



Report 5: Exploring the challenges facing councils and iwi when working around biosolids issues; Key insights and lessons learned

Prepared by



October 2018

Regional Biosolids Strategy – Lower North Island

Report 5: Exploring the challenges facing councils and iwi when working around biosolids issues; Key insights and lessons learned

This report has been prepared for the **Regional Biosolids Strategy Partner Councils** and the **Ministry for the Environment** by Lowe Environmental Impact (LEI). No liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other parties. This project was undertaken with the support of the Ministry for the Environment waste minimisation fund, however, the Ministry does not necessarily endorse or support the content of this publication in any way.

Quality Assurance Statement		
Task	Responsibility	Signature
Project Manager:	Hamish Lowe	
Prepared by:	Virginia Baker James Ataria Jacqui Horswell Jennifer Prosser	
Reviewed by:	Hamish Lowe	
Approved for Issue by:	Hamish Lowe	
Status:	Final	

Prepared by:

Lowe Environmental Impact
P O Box 4467
Palmerston North 4442

| T | [+64] 6 359 3099
| E | office@lei.co.nz
| W | www.lei.co.nz

Ref: Regional_Biosolids_Strategy-Report_5-
Lessons_Learned_Report

Job No.: 10416

Date: October 2018

This work is copyright. The copying, adaptation or issuing of this work to the public on a non-profit basis is welcomed. No other use of this work is permitted without the prior consent of the copyright holder(s).



Please cite this report as: Lowe Environmental Impact Limited (2018). Report 5: Exploring the challenges facing councils and iwi when working around biosolids issues; Key insights and lessons learned. Regional Biosolids Strategy: Lower North Island, New Zealand.

Acknowledgements:

The authors would like to acknowledge significant contribution from Martyn Cole, Glen O'Connor, and Mahinarangi Hakaraia, Iwi Relationship Manager from Kāpiti Coast District Council. The Project Team would also like to thank Mahina-a-rangi Baker from Te Ātiawa ki Whakarongotai (TAKW), as well as Caleb Royal (Ngāti Raukawa ki te Tonga) and Todd Taiepa (Poutakawaenga Matua - Principal Māori Advisor at Palmerston North City Council) for their insights and support of conversations with the Project Team about the best approaches for engagement with local Iwi and hapū.

Disclaimer:

It is important to note that this document may only capture some conversations and activities undertaken. The perspective offered is predominantly viewpoints from The Institute for Environmental Research Ltd (ESR) and Centre for Integrated Biowaste Research¹ (CIBR) science and social science team. There may be other significant conversations, viewpoints and decision points not adequately represented here, and the Project Team apologise for any inaccuracies and omissions.

¹ The Centre for Integrated Biowaste Research (CIBR) is a virtual centre, combining the expertise of 8 New Zealand research institutes, universities and research partners. Led by the Institute of Environmental Science and Research (ESR), it brings together a multi-disciplinary team of scientists and researchers from ESR, Scion, Cawthron Institute, Landcare Research, Lincoln University, Lowe Environmental Impact, Northcott Research Consultants Ltd. and Kukupa Research Ltd. CIBR aims to facilitate more sustainable options for reusing biowaste (organic waste) by building greater understanding of the environmental risks and benefits of applying biowastes to land.

TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	1
2	INTRODUCTION	3
2.1	Background: Regional Biosolids Strategy – Lower North Island	3
2.2	Purpose of this document	3
3	METHODOLOGY.....	4
3.1	Background and scope	4
3.2	Research rationale	4
3.3	Methods and approach	5
4	RESULTS	6
4.1	Māori governance advisory role.....	9
4.2	Current status	9
4.3	Key insights and lessons learned	10
4.4	Next steps.....	11
5	CONCLUSION	13
6	REFERENCES.....	14
7	APPENDICES.....	15

- Appendix 1 A. Scope from initial business plan and MfE/LEI contract
 B. Outline of CIBR for KCDC
- Appendix 2 Draft outline of approach for Iwi Engagement Plan

1 EXECUTIVE SUMMARY

Background

Ten lower North Island councils are working in partnership to develop a biosolids strategy that includes a potential collective approach for sludge management and beneficial end-use. The strategy is led and co-ordinated by a collaborative management team of Lowe Environmental Impact (LEI), Massey University and The Institute of Environmental Science and Research Ltd (ESR).

Initial stages of this project included plans to develop an iwi and wider community engagement framework that aimed to incorporate community views into long-term, regional wide solutions for managing biosolids. Recognising the importance of stakeholder engagement, one of the first steps towards this project goal was to investigate the potential to develop a framework for engaging with tangata whenua, mana whenua and the wider community within the study region. It was anticipated that such a framework could aid in identifying positive processes for bringing individuals and groups together and help establish common principles for managing biosolids and sludges in the lower North Island region.

This milestone (Year 1, Stage 3; Community and Stakeholder Engagement Framework) aimed to utilise social/cultural science expertise and resources from previous community engagement work conducted by the Centre for Biowaste Research (CIBR) programme (Ataria et al 2016; Baker et al 2016) to support the design of a pilot strategy for Iwi engagement.

This document provides a short summary of the progress made in developing a pilot Iwi engagement plan (Appendix 1). Outlining achievements to date, roadblocks, challenges and lessons learnt through 18 months of consultation/discussion.

Project Progress

- The project aimed to develop a pilot Iwi engagement strategy with the guidance of Iwi/hapū and the Kāpiti Coast District Council (KCDC)
- The project's social and cultural researchers supported an Iwi engagement process which was led by KCDC staff who maintain a well-established council/iwi relationship
- The model followed was to ensure that KCDC staff would lead the relationship building and bring the researchers into the conversations where and when appropriate
- The development of the framework was initiated via emails, face to face meetings and phone calls.
- The progress of the project was hindered by many factors including external complexities across the region involving water, wastewater and land-use issues
- Despite the best efforts from all involved, the Project Team were unable to gain significant traction with the Iwi/hapū involved on how to best proceed with a pilot engagement approach.

