Whāngārei heads to the Bay of islands. Restoring kiwi populations and forest biodiversity are key aims of this project which could include the whole of Russell forest in the future.

Planning for large scale pest control has also begun at Waipoua as part of a joint MPI, DOC and NRC proposal aimed at controlling the vectors of kauri dieback and other pests. The management area of this proposal covers more than 100 000 hectares of crown and private land and would require long term funding.

The relationship NRC maintains with DOC is critical to the success of large scale pest control and to assist with this a joint NRC/DOC Memorandum of Understanding is being prepared. Part of this MOU will aim to ensure the efforts of the NRC and DOC are co-ordinated and priorities are aligned when it comes to undertaking pest management.

ISSUE: Review of Regional Pest Management Strategies - Update

ID: A794593

To: Environmental Management Committee, 7 December 2015

From: Don McKenzie, Biosecurity Senior Programme Manager

Date: 6 November 2015

Report Type:	<input checked="" type="checkbox"/>	Normal operations	<input type="checkbox"/>	Information	<input type="checkbox"/>	Decision
Purpose:	<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Public service	<input type="checkbox"/>	Regulatory function
	<input type="checkbox"/>	Legislative function	<input type="checkbox"/>	Annual\Long Term Plan	<input type="checkbox"/>	Other
Significance:	<input type="checkbox"/>	Triggered	<input type="checkbox"/>	Not Triggered		

Executive Summary:

- The review of the Regional Pest Management Strategies is making steady progress and on schedule to meet the timeline which includes public notification of a Proposed Pest Management Plan and Marine Pathway Plan in June 2016. Hearings are scheduled for late July 2016 and a hearings committee needs to be appointed.
- The National Policy Direction for Pest Management is now operative and staff are working to ensure that the new plans for Northland are not inconsistent with this.
- NRC staff have been actively involved in the national alignment project for pest management, and have been working closely with other regional councils to develop a national template for the new RPMPs.

Legal compliance and significance assessment:

The activities detailed in this report are part of the council's day to day operations, are provided for in the council's 2015-2025 Long Term Plan, and are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002. The matters are not significant under council policy and are in accordance with the above legislation and Biosecurity Act 1993.

Recommendation(s):

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1. That the report Review of Regional Pest Management Strategies – update by Don McKenzie, Biosecurity Senior Programme Manager and dated 6 November 2015, be received.
 2. That the Committee appoint three Councillors to the Hearings Committee which will hear submissions in July 2016, these being Cr Dimery, Cr Brown and Cr Carr.
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Regional Pest Management Plan and Regional Pathway Management Plan

The Biosecurity Act 1993 (BSA) now provides for the development of 10 year regional pest management plans and regional pathway management plans. A Regional Pest Management Plan (RPMP) will manage identified pests, whereas a Pathway Management Plan will aim to manage the pathways through which pests may be introduced. Making the first Northland pathway management plan for marine pests is beneficial as the pathways are relatively easily identified, there are no private land issues, and the fast distribution of marine pests is a growing concern.

The two plans will progress through the same statutory process as separate documents under different sections of the BSA, but will come together in one physical document at the completion of the process.

The development of the new RPMP and pathways plan is progressing well and is on schedule to meet the attached timeline. This includes public notification of the proposed plans in June 2016. Hearings are scheduled for late July 2016 and a hearings committee needs to be appointed.

Updates will continue to be provided to EMC throughout development of the proposed plans. A workshop is proposed with EMC during March 2016 to seek feedback on the proposed plan. Due to the timing of meetings and the requirements of the Biosecurity Act, the statutory process to approve the proposed and final plans will proceed through full council.

National Policy Direction

The National Policy Direction (NPD) required by the Biosecurity Act became operative in September 2015. The NPD contains directions on the process and content of RPMPs and Pathway Management Plans, as well as their implementation, monitoring and use of good neighbour rules. All new plans are required by the Act to not be inconsistent with the National Policy Direction. Staff are now working to ensure that the new plans for Northland meet the requirements of the NPD.

National alignment project

In addition to our discussions with Auckland Council regarding regional collaboration and possible alignment of species and rules, the NRC is also part of a national alignment project with other regional councils. The aim of the project is to develop new RPMPs that are consistent with the NPD, look and feel similar, align pest programmes across regions where it makes sense to do so and recognise efficiencies from common methodologies and cost sharing in their development to achieve better pest outcomes for our regional communities. NRC staff have been actively involved in the national alignment project and have been working closely with other regional councils to develop a national template for the new RPMPs.

