FINAL REPORT

OF

THE

WASTE MINIMISATION TASKFORCE

'Moving Kāpiti from the important many to the vital four'

5 December 2019

WHY WE NEED TO TAKE ACTION NOW1

Did you know?

- On a per capita basis New Zealanders sent 730.6kg of urban waste to landfill in 2016. This made us one of the highest generators of household waste in the OECD and placed New Zealand was among the OECD lowest in the percentage of waste recycled.
- New Zealanders currently generate about 734kg of waste each year. That amount has increased by around 20 per cent over the past three years.
- In New Zealand, a landfill 'tax' of \$10 per tonne is applied to promote and fund waste diversion activities. This is low compared to similar taxes in the OECD of up to \$160 per tonne.²
- New Zealand produces some of the world's highest volumes of e-waste (electronic equipment such as cell phones, laptops and television).

In Kāpiti, since 2010:

- kerbside recycling collection annual volumes have remained relatively flat at around 67kg per person,
- kerbside waste collection annual volumes have grown from 208kg per person to 260kg; and
- waste to landfill annual volumes have grown from 411kg per person to 538kg

¹ The information here is from various sources including: https://www.mfe.govt.nz/waste/why-reducing-reusing-and-recycling-matter

² The Government is proposing to increase the levy and apply it to more landfill types. See https://www.mfe.govt.nz/consultations/landfill-levy

Introduction

Kāpiti Coast District Council is now in the process of implementing its second Waste Management and Minimisation Plan; the first covered the period 2011-2017. The core purpose of each of the plans has been, through a variety of approaches, to reduce the amount of waste going to landfill. In support of implementing the actions and activities detailed in the WMMP's the Council has expended \$1.6 million over the eight years.

However, the clear evidence is that since 2010 the amount of waste going to landfill has actually increased; although it is estimated there may be a slight reduction this year. Different things need to be done – and things need to be done differently. This report provides an opportunity for the Council to get on and do the right things.

Kāpiti Coast District Council (KCDC), together with other councils in New Zealand, is now turning its attention more fully to managing those things that, if left alone, will have a deleterious impact on the health of the planet. While for many years 'waste³' was considered to be primarily a public health issue, it is now considered by many people to be a fundamental environmental health issue. Waste is polluting our land, our lakes and rivers, and our coasts and oceans, and is estimated to contribute 5 per cent of New Zealand's greenhouse gas emissions.

Given this background, the importance of waste as an issue for many in the Kāpiti community, and the need to generate progress in implementing the 2017-2023 Wellington Regional Waste Management and Minimisation Plan (RWMMP17), in March 2019 a Waste Minimisation Taskforce (WMTF) was established⁴. Made up of a small number of community representatives, including iwi members, as well as Councillors, the WMTF had as its principal purpose:

'to review the actions listed in the Regional Waste Minimisation and Management Plan 2017 (WMMP), and report back to Council on how these actions may be implemented to achieve the most cost-effective reduction in the volume of waste materials in the District.'5

This report contains the WMTF's insights and opportunities that were identified by the members as they discussed an extensive range of issues among themselves, and as they talked with and listened to waste experts, and as they visited various waste related sites. It is hoped that they will make a contribution to the District lifting its waste management and minimisation performance, and to substantial inroads being made to the 33 per cent reduction target in waste going to landfill by 2026; the target identified in the 2017-2023 WMMP.

With the completion of this report, the work of the WMTF is also completed. The extent of the contribution it makes to the Council's waste management and minimisation efforts, lies solely in the Council's hands.

Our hope is that in deciding what to do, the Council will be guided by the vision of 'toitū Kāpiti' set out in its Annual and Long Term plans, and which gives a priority to the protection and improvement of our land and waters, so that an environment can be created which is able to

³ In simple terms waste is defined as 'anything disposed of or discarded'.

⁴ The WMTF Terms of Reference are at Annex A.

⁵ Para 5 of KCDC IS-19-753 dated 21 March 2019

sustain, support and nourish its communities. Toitū te whenua, toitū te wai, toitū te tāngata, toitū Kāpiti!⁶

We would like to acknowledge, in particular, the invaluable contribution made to our work by both the Council's Solid Waste Services Manager, Adrian Mitchell who, despite the pressures of his work as a Council staff member, was generous with the time he gave to the WMTF, and by Marguerita Harris, Executive Secretary to the Group Manager, Infrastructure Services, who provided us with valuable administrative support.