Key insights and lessons learned

Despite best efforts, the development of an iwi engagement framework has not progressed as intended. The occurrence of misunderstandings and misalignments has hindered this work and the wider project. The Project Team does however acknowledge that significant learnings have been achieved through this process:

- It is evident that sole focus should not be on biosolids waste without the inclusion of related water, wastewater and land-use issues when engaging with iwi and community stakeholders.
- Māori representation in the governance arrangements for the regional strategy project was essential to iwi. As such the Project Team took immediate steps to ensure Māori representation in the high-level governance of the regional strategy. This should be taken into consideration at the initial stages of any similar project in the future.
- It is fundamental to the success of any future strategy that the community engagement process begins before any physical aspects of the project are put into practice. i.e. avoid 'a cart before horse' approach.
- There are many complex dynamics to hapū and inter-regional Iwi ownership, including historical decisions and events, sites of cultural significance, mahinga kai, multiple and sometimes conflicting interests of hapū, Iwi and councils pertaining to wastewater treatment, WWTP locations, water quality and land-use issues in the region.
- Irrespective to KCDC's well-established council/iwi relationship, there was an evident lack of trust and confidence in council decision making in some areas, exacerbated by wider dynamics not pertaining to the project.

Next steps

More positively the Project Team have engaged and responded as best as possible to the signals from KCDC and Iwi representatives to reappraise the approach for Iwi engagement within the wider project. This has included establishing a Terms of Reference and appointment of a Māori Cultural Advisor in the project governance team. There is commitment from all currently involved to explore and support improved Iwi and council engagement in negotiating issues of municipal wastewater and biosolids treatment in context of developing a regional strategy.

The Project Team plans to do this by:

- Continuing to strengthen and support Iwi/advisory engagement in the governance and regional strategy forum; and
- By building a better understanding of the interconnected biosolids, wastewater and water quality challenges facing Councils and Iwi when working on biosolids issues.

The Project Team are grateful for the time and commitment of all involved in contributing to this summary and helping shape the revised next steps.

2 INTRODUCTION

2.1 Background: Regional Biosolids Strategy – Lower North Island

In the lower North Island, there is an estimated 80,000 tonnes of sludge (at 20% solids) produced from oxidation ponds (every 30-50 years) and additional sludge from 5 high rate treatment plants. Most of this sludge which is removed from the treatment plants ends up in landfills. Landfilling is not a long-term management option and is becoming more difficult due to increased levies, space required and transportation distances. Further, there is an increasing community expectation to develop sustainable use options where the material can be considered a resource. Management of solids can be especially difficult for smaller communities where limitations due to lesser economies of scale can stifle the development and creation of workable solutions. All territorial authorities are facing the same problem – what to do with their biosolids.

This project aims to develop a collective biosolids strategy and use programme in the lower North Island. The strategy will consider economies of scale and alternatives for discharge and beneficial use of biosolids which are affordable, sustainable and provide targeted solutions that are consistent with national waste minimisation strategies.

Low Environmental Impact (LEI) and The Institute of Environmental Science and Research Ltd (ESR) is working with 10 councils in the Lower North Island to determine pathways to work together that will form the basis of a regional strategy.

Recognising the importance of stakeholder engagement in this issue, one of the first steps in this project was to investigate the potential to develop a framework to engage with tangata whenua, mana whenua and the wider community (Year 1, Stage 3; Community and Stakeholder Engagement Framework). It was anticipated that such a framework could aid in identifying positive processes to bring individuals and groups together to begin to identify key issues and criteria to be considered, and to explore common principles for managing biosolids and sludges in the lower North Island region. The milestones and stages for the development of an engagement framework was designed to run concurrently within the wider biosolids strategy, biophysical science experiments and field trials.

2.2 Purpose of this document

This document provides a short summary of the progress made in developing a pilot Iwi engagement plan (Milestone 1.1) (Appendix 1) within the Waste Minimisation Fund “Small Community Collective Biosolids Strategy – Lower North Island”.

This milestone aimed to utilise social/cultural science expertise and resources from previous community engagement work conducted by the Centre for Biowaste Research (CIBR) programme (Ataria et al 2016; Baker et al 2016) to support the design of a pilot strategy for Iwi engagement.

This report outlines the progress to date on development of the framework, roadblocks, challenges and lessons learnt. It documents the key activities and decision points related to Milestone 1.1 and aims to capture some of the key insights, dynamics and lessons learned thus far, from the period October 2016 to October 2018. It is intended that these experiences will inform the next steps and further conversations in the wider project about how to best approach the dynamics of Iwi/Council engagement on wastewater treatment and infrastructure investments under a regional biosolids management strategy.

3 METHODOLOGY

3.1 Background and scope

Early negotiations between the Project Team and MFE to scope the Lower North Island biowaste strategy work included the development of a milestone to support Iwi and community engagement for the project. The full details of this milestone are included (see Appendix 1). In summary, this milestone intended that:

A Draft Engagement Framework will be developed which will identify how Tangata Whenua and the community at large can be incorporated into developing long term regional wide solutions for managing biosolids. It will be a framework that each individual partner can use, with scope for modifications to include the engagement dynamics of the individual community. It will also identify options and methods for engagement in situations where biosolids generated in one area are transferred to another area i.e. to another rohe.

The approach for delivering this milestone was to utilise CIBR and LEI experience in building participatory approaches for governance and decision-making. KCDC had kindly offered the wider regional project an opportunity to develop these aims further within a pilot Iwi engagement strategy that would build good processes and conversations with local Iwi to explore current and future approaches for wastewater and biosolids management in the Kāpiti Coast area.

It was intended that conversations would follow the principles outlined in the existing CIBR/LEI framework (Baker, Ataria *et al*/2016), to involve and collaborate (IAP2) from a Treaty of Waitangi partnership approach. The 1840 Treaty of Waitangi gives guiding principles that can be applied to Iwi and local government partnership for environmental management. As both a Treaty Partner and a key stakeholder, Iwi and rūnanga have keen interests in being involved in biowaste, water and environmental decision-making (CIBR/LEI 2016).