Regional Pest Management Plan preferred timeline

Draft to Communications team for final editing.	11 May 2016	Four weeks
Submit draft to council for notification approval.	Council meeting 17 May	
Notify Plan	8 June 2016	One month
Submission period closes	8 July 2016	
Submission summary period	9 July - 24 July	Two weeks
Hearings	25 July – 29 July	One week
Decision reporting, agenda item for plan approval	1 August – 12 August	Two weeks
Council approve plan	Council meeting 16 August	Three weeks (15 working days)
If no appeals to environment court, Council make plan with seal.	Council meeting 20 September	

ISSUE: Manchurian Wild Rice Control Programme

ID: A796577

To: Environmental Management Committee, Monday 7 December 2015

From: Curtis Harris, Manchurian Wild Rice Project Officer

Date: 16 November 2015

Report Type:	<input checked="" type="checkbox"/> Normal operations	<input type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input type="checkbox"/> Not Triggered	

Executive Summary:

- The Manchurian wild rice (MWR) programme is funded by MPI with NRC contracted to carry out operations until 2017 and an option to extend the programme for a further four years.
- The density of MWR at 80% of treated sites is now less than 5% of the original infestation, with 12% of sites now either under surveillance or eradicated.
- A 'working group' trial is underway whereby a group of landowners outside the current area of operations receive assistance from the programme to carryout spraying on their properties.
- The timing of spray rounds has been adjusted to comply with recent Environmental Protection Agency (EPA) conditions for spraying herbicide over water.

Legal compliance and significance assessment:

The activities detailed in this report are part of the council's day to day operations, are provided for in the council's 2015-2025 Long Term Plan, and are in accordance with the council's decision making process and sections 76-82 of the Local Government Act 2002. The matters are not significant under council policy and are in accordance with the above legislation and Biosecurity Act 1993.

Recommendation(s):

That the report Manchurian wild rice control programme by Curtis Harris, Manchurian Wild Rice Project Officer and dated 16 November 2015, be received.

Manchurian Wild Rice

Manchurian wild rice (MWR) is a tall rhizome-producing perennial grass that grows up to 3 metres tall. It has harsh, erect, dull-grey-green leaves (2-3 cm wide) up to 2.5 m long, which have a stout midrib and taper to a point. MWR invades low lying pasture, chokes waterways (contributing to flooding) and displaces native flora; it is both a serious agricultural and environmental pest plant.

MWR is widespread throughout the Kaipara district and covers approximately 500 hectares with the main infestation found adjacent to the Northern Wairoa River and its tributaries. Most of the outlier sites, (sites that are not connected to the main infestation area) are found in the Kaipara district with a small number of sites scattered across Northland in the Whangarei, Kerikeri, Mangawhai and Mangakahia areas. In total there are 337 active sites under management (appendix 1), 235 of which are outlier sites. With increased public awareness and continued delimiting surveillance, it is predicted that additional outlier sites may be reported.

Partnership Programme

The MWR programme (started in 2009) is a joint initiative between the Ministry for Primary Industries (MPI) and NRC. MPI cover all financial costs and during this time have contributed over two million dollars. The bulk of funding has been used to cover the costs of spray contractors, herbicide, monitoring and programme management.

Main objectives of the Manchurian Wild Rice Programme for Northland

- Distribution, density and the number of active MWR outlier sites is decreasing over time. By May 2020 no outlier sites included in the programme after June 2009 will still be active.
- To monitor all sites to determine the effectiveness of control operations and to determine that MWR has been eliminated
- To increase public knowledge and awareness of MWR, the risks it poses and the cost it imposes, resulting in the reduction of behaviour that might lead to MWR being spread, and the reporting of any suspect sites.

NRC is contracted to MPI to undertake operations through to 30th of June 2017 with the option of a further four years. It is hoped that by this time all current outlier sites will be eliminated and work on the Intransigent zone will have progressed. At the present level of effort the total eradication of MWR in Northland is likely to take over a decade. However, in the meantime the risk of further spread will be greatly reduced as outlier sites are eliminated and active MWR sites are pushed back to the main infestation along the margins of the Northern Wairoa and Kaihu Rivers.

Progress

MWR is a very difficult plant to kill and this can often only be achieved through repeat treatments over several years. Sites are treated biannually (spring/summer and summer/autumn) with Haloxypop, a grass specific herbicide. The density of MWR at 80% of outlier sites is now less than 5% of the original infestations; with continued treatment the majority of these sites will be moved into surveillance within the next three years.