Waste Minimisation Taskforce

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⁶ https://www.kapiticoast.govt.nz/your-council/planning/annual-and-long-term-plans/our-vision-and-direction/

Executive Summary

Introduction

In 2011, Kāpiti's first WMMP came into effect. Six years later it was replaced by the second, and current, one. In reflecting on the eight years of waste related work that has been guided by those two WMMP's, two strong linkages between the two Plans are apparent:

- The overarching target in each report was to reduce the amount of waste per person, per year, that was going to Class 1 landfills; and
- The target was included because, despite the influence on it of a range of factors, including population and consumer growth, the Council believed it could be achieved.

Unfortunately, the evidence is that the amount of waste going to Class 1 landfills, (despite everything that is being done, including waste related expenditure over eight years of some \$1.6 million), has been increasing; although it is estimated there may be a slight reduction this year. If this year's result is to be more than a 'one off', and substantial reductions in waste going to landfill are to be achieved, then changes to the Council's current approach need to be made.

In March this year, almost two years into the 2017-23 Waste Management and Minimisation Plan (WMMP), the Council approved the establishment of the Waste Minimisation Taskforce (WMTF) for the purpose of reviewing the WMMP, to identify priority projects for meeting the Council's target for the reduction by 2026 of 33 per cent in waste going to landfill, and to report back to Council plans for the projects; including timelines and costs. It was not until May that the group, consisting of community and elected member representatives, held its first meeting.

Over the next seven months, the WMTF set about its task. It met fortnightly, spoke with Council staff from the waste management area, listened to experts in waste as a challenge, read relevant literature, visited three landfill sites and attended two regional Waste Forum meetings. Early on, it became clear that both the task force approach and the WMMP, as a list of actions rather than a plan for action, mitigated against the WMTF achieving the specific task for which it was established.

Four vital things for Kāpiti

Nevertheless, given the opportunity to make a contribution, the WMTF agreed that it could help the Council achieve what it had signed up to, and to lift its waste management and reduction performance. Consequently, the WMTF has identified four vital things that, if implemented, would have a substantial impact in Kāpiti in reducing waste going to landfill by 2026 – and beyond.

The principal drivers for those things, which complement and do not replace the WMMP, are:

- The transformational policy and regulatory changes are driven by central government.
 Consequently, the Council, alongside other local government agencies, needs to be able to position itself as a valued partner and a persuasive voice with a seat at the table.
- The two waste streams that provide the greatest potential for substantial reduction are Construction and Demolition waste and food and green (organic waste), and so this is where Council should make a focused effort to make a positive impact.

• Ultimately, waste will be managed effectively and reduced substantially by people changing their behaviour – and understand the effects of it, in relation to waste, have local, regional, national, and global impacts.

The vital four things for Kāpiti if it is to reduce waste are listed in the table below:

PROJECT PRIORITY ⁷	STRATEGY	PROJECT
1	Position local government to shape government policy and regulatory decisions.	Step Up . Council take a leading role in developing collaborative local government waste related efforts at the regional and national levels.
2	 Focus on waste streams that provide the greatest opportunities for reductions Provide an accessible and integrated waste diversion facility at an appropriate site in the Kāpiti District. 	Otaihanga. Council establish an exemplar district waste management facility at the Council's Otaihanga site; with an initial focus on managing C & D waste.
3	 Focus on waste streams that provide the greatest opportunities for reductions Identify waste reduction approaches that are accessible to the community. Achieve an early success in reducing waste to demonstrate to the community what clear intent, a sense of urgency, and financial investment can achieve. 	Kai Tiaki. Council establish a food waste composting facility in the Kāpiti District – accompanied by a comprehensive education and engagement programme, focused on composting as an effective and accessible waste reduction strategy.
4	Ensure every participant in the waste system, whether a domestic or commercial one, young or old, is a fully informed and engaged one.	E2. Council facilitate demonstrably effective education and engagement programmes across the Kāpiti District and into those areas where they will make the greatest difference in changing community behaviours.

Table: The Vital Four Things

The opportunities

Additionally, the WMTF identified thirteen opportunities which, if turned into action plans by the Council, would complement, not only the positive effects of the four vital things, but also ongoing work in progressing the WMMP. The opportunities are⁸:

Opportunity 1

The Council could improve the utility of its waste management and minimisation plan by developing a complementary strategic plan, incorporating high level strategic goals and associated strategies, targets and accountabilities, with which the WMMP would be aligned.