It was envisaged that mana whenua and local Māori researchers would help co-design a pilot engagement framework, guided by local tikanga for engagement, and draw on local and national Māori led environmental management approaches. The milestone was to include delivering a hui (or other forum) to support local council, Iwi and wider community engagement conversations to consider what to do with biowastes. The pilot Iwi engagement process aimed to identify and strengthen good practice approaches and processes for conversations with other councils, Iwi and communities involved in the wider project. The lessons learned from designing and testing a pilot engagement process would support further regional conversations in developing a regional strategy.

3.2 Research rationale

This research took a participatory approach that aimed to help involve local government, Iwi and other key stakeholders in building shared understandings of the current biowastes situation and to explore viable solutions. The participatory process intended to enable more robust and effective local and regional governance, and greater community confidence in the decision-making process (Goven *et. al.*, 2016). Participatory approaches aim to give policy decision makers a deeper appreciation of community values and views on economic, environmental, social and cultural risks and benefits, highlighting uncertainties and conflicting values, and enable those involved to gain a greater appreciation of different perspectives and options for managing waste.

For Iwi, runanga and hapū there may be benefits of enhanced tino rangatiratanga, having more meaningful involvement in the decision process, as well as greater confidence that culturally significant sites, habitats and ecosystems have been identified, and a greater assurance that cultural values will be recognised and upheld in any solutions.

It is intended that the longer term, social and cultural benefits from the implementation of the project may include:

- Greater public and stakeholder awareness and confidence in regional waste management;
- Benefits to rate-payers with regional strategies and approaches giving greater economy of scale than community level management;
- Benefits to Iwi in cultural knowledge being recognised alongside scientific criteria in the decision-making process;
- Enhanced environmental management and cost efficiencies in the region;
- Generation of employment in new regional infrastructure projects; and

Infrastructure that better supports population, industry and economic growth for the region.

3.3 Methods and approach

A decision was made early in the scoping of the Regional Strategy that a pilot Iwi engagement strategy could be developed with the guidance of Iwi/hapū in the Kāpiti Coast district. This was supported by an offer of co-funding from Kāpiti Coast District Council (KCDC) who were keen to explore processes and opportunities to further strength Iwi involvement in water and waste management and decision making in the Kāpiti rohe.

The design of a pilot process to support Iwi engagement on this issue would be guided within KCDC's well established relationships with Te Whakaminenga o Kāpiti (TWOK), one of the longest lasting partnerships between tāngata whenua and Local Government in New Zealand. The partners with this forum are the Kāpiti Coast District Council and the mana whenua (people with 'authority over the land') on the Kāpiti Coast: Te Āti Awa ki Whakarongotai, Ngāti Raukawa ki te Tonga and Ngāti Toarangatira.

The approach of the project's social and cultural researchers was to support an Iwi engagement process which would be led by KCDC staff (who hold the local relationships with Iwi and have a significant stake in managing council/Iwi relationships). KCDC staff would negotiate and facilitate face to face meetings and initiate the connections between their Iwi clients and the wider project team where deemed timely and appropriate. Through these relationships the Project Team would co-design an appropriate pilot engagement plan that would draw upon KCDC, CIBR and local mātauranga Māori frameworks, insights, and resources.

4 RESULTS

From November 2016, members of the Project Team with expertise in social systems (Jinny Baker) and biophysical science (Jacqui Horswell) worked with Martyn Cole (Water & Wastewater Asset Manager) and Glenn O'Connor (Solid Waste Services Manager) from KCDC to support KCDC with their Iwi/hapū involvement in the design and delivery of a pilot Iwi engagement framework for biosolids.

The model followed was to ensure that KCDC staff would lead the relationship building and bring the researchers into the conversations where and when appropriate. This entailed KCDC seeking TWoK guidance, direction and advice on appropriate pathways for engagement with Iwi/hapū who could then inform, shape and co-design a pilot approach to support engagement with other Iwi and communities involved in the biosolids regional strategy project.

The Project Team supported this process by providing additional documentation to help explain the intent, by attending relevant meetings, and by providing summary notes and following up on any actions to confirm and support the next steps. Dr Jamie Ataira, CIBR's cultural advisor was also involved, providing advice and support where necessary. This advice was facilitated via email and phone calls.

Several emails, summary meeting notes, face to face meetings and phone calls occurred between the different parties over an 18 month period. Where possible Project Team members met face to face. Despite the best efforts from all involved, by September 2018 they were unable to gain significant traction with the Iwi/hapū involved on how to best proceed with a pilot engagement approach.

The following table summarises some of the key meetings pertaining to the guidance and development of ideas for a KCDC pilot Iwi engagement approach.