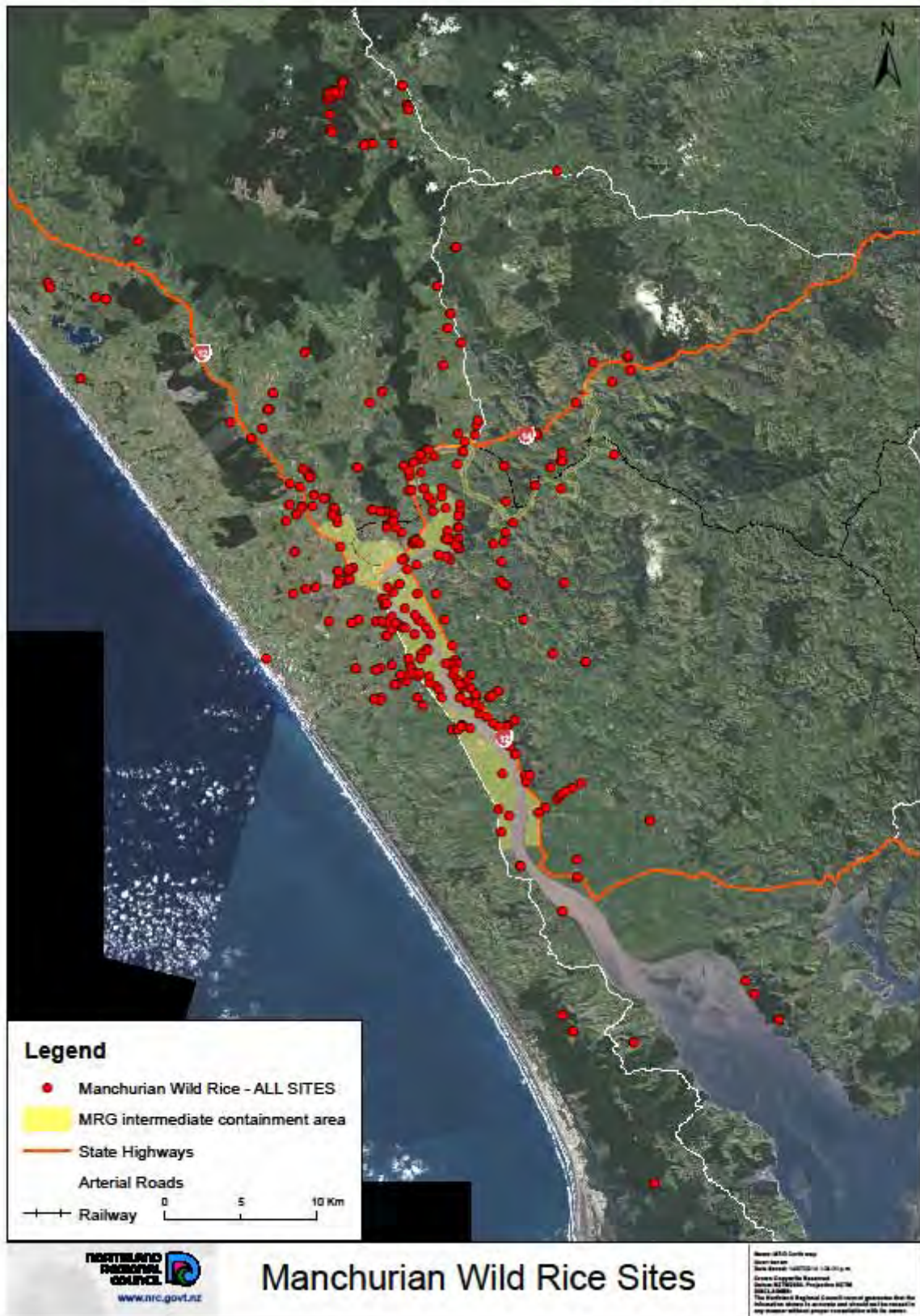
From 2009 to 2015, the total number of sites that are either eradicated or under surveillance has increased by 12.3% (a site remains active until no live MWR plants have been found for eight continuous years).

The programme has started a trial 'working group' in the Pukehuia area, where NRC provides the initial knock-down and will then provide land owners with herbicide so that they can take over the spraying of MWR. As other sites are eliminated and resources become available, the MWR programme will resume control of spray operations on these properties. By that time it is anticipated that MWR density will be greatly reduced and contractors skilled in the final stages of eliminating MWR populations will take over. Property owners have been very enthusiastic towards this initiative, which will accelerate the programme and also reduce costs.

Spraying constraints

As MWR can grow in both terrestrial and aquatic environments, some of the spraying is over water. The programme has to adhere to strict consent conditions and also has to meet specific conditions applied under an 'approval' issued by the Environmental Protection Agency regarding the spraying of the herbicide 'Haloxypop' over water. These conditions ensure that any adverse effects of spraying over water are mitigated through specific 'no spray' periods, restricted amounts of herbicide per hectare and monitoring. The timing of spray rounds has been adjusted to comply with recent Environmental Protection Agency conditions for spraying over water.

Appendix 1: Map of all active and surveillance sites within the MWR programme.



ISSUE: Fonterra Presentation

ID: A787488

To: Environmental Management Committee, 7 December 2015

From: Nola Sooner, Committee Secretary

Date: 8 October 2015

Report Type:	<input type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input checked="" type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> Not Triggered	

Report

Fonterra wishes to address the Environmental Management Committee on Monday 7 December 2015 for 15 minutes on the Living Water programme at Hikurangi.

Legal compliance and significance assessment:

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

Recommendation:

That the presentation from Fonterra be received.

ISSUE: Agenda items for next EMC Meeting – 29 February 2016

ID: A79

To: Environmental Management Committee, 7 December 2015

From: Nola Sooner, Committee Secretary

Date: 19 November 2015

Report Type:	<input type="checkbox"/> Normal operations	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> Decision
Purpose:	<input type="checkbox"/> Infrastructure	<input type="checkbox"/> Public service	<input type="checkbox"/> Regulatory function
	<input type="checkbox"/> Legislative function	<input type="checkbox"/> Annual\Long Term Plan	<input checked="" type="checkbox"/> Other
Significance:	<input type="checkbox"/> Triggered	<input checked="" type="checkbox"/> 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 29 February 2016.

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 29 February 2016.