⁷ The allocation of these priorities is not intended to encourage a sequential approach to seizing the opportunities they represent.

⁸ The 'highest' priority opportunities are outlined in green.

Opportunity 2

The Ministry for the Environment (MfE) should review the policy associated with Waste Levy funding that causes the extremely tight linkage with the WMMP to constrain the 'planning' aspect of the WMMP, so that plans for action, rather than lists of actions, are able to be developed.

Opportunity 3

The various approaches and opportunities identified in this report will, <u>if implemented</u>, serve to help the Council make noticeable and sustained progress in reducing waste going to landfill; as well as achieve other waste management and minimisation benefits.

Opportunity 4

Whenever the Council uses a taskforce for any task, then the Chair, at least, should be formally debriefed by Council officers, so that a data base of 'lessons learned' can be established within the Council to facilitate the establishment of task forces that are optimally fit for purpose.

Opportunity 5

The Council should review the means by which it can influence national decision making and should, for example, form a view of whether Local Government NZ (LGNZ) is fit for purpose in terms of generating the best possible local/central government relationship and in its ability to advocate on behalf of local government bodies on those issues that matter the most.

Opportunity 6

Local government should be specifically represented with provision for two to three members on the Waste Advisory Board.

Opportunity 7

The Council should, in addition to carrying out work to improve the operation of the current transfer stations, make an early decision for work to start on developing a proposal to develop the Otaihanga site along the lines described in this section of this report.

Opportunity 8

The WMTF understands the proposal for the Food/Green waste funding application to the Waste Minimisation Fund is being managed within Council staff delegation. Council should engage directly in the process so that the full range of strategic benefits can be accessed.

Opportunity 9

A formal communication and engagement programme should be developed for Project Kai Tiaki and integrated into the project's acquisition, installation and operational phases; promoting both the HotRot capability and the benefits of composting in reducing organic waste going to landfill.

Opportunity 10

The Council should use the extra organisational capacity that will be provided by the two additional staff in this area, to increase the education and engagement effect across the whole community; particularly through digital media.

Opportunity 11

The Council should identify and exploit opportunities to demonstrate leadership in establishing a 'fit for purpose' waste management and waste reduction system in Kāpiti.

Opportunity 12

The Council should take an active interest in the progress and outcomes of the proposed product stewardship scheme so that it is positioned to respond proactively to whatever it delivers.

Opportunity 13

The Council should, in the meantime, implement changes that will improve the recycling and educational capabilities of the current recycling sites.

Conclusion

To fully benefit from the various opportunities in this report will require a firm decision that reducing waste going to landfill, and providing a fit for purpose waste management system of which both the Council and community take ownership, are important matters for the District, and will not be able to be addressed by taking an approach that merely positions them as 'business as usual activities.'

Furthermore, because some of them will require financial investment, then the Council will need to obtain the right information to enable them to make the right long-term decisions to ensure the right balance is achieved between minimising waste and achieving key financial objectives.

Whether these opportunities are seized or ignored, in part or in full, rests with decisions that it will be the Council's responsibility to make. Over the past eight years it has failed to achieve the waste reduction targets it has set for itself, in the expectation that they can be achieved. This report provides an opportunity for the Council to try something different and so sustain the positive result that is expected this year.

Part 1 – The Council's involvement in waste minimisation and management

Introduction

- 1.1 New Zealand's waste related and local government legislation make Council involvement in waste management and minimisation activities an obligation. And while there is some discretion around the specifics of the 'what' and 'how', it is clear that much of the community expectation around the nature and extent of the Council's performance in regard to that obligation is set at a high level.
- 1.2 Figure 1 below, illustrates the key elements that shape the Council's development of the waste management and minimisation plan and its implementation and where the WMTF's work is situated.

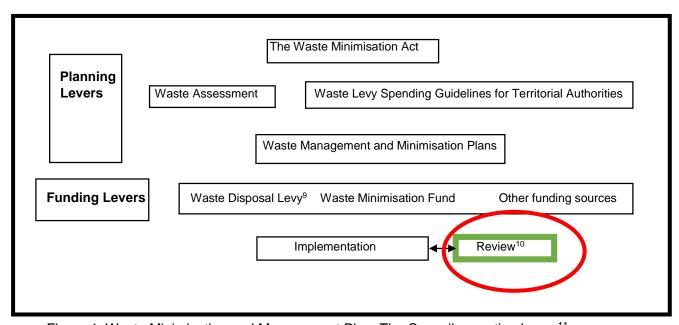


Figure 1: Waste Minimisation and Management Plan: The Council operating levers¹¹

⁹The Waste Levy contributes over 50% of what Council spends on waste minimisation related activities.