Table 1: Key actions and activities

24.11.16	<p><i>LEI project strategy meeting launch – Location: Palmerston North</i></p> <p>Virginia (Jinny) Baker (Social Scientist, ESR) and Jacqui Horswell (Science Leader, ESR/LEI) attended a project strategy meeting in Palmerston North with councils and met with Martyn Cole (Water & Wastewater Asset Manager, KCDC).</p>
07.12.16	<p><i>Jinny met with Glen O'Connor (Solid Waste Services Manager, KCDC) and Monica Fraser (Iwi Relationships Manager, KCDC) – Location: KCDC</i></p> <p>KCDC's Iwi relationship manager expressed early reservations about a pilot approach and recommended the project address Māori representation in the high-level governance of the regional strategy.</p> <p>Meeting notes were summarised and following these recommendations from KCDC Iwi Relationships Manager, a Terms of Reference was developed and Todd Taiepa (Poutakawaenga Matua, Principal Māori Advisor at Palmerston North City Council) was appointed to an advisory role in the governance forum for the wider project.</p>
19.06.17	<p><i>Meeting with Monica, Jinny, Martyn, and Mahinarangi Hakaraia (Ngāti Raukawa ki te Tonga) KCDC's new Iwi Relationship Manager – Location: KCDC</i></p> <p>Introductions, updates and information sharing with new KCDC Iwi relationship manager.</p>
Jan – Oct 2017	<p><i>KCDC various negotiations with local forum</i></p> <p>During this transition time for KCDC's Iwi relationship role, meetings occurred with KCDC Wastewater Treatment Plant (WWTP) managers and TWoK to socialise the project and seek mana whenua involvement to design the approach for piloting a strategy for Iwi engagement.</p> <p>During this time a number of efforts were made to set up a meeting with Iwi representatives at the WWTP site to share information, seek guidance and explore opportunities.</p>
21.07.17	<p><i>A draft written plan for processes to engage with local Iwi/hapū</i></p> <p>To meet project milestone reporting obligations, a draft Iwi engagement plan outlining processes to underpin further work with appropriate Iwi partners to co-design a strategy for engagement with Iwi was produced. This draft plan was circulated to KCDC WWTP managers, Mahinarangi Hakaraia and Todd Taiepa.</p> <p>This draft document outlined the intention to work with mana whenua and local researchers to co-design an initial engagement approach. The legitimacy and status of this draft outline was later questioned when reviewed by the Te Whakaminenga o Kāpiti (TWOK) appointed Te Ātiawa ki Whakarongotai (TAKW) representative.</p>
13.09.17	<p><i>Resolutions from Te Whakaminenga o Kāpiti 13 September 2017</i></p>

	<p>Martyn Cole, KCDC, attended the Te Whakaminenga o Kāpiti forum on 13 September 2017 and gave a brief outline of the project. A resolution was made, see below.</p> <p>Te Whakaminenga o Kāpiti 17/09/102 FORMATION OF AN IWI MANAGEMENT PLAN WORKING GROUP (SP-17-308) It is recommended that an Iwi Management Plan Working Party is established with a representative from each of the three iwi in line with the draft Terms of Reference attached as Appendix 1 to Report SP-17-308. CARRIED</p> <p>Te Whakaminenga o Kāpiti 17/09/103 COLLECTIVE BIOSOLIDS STRATEGY – LOWER NORTH ISLAND – IWI ENGAGEMENT (IS-17-297) MOVED (Waaka/Gerretzen) <ul style="list-style-type: none"> · Te Whakaminenga o Kāpiti approves the proposed engagement process to develop a Tāngata Whenua Framework for Biosolids Reuse through the Collective Biosolids Strategy Project. Te Whakaminenga o Kāpiti mandate a tri-Iwi working group to engage in the development of the Tāngata Whenua Framework for Biosolids Reuse Framework for Kāpiti. · Te Whakaminenga o Kāpiti will confirm the appropriate representation from each Iwi for the tri-Iwi working group. · Further consultation is to be undertaken and feedback is to be provided at the next meeting of Te Whakaminenga o Kāpiti on 24 October 2017. CARRIED</p>
26.10.17	<p><i>Meeting with Mahina-a-rangi Baker - Te Ātiawa ki Whakarongotai (TAKW), Jacqui, Jinny, Glenn, Location: KCDC</i></p> <p>Introduced the project aims and asked for Iwi/hapū support in co-developing a pilot Iwi engagement strategy, and to clarify their involvement in a composting trial in Fielding.</p>
04.12.17	<p><i>Email correspondence between TAKW and KCDC</i></p> <p>KCDC was made aware of dissatisfactions from Te Ātiawa ki Whakarongotai and Ngāti Kauwhata in regards to composting field trials.</p> <p>The team became aware that Ngāti Kauwhata were 'opposed to the concepts contained in the biosolids strategy' and the notion of transporting human waste from other areas to their rohe. There was opposition to Kāpiti biosolids being taken to Fielding for a proposed trial, and concern that mana whenua were 'being forced to work at cross-purposes to the project' (Email 4.12.17).</p> <p>This created confusion within the project team, as they had been under the impression that hapū had given their consent and were supportive of the field trial.</p> <p>KCDC emailed an apology, reemphasised the need for mana whenua guidance in shaping a pilot Iwi engagement framework, and suggested a further meeting with Mahina-a-rangi Baker, Ngā Hapū o Ōtaki and Ngāti Toarangatira representatives.</p>
10.04.18	<p><i>Meeting with Mahina-rangi Baker, Caleb Royal (Ngāti Raukawa ki te Tonga), Martyn, Glenn, Jacqui, Jinny – Location: KCDC</i></p>

	<p>Jacqui talked about some of the challenges including the boundaries of this project being biosolids, yet there being a wider context of water and wastewater management issues. For Māori, the issues concerning solid wastes, waste water, historic decisions, current conditions and negotiations for renewing Resource Consents for various WWTPs in the region tend to be viewed as interconnected. Having a focus on biosolids waste without paying attention to related water, wastewater and land-use issues could be a point of tension in the scope of the project.</p> <p>There seems to be elevated concerns by iwi across the region about environmental issues pertaining to water and wastewater treatment. Issues included whether safety could be guaranteed for Iwi/whanau and participating researchers, against a background of wider historic issues, distrust in councils, and Treaty claims across the wider region.</p> <p>There were shared concerns of volatilities, uncertainties, challenges, reputational and political complexities in the wider region. There was suggestion that working with Manawatu hapū (impacted by WWTP issues in their rohe) were circumstances requiring a more urgent focus on Iwi engagement. There was also acknowledgement that building an Iwi/hapū based pilot intervention amidst these wider dynamics would not be easy for those involved. All were however keen to keep talking about how the Project Team could best make a useful contribution to the regional situation.</p>
24.04.18	<p><i>Email correspondence</i></p> <p>A brief summary email from Jinny was sent to those involved in the 10.04.18 meeting. There were no replies and activities on developing a draft iwi engagement framework drew to a halt. In the wider project, steps began to be taken to revisit the approach, milestones and next steps.</p>

4.1 Māori governance advisory role

A key decision point from the meetings was to establish Māori representation in the governance arrangements for the regional strategy project. Following early engagement, feedback and advice from KCDC Iwi relationship management staff, the Project Team took immediate steps to ensure Māori representation in the high-level governance of the regional strategy. A Terms of Reference was developed and the role and appointment of the Pou Whakahaere (Māori Cultural Adviser) in the project governance forum was actioned.

4.2 Current status

Despite the efforts and best intentions of all involved, this engagement framework milestone (see Appendix 1) has not progressed as intended. There seem to have been delays in gaining traction with the appropriate Iwi/hapū forum, as well as early reservations about the scope, legitimacy and applicability of a pilot engagement framework as a way to formulate approaches to address wider dynamics between Iwi, hapū and councils in the wider Lower North Island region.

At this stage there is agreement that establishing a pilot processing site and engagement framework amidst increasing tensions in the wider region on water quality and wastewater

infrastructure issues, would present a number of challenges for the hapū, researchers and Project Team involved. This does not preclude parties talking about how KCDC, local researchers and the Project Team could make a useful contribution in the regional situation.

4.3 Key insights and lessons learned

Various factors have been presented in the complexities of developing a pilot Iwi engagement framework in context of a regional strategy approach. Foremost, the initial scoping and design of the project to establish a pilot Iwi engagement framework, amidst a number of concurrent processes and to seek permission from various hapū for beginning field trials, may unfortunately have accentuated impressions of 'a cart before horse' approach (Email 04.12.17).

Delays on this milestone may have also contributed to perceptions of the project 'developing a theoretical framework [in isolation], whilst an actual appropriate framework isn't being implemented' to manage Iwi engagement for the field trials (Email 04.12.17). The tensions in the timing of designing a pilot Iwi engagement framework and the parallel processes to negotiate various local permissions for composting field trails were in many ways difficult to avoid. Technical trials and experiments are fundamental to the wider project delivery schedule. Understanding the different physical characteristics of the sludges received in different districts underpins the design of viable regional solutions.

On reflection it was optimistic to anticipate that developing a pilot Iwi engagement strategy in parallel, but not fully connected with approaches to gain approval to begin biophysical science and experimental field trials, could adequately address the complexities presented. Delays in gaining guidance from KCDC Iwi forum, may have also impacted on the biophysical science trials moving at a faster pace, and have possibly not helped in securing trust and confidence in the scope of a pilot engagement strategy.

Efforts were made to quickly address an Iwi advisory role in the governance arrangements for the wider regional strategy. Yet overall, the research team had difficulty in finding good processes to help understand, let alone navigate, the many complex dynamics of hapū and inter-regional Iwi ownership. These dynamics include historical decisions and events, sites of cultural significance, mahinga kai, multiple and sometimes conflicting interests of hapū, Iwi and councils pertaining to wastewater treatment, WWTP locations, water quality and land-use issues in the region.

Whilst the wider project may be only concerned with use of biosolids, for Māori the issues of biosolid wastes are likely to be viewed as interconnected and entwined with wastewater and fresh water quality issues. The complexities across the region include heightened Iwi and public concerns of declining water quality, prompting more scrutiny on wastewater treatment, land use and other resource management issues impacting the environment.

Whilst the Project Team have made good connections and had invaluable conversations together, the researchers, KCDC wastewater staff, and the Te Ātiawa ki Whakarongotai (TAKW) Iwi/hapū involved are not confident that a pilot Iwi engagement approach will be helpful in negotiating the wider dynamics where hapū often seem to lack trust and confidence in council decision making. Furthermore, it is uncertain if the project team would have legitimacy in a neutral third-party facilitation role, especially given the complex relationships and activities between various technical providers, councils and Iwi across the wider region.

4.4 Next steps

There is commitment from all currently involved to explore and support improved Iwi and council engagement in negotiating issues of municipal wastewater and biosolids treatment in context of developing a regional strategy. Correspondence from TAKW (email 04.12.17) outlined that in 'finding a way forward', there is a role for TAKW and Kāpiti mana whenua to play in being a 'critical conduit' and providing advice to the Project as to how tangata whenua can be engaged and collective agreement can be gained going forward.

Currently the Project Team is focused on rethinking and renegotiating the engagement parts of the Ministry for the Environment Regional Strategy contract. With this in mind and the Project Team's experiences to date, focusing on two critical steps would be helpful in the development of revised milestones:

1. Continue strengthening and supporting Iwi/advisory engagement in the governance and regional strategy forum; and
2. Build a better understanding of the interconnected biosolids, wastewater and water quality challenges facing Councils and Iwi when working on biosolids issues.

Each of these two points are discussed further below.

Strengthening Māori governance

This first area of work would focus on exploring ways to strengthen Iwi/hapū confidence and involvement in the governance of the project. Possible actions could include inviting Sir Mason Durie and/or other local Māori experts to present at different council and regional strategy forum in an advisory capacity.

Iwi Relationship Managers from the various Councils represented in the wider regional strategy could also become more actively involved in the project at various points in the strategy development. This expertise would guide the project engagement with hapū and communities, supporting better understandings and ways to approach engagement, risks and opportunities in local rohe. This could involve the design of hui and appropriate forum and processes for sharing information and gaining insights from various hapū to contribute to regional biosolids strategy building.

Building better shared understandings of the challenges

As the pilot Iwi engagement milestone progressed, the team became aware of a breadth of challenges in Iwi and council dynamics in the wider project area, which the Project Team, councils and service providers outside the respective local areas may not be aware of. In light of this wider context, it is possible to reposition the milestones for future work to contribute to building more comprehensive understandings of the many complex local, regional and inter-regional dynamics to be considered within a strategy.

Initially the work towards a second milestone would involve a desktop-based scoping and feasibility exercise to collate publicly available data about the status of the WWTP Resource Consents in the wider region. This would include gathering information about Resource Consent conditions and timing for renewal, the nature of the WWTP and its location, the Iwi/hapū involved, Treaty settlement status, and significant historical issues. These may include the WWTP proximity

to culturally important areas and archaeological information. This would initially be based on publicly available information held by councils, but could be supplemented by interviews with the local council Iwi relationship managers, and Iwi/hapū.