¹⁰ WMTF's area of interest.

¹¹ See Annex B for descriptions of the elements in Figure 1.

Part 2 – The 2017-23 Waste Management and Minimisation Plan (WMMP): identifying "the important many"

Introduction

2.1 In developing their WMMP, the Council must consider a variety of factors, including the various methods of waste management and minimisation¹², the New Zealand Waste Strategy, and 'the most recent assessment undertaken by the territorial authority...' In reviewing the WMMP, it eventually became clear to the WMTF that, while the Regional Waste Assessment was a key influence on the actions within the WMPP, the strongest driver seemed to be the policy underpinning Councils' expenditure of the waste (disposal) levy received annually from the Ministry for the Environment (MfE).

The Regional Waste Assessment (RWA)

- 2.2 The RWA which informed the current regional and district WMMP's, was completed in 2016. It is a comprehensive and, within the limits of available information, robust piece of work which identified as major issues:
 - a. **Data limitations**. Without data, targets and progress against them cannot be readily measured.¹³ While the Councils have reliable data on the waste flows that they control, data on those services provided by private industry is limited.
 - b. Time frame balance. The horizon for the WMMP is centred on a 10-year timeframe, in line with councils' Long-Term Plans (LTPs). However, for some assets and services, and the associated costs, it is necessary to consider a longer timeframe.¹⁴
 - c. **Solid waste focus**. In line with the Councils' previous joint WMMP, this Waste Assessment is focused on solid waste that is disposed of to land or diverted from land disposal including, of course, disposal of solids from waste water treatment facilities. This, however, is a Council derived constraint because, ultimately, it is up to Councils to determine the scope of their WMMP in terms of which wastes and diverted materials are to be considered within the plan.'15
 - d. Identification of best practice. While there is far from a consensus around best practice collection and processing systems, there is a convergence towards certain systems in new contracts – notably two-stream collection of recyclable materials, with glass collected separately, and a growing move towards smaller wheeled bins for domestic refuse.¹⁶
 - e. **Effectiveness and consequences of collection systems**. More convenient collection systems encourage more waste material. An increase in the numbers of large wheeled bins used for refuse collection, for example, drives an increase in the quantities of material disposed of through them.¹⁷ Conversely, more convenient

¹² That is, reduction, reuse, recycling, recovery, treatment, disposal and disposal.

¹³ WA Section 1.4.1

¹⁴ Ibid Section 1.4.2

¹⁵ Ibid Section 1.4.3

¹⁶ Ibid Section 4.2.1.1

¹⁷ See Duncan Wilson's '*The Horror of the 240 litre bin*' at https://www.wasteminz.org.nz/wp-content/uploads/WasteMINZ-2014-The-horror-of-240-litre-wheelie-bins.pdf

recycling systems with more capacity help drive an increase in the amount of recycling recovered.¹⁸

- 2.3 The key opportunities for improvement for inclusion in the WMMP were identified as:
 - a. Reverse the current trend of increasing quantities of levied waste to Class 1 landfills
 - b. Improve the poor data quality which characterises the information space
 - Make an effort to determine the quantities of waste being disposed into Class 2-4 landfills
 - d. Improve overall recycling performance
 - e. Implement effective management of sewage sludge/biosolids
 - f. Increase the diversion rate on organics
 - g. Identify opportunities for alignment of Councils approaches to funding and management models to enable greater joint collaboration in Council service delivery

The Waste Disposal Levy (Waste Levy)

- 2.4 While the RWA provides a solid evidential base on which to build the WMMP, it is very likely that the major influences on the plan are the Waste Minimisation Act provisions related to expenditure of the Levy; namely Section 32, which states:
 - 'A territorial authority may spend the levy money it receives under section 31 only—
 - (a) on matters to promote or achieve waste minimisation; and
 - (b) in accordance with its waste management and minimisation plan.'
- 2.5 And, MfE guidance states, 'Waste management and minimisation plans (WMMP) prepared by each territorial authority set out how the levy will be used.' The Ministry's 'Waste Levy Spending Guidelines for Territorial Authorities' include, 'If your WMMP includes a list of explicit actions to help promote or achieve waste minimisation, these actions can be fully or partially funded from your levy money.' 20