It is intended that this approach would provide an *information sharing platform* for Iwi and councils within the regional strategy project. In time, this data could inform or contribute to a regional GIS system that would serve as a tool for councils, policy agencies and Iwi to quickly gain background information, identify a site of cultural historical significance, and connect with the right people. This would initially help council staff, research and policy organisations involved in the project to gain a deeper appreciation of some complexities of waste infrastructure sites in the lower North Island region. Arguably, better identifying historical decisions and current conditions will lessen knowledge gaps and uncertainties and support informed conversations between councils and Iwi/hapū about the opportunities and barriers that exist in negotiating and developing a viable regional strategy.

In the first instance, access to the information would be given to those Council and Iwi involved in the regional strategy project. It is acknowledged that different Iwi, hapū and whanau may have different viewpoints and interests within and across rohe. These and other sensitivities mean that future protocol for adding, interpreting and conveying information (beyond that which is publicly available) would require careful consideration in the next steps for the project. Such protocol would need to be considered in the project governance forum. The development of the protocol could include input from local research organisations and council Iwi relationship managers involved in the strategy.

In summary it is hoped that these two critical steps will support the building of deeper shared understandings and build an initial appreciation of hapū concerns about waste and wastewater treatment in the complexities to be considered across the region.

5 CONCLUSION

This document has briefly outlined the background, scope and methods used in support of developing an appropriate Iwi/community/stakeholder engagement framework within the wider Lower North Island regional biosolids strategy. It provides a summary of key actions and activities, the current status of the project, key insights, lessons learned and next steps.

In summary, it is suggested that two key aspects would be useful to consider in formulating the next milestones for the engagement approach. Firstly, to continue strengthening and supporting Iwi/advisory engagement in the governance and regional strategy forum. Secondly, to begin building an information sharing platform to support more comprehensive understandings of the challenges facing Councils and Iwi when working on biosolids issues across the wider region.

The project has generated valuable insights and lessons learned, as well as invaluable connections and relationships in the process thus far. It is hoped that developing a slightly different emphasis for supporting Iwi engagement in the wider project will lead to positive outcomes. The Project Team is very grateful for the time and commitment of all involved toward these next steps.

6 REFERENCES

- Allen, W. Ataria, J., Apgar, J., Harmsworth, G., & Tremblay, L. (2009) Kia pono te mahi pūtaiao – Doing science in the right spirit. *Journal of the Royal Society of New Zealand*, Volume 39, Issue 4 December 2009, pages 239 - 242.
- Ataria, J., Baker, V., Goven, J., Langer, E.R, Leckie, A., Ross, M., & Horswell, J. (2016) From Tapu to Noa - Māori cultural views on biowastes management: a focus on biosolids. Centre for Integrated Biowaste Research. 25p.
- Baker, V., Ataria, J., Goven, J., Langer, E.R., Leckie, A., Horswell, J. (2016) The CIBR Community Engagement Framework. Report for local government staff, engineers and consultants in the waste and wastewater sector. Centre for Integrated Biowaste Research. 34 p.
- Durie, M. (2003) *Nga Kahui Pou: Launching Māori Futures*. Huia: Wellington.
- Goven, J., Langer, E.R., Baker, V., Ataria, J., Leckie, A. 2012. Community engagement in the management of biosolids: Lessons from four New Zealand studies. *Journal of Environmental Management*, 103: 154-164.
- Goven, J., Langer, E.R., Baker, V., Ataria, J., Leckie, A. 2015. A transdisciplinary approach to local waste management in New Zealand: addressing interrelated challenges through indigenous partnership, *Futures* 73: 22-36, <http://dx.doi.org/10.1016/j.futures.2015.07.011>
- Smith, L. (1999) *Decolonizing Methodologies: Research and Indigenous Peoples*. Zed Books: London.

7 APPENDICES

- Appendix 1 A. Scope from initial business plan and MfE/LEI contract
 B. Outline of CIBR for KCDC
- Appendix 2 Draft outline of approach for Iwi Engagement Plan

APPENDIX 1

Appendix 1a: Excerpts from the Business Case and Original Contract

Waste Minimisation Fund Application - Business case: Small Community Collective Biosolids Strategy –Rural Lower North Island May 2016

A framework is needed to engage with both Tangata Whenua and the wider community. While a framework may be dependent on the individuals and groups involved, such a framework will be largely consistent in content when managing biosolids and sludges. It is proposed that a generic framework can be developed which can be modified within the small consultation framework adopted and tailored by each partner council. There may be a particular focus within that framework for Tangata Whenua and community interest groups. These are discussed in more detail below.

a) Tangata Whenua Engagement Framework

As a Treaty partner, key stakeholder and environmental guardian, Iwi and rūnanga have a very keen interest in being involved in water management and environmental issues. Research undertaken by CIBR (Ataria et al., 2016) has consistently shown that Iwi organisations do not support a 'flush and forget' approach and are very keen to engage with local government on waste and management issues. They hold extensive knowledge of their local environment and history, along with well-established practices for managing human impacts upon natural resources. Such practices are based around tapu and noa, key cultural constructs that were central to traditional Māori society and operate alongside other concepts and values to inform traditional knowledge and resource management frameworks in the present day.

Identifying alternatives to landfilling of biosolids will typically require a consultation process to identify issues, concerns and the potential effects that the discharges may have on affected parties and key stakeholders. This presents both challenges and opportunities for local government and communities. One significant issue often raised by local hapū and Iwi is that there are no cultural frameworks to guide conversations and input into waste management.

b) Pilot Tangata Whenua Engagement Framework

KDCD are developing an Iwi consultation framework for investigating alternatives to landfilling for their biosolids in their District. This process is based on the research undertaken by CIBR and summarised in the research report "From Tapu to Noa - Māori cultural views on biowastes management: a focus on biosolids" (Ataria et al., 2016).

In this stage the project team will work alongside KDCD as they develop their framework and provide the technical (LEI) and scientific (CIBR) expertise required to support the process.²

c) Wider Community Engagement

There are many groups and individual community members that have an interest in how TLAs manage wastes. This interest is often a reflection of either a sense of guardianship related to ensuring wise expenditure of a limited rate-take, or concern about the impact on the environment. The earlier aspect related to finances benefits from early engagement with the community. The later aspect is equally important, but typically relates to the effects of a decision as to where, in this case, the material is applied and how it is to be used.

² KDCD are providing \$30,000 in-kind funding to undertake the Iwi consultation process.

This stage of the project will identify a framework of how to engage with the wider community, and span the progression of ideas from developed concepts for what to do with the biosolids through to managing engagement during specific consenting processes. The work will also incorporate the earlier work within this stage regarding Tangata Whenua engagement.

Milestone Output No.3: A Draft Engagement Framework will be developed which will identify how Tangata Whenua and the community at large can be incorporated into developing long term regional wide solutions for managing biosolids. It will be a framework that each individual partner can use, with scope for modifications to include the engagement dynamics of the individual community. It will also identify options and methods for engagement in situations where biosolids generated in one area are transferred to another area i.e. to another rohe.

Original contract

a) Pilot Tangata Whenua Engagement Framework

KCDC are developing an Iwi consultation framework for investigating alternatives to landfilling for their biosolids in their District. This process is based on the research undertaken by CIBR and summarised in the research report "From Tapu to Noa - Māori cultural views on biowastes management: a focus on biosolids" (Ataria et al., 2016).

In this stage the project team will work alongside KCDC as they develop their framework and provide the technical (LEI) and scientific (CIBR) expertise required to support the process.^[1]

The table below has the high level objectives in the MfE deed

Objective	How will you monitor achievement	Baseline info
Develop an Iwi Engagement Framework of how to engage with local hapū and Iwi as there are currently no cultural frameworks to guide conversations and input into waste management.	Working with Iwi in Kāpiti to develop an Engagement Framework that identifies how Tangata Whenua and the community at large can be incorporated into developing long term regional wide solutions for managing biosolids. Achievement will be met by having a common framework endorsed by each partner council.	A significant issue often raised by local hapū and Iwi is that there are no cultural frameworks to guide conversations and input into waste management.

Tools and methods section of the deed: One significant issue often raised by local hapū and Iwi is that there are no cultural frameworks to guide conversations and input into waste

^[1] KCDC are providing \$30,000 in-kind funding to undertake the Iwi consultation process.

management. CIBR has developed a starting point based on research which is a document called "From Tapu to Noa Māori cultural views on biowastes management: a focus on biosolids" using this document as a basis we will develop a cultural framework.

The milestones are in the table below

<p>1. Development of iwi and wider community Engagement Framework (Part 1):</p> <ul style="list-style-type: none"> a. Initial meeting with Kāpiti Coast District Council to review the work so far and determine how we can provide the technical (LEI) and scientific (CIBR) expertise required to support the process. b. Develop an iwi engagement plan c. Workshop held with local iwi and Hapū to explore values and viewpoints and decide on a short list of preferred scenarios for biosolids using the Quadruple Bottom Line (environmental, cultural, economic and social) sustainable management process. d. Collate data from workshop. 	<p>1. Development of iwi and wider community Engagement Framework (Part 1):</p> <ul style="list-style-type: none"> a. Summary of meeting with Kāpiti Coast District Council b. Copy of engagement plan including plan for hui with iwi and hapū c. Copy of short written report outlining values and viewpoints and preferred scenarios for biosolids in the region as discussed at workshop. 	<p>30 June 2017</p>
---	---	---------------------

Appendix 1b: Background on CIBR for KCDC project

CIBR/LEI - MfE Collective Biosolids strategy - Lower North Island Kāpiti Coast District Council (KCDC) - Pilot Tangata Whenua Engagement Framework

The project team will work alongside KCDC as they develop their framework. CIBR/LEI can provide technical and scientific expertise to support the process of KCDC engaging with Iwi and hapū to better understand Iwi values and viewpoints on the options for biosolids management in the Kāpiti area.

KCDC will be submitting a proposal to Te Whakaminenga o Kāpiti and the ART forum for a local Māori researcher to carry out the 'Scenario development and engagement' work with local Iwi. This will be submitted in July 2017.

Following this process and the appointment of a local researcher, CIBR can provide KCDC with assistance and support in the design of a one day hui/workshop that will;

- Outline the current situation - wastewater treatment plant operations.
- Explore different scenarios and identify preferred scenarios
- Explore Iwi values using Quadruple bottom line (cultural, social, environmental, economic) criteria.
- Explore Mātauranga Māori frameworks on decision making, management and monitoring (ie. Tapu to Noa, Mauri Compass, Mauri model etc), and their applicability in context of what can be done with Kāpiti biosolids.

Who is CIBR?

The ESR Biowaste team leads the Centre for Integrated Biowaste Research (CIBR). We work with other organisations on the sustainable management of the approximately 700,000 tonnes of biowaste sent to landfills in New Zealand each year. CIBR is a formal partnership between ESR, Scion, Landcare Research and Cawthron Institute with a large number of other collaborators.

Sustainable waste management is a 'wicked' problem because of its inextricable mix of social, economic, environmental, infrastructural, political and cultural factors. Tackling this 'wicked' problem requires a multidisciplinary, holistic approach underpinned by the very best science and innovation.

CIBR research is focussed on the sustainable management of biowaste - solid and liquid organic, biodegradable waste. Such wastes include sewage sludge, organic industrial waste; agricultural waste; kitchen/food waste; and green waste, sewage effluent and greywater.

Most biowastes have good prospects for alternative, economical and beneficial end-use options; and in some regions re-use of biowastes such as biosolids is successfully undertaken (e.g. vermicomposting). In an agricultural context, beneficial use of biowaste may offset the cost of inorganic fertilizers, while improving soil quality. However we need to manage other components such as:

- Microbes
- Trace elements
- Organics
- Nutrients

CIBR has been working on finding sustainable solutions for the management of biowastes, centred around land application. Our research is focussed on key research areas:

- characterising chemical and microbial levels in biowastes;
- generating environmental fate, transport and effects data for priority chemicals and microbes;
- assessing waste processing technologies –e.g. lagoons and vermicomposting
- developing systems for mitigating and minimising environmental impacts; and
- developing frameworks to support and aid the community and iwi engagement;

CIBR also provides the science behind the development of policy and guidelines for biowastes such as biosolids, on-site wastewater and greywater re-use in New Zealand. Much of our current research is focused on future proofing sustainable re-use of biowastes by gaining an understanding of the fate and effects of new and emerging contaminants.

Appendix 2

CIBR/LEI - MfE Collective Biosolids strategy - Lower North Island Iwi Engagement Plan (draft) - June 2017 Kāpiti Coast District Council (KCDC) - Pilot Tāngata Whenua Engagement Framework

Outline:

A significant issue often raised by local hapū and Iwi is that there are no cultural frameworks to guide conversations and input into waste management. The work with Iwi in Kāpiti to develop an Engagement Framework that identifies how Iwi, tāngata whenua and community values can be incorporated into developing long-term regional-wide solutions for managing biosolids.

The project team will work alongside KCDC to support their engagement with Iwi and to develop a 'pilot tāngata whenua engagement framework'. CIBR/LEI aims to provide technical and scientific expertise to support KCDC to better understand and consider Iwi values and viewpoints on the options and scenarios for biosolids management in the Kāpiti area. The pilot approach with KCDC and local Iwi will draw upon the 'CIBR/LEI community engagement framework' and the 'Tapu to Noa' approaches to develop an engagement framework.

This work will be presented to wider lower North Island Councils and Iwi groups for consideration on ways that mana whenua values and mātauranga Māori frameworks can better inform decision-making, management and monitoring processes for waste and wastewater treatment options and biosolids reuse in the wider region.

There are three Iwi within KCDC's jurisdictional area. These are Te Āti Awa ki Whakarongotai, Ngāti Raukawa ki te Tonga, represented by Ngā Hapū o Ōtaki and Ngāti Toa Rangatira.

We have outlined three phases to the work:

Phase 1: Co-design and set up (Dec 2016 – July 2017)

Initial scoping meetings held with CIBR and KCDC's wastewater management and Iwi Relationships Manager to co-design the approach. Key actions identified included;

1. Iwi engagement must also be addressed in the high level governance arrangements for the project. A Terms of Reference was developed and Todd Taiepa, Poutakawaenga - Principal Māori Advisor for the Palmerston North City Council (PNCC) has been appointed as Māori Advisor for the project.
2. The research will be led and guided by a local Māori researcher or a tri-Iwi working party. KCDC will be submitting a proposal to KCDC Te Whakaminenga o Kāpiti) to gain their approval on a process to carry out the 'Scenario development and engagement' work with local Iwi. This proposal will be submitted by Martyn Cole, KCDC Water & Wastewater Asset Manager, in September 2017.
3. Mahinarangi Hakaraia (Ngāti Raukawa Ki Te Tonga), has now replaced Monica Fraser as KCDC's Iwi Relationships Manager. Martyn and Mahinarangi will support liaison between the tri-Iwi working party or appointed local Māori researcher and CIBR/LEI team in the co-design of a hui or forum to engage with local Iwi and hapū.

Following the process of approval from Te Whakaminenga o Kāpiti, the CIBR team will liaise with KCDC's Iwi Relationships Manager, the local researcher, or tri-Iwi working party to plan together how the CIBR processes might be utilised alongside a wider Iwi-led research process to support the development of a 'pilot tāngata whenua engagement framework'.

Phase 2: Design and delivery of a Hui/workshop with KCDC and local Iwi/hapū (July 2017 – Dec 2017)

We envisage that CIBR could provide KCDC with assistance and support in the design of a one day hui/workshop. The hui would aim to combine technical and cultural perspectives to explore and consider different scenarios for wastewater and biosolids management for the Kāpiti Coast area. The timing and content of the hui, or other 'fit for purpose' activities, will be designed with the appointed local Māori researcher or tri-Iwi working party to be delivered at an appropriate time in the research cycle.

Draft outline of Hui/workshop

1. Outline the current situation - wastewater treatment plant operations, current site and processes, opportunities/constraints.
2. Explore local cultural data including sites of significance
3. Explore Mātauranga Māori frameworks on decision making, management and monitoring (ie. Tapu to Noa, Mauri Compass, Mauri model etc), and their applicability in context of what can be done with Kāpiti biosolids.
4. Incorporate Quadruple bottom line (cultural, social, environmental, economic) criteria.
5. Explore different scenarios and identify preferred sites/scenarios for Iwi.
6. Identify guiding principles to support good process for Council and Iwi engagement in the wider lower North Island.

Phase 3: Co-analysis with local researcher, CIBR and KCDC (July 2017 – July 2018)

Following delivery of the hui, the data gathered will be analysed and written up, working closely with KCDC staff and the appointed local Māori researcher or tri-Iwi working party.

A written report of the hui/workshop will identify the issues and solutions specific to the KCDC wastewater treatment situation, and bring together different technical and cultural knowledge systems and considerations in the development of viable scenarios for the Kāpiti Coast area.

It is envisaged that the scenario development work with Iwi and hapū will support KCDC's decision-process in determining viable options for future biosolids and wastewater treatment – for both local infrastructure investments for the Kāpiti Coast area, and in relation to how Kāpiti might wish to connect with collective biosolids solutions for the lower North Island region.

Outcomes and learnings from Phases 1-3 will be incorporated into an Engagement Framework that provides pathways and processes for conversations with Tangata Whenua about biosolids management. The framework will be presented to the wider project stakeholders to be considered as a resource that may better support council/Iwi decision-making processes and the development of viable scenarios for biosolids reuse for the wider lower North Island region.



Ministry for the
Environment
Manatu Mo Te Taiao

L O W E
Environmental
I m p a c t

E / S / R
Science for Communities



WHANGANUI
DISTRICT COUNCIL
Te Kaunihera a Rohe o Whanganui