Insight 1

2.6 The WMPP process has a number of notable deficiencies; including a lack of targets and associated processes and accountabilities that enable progress towards the targets to be practically tracked and, if required, plans recalibrated. A consequence of the dependent relationship between the WMPP and the Waste Levy, is that rather than being a plan focused on delivering strategic change based on the very good work that goes into the RWA, and a plan which enables effective and accountable implementation, the WMPP becomes a detailed list of activities marked for Waste Levy funding, a list that will facilitate a 'pass' in any MfE Waste Levy expenditure compliance review, and one that compromises the potential for performance improvement inherent in the Waste Assessment effort.

¹⁸ Ibid Section 7.1.4

¹⁹ https://www.mfe.govt.nz/waste/waste-guidance-and-technical-information/waste-disposal-levy/waste-disposal-levy-payments

²⁰ Waste Levy Spending Guidelines for Territorial Authorities p3

Opportunity 1

2.7 The Council could improve the utility of its waste management and minimisation plan by developing a complementary strategic plan, incorporating high level strategic goals and associated strategies, targets and accountabilities, with which the WMMP would be aligned.

Opportunity 2

2.8 MfE should review the policy associated with Waste Levy funding that causes the extremely tight linkage with the WMMP to constrain the 'planning' aspect of the WMMP, so that plans for action, rather than lists of actions, are able to be developed.

The current plan and progress in delivering its actions and activities

- 2.9 The activities in the current WMMP and progress against them are shown in detail at Annex C. A summary of the WMMP's status is in Table 1 below. Notwithstanding a lack of timelines and targets in many parts of the plan, the overall result appears to be a satisfactory one.
- 2.10 Nevertheless, the majority of the areas which are 'lagging' are those related to engagement, and education type activities; and this 'gap' is consistent with the conclusions of the WMTF which highlight this as one of the vital areas for attention.
- 2.11 Nevertheless, the WMTF view is that the relative lack of progress is very likely to be more indicative of a lack of resources in these particular areas, than it is of the size of the ambition set out in the plan. Certainly, the WMTF saw no evidence that it reflects any lack of staff effort.

Number of activities	Activity on track	Activity has major problems	Activity has minor problems	Activity yet to start	Progress cannot be determined
24	14 (58%)	1	7 (30%)	2	0

Table 1: Current status of WMMP

The WMMP's and their effects on waste reduction

- 2.12 It is often the case that taking actions is assumed to be making progress in the right direction of travel. This current WMMP (2017-2023) is the second WMMP developed to effect waste management and minimisation objectives. The first one, which covered 2011-2017, contained no specific targets for reducing waste to landfill, but did set out the following objectives:
 - a. reduced total volumes of waste disposed to landfill;
 - b. increased volumes of waste diverted through reuse and recycling; and

- c. increased recovery of materials and/or energy from waste.²¹
- 2.13 The effect on waste minimisation since 2010, including nine years of WMMP directed activity, is shown in Table 2.

Item (per capita)	2010	2013	2017	2019 (estimated)
Kerbside waste	208kg	206kg	230kg	260kg
Kerbside Recycling	67kg	67kg	64kg	67kg
Waste to landfill	411kg	441kg	546kg	538kg ²²

Key: Trending in the wrong direction Trending in the right direction Trend steady

Table 2: Progress in minimising waste to landfill 2010-2019

- 2.14 The 2011-2017 WMMP makes the point that, 'waste is primarily linked to economic growth and population'. Nevertheless, while taking into account demographic and economic projections for the region, including Kāpiti, the WMMP concludes that, ', an overall modest reduction in total waste to landfill can be projected for Councils of the Wellington Region.'²³
- 2.15 The information in Table 2, however, demonstrates that the WMMP's may not be particularly well focused on the actions and activities that will deliver the waste related effects that Councils wish to achieve; and that this is affecting the value that is derived from the expenditure of \$1.6 million over the eight years the WMMP approach has been in effect.
- 2 .16 Clearly, if the right effects are to be achieved, then things need to be done differently. This report provides some options for assisting the Council to do that.

Insight 2

2.17 The evidence of two WMMP's to date is that they are not delivering to Council the waste minimisation effects that it wishes to achieve – through the plans and through the investment of funding.

²¹ Waste Management and Minimisation Plan 2011 – 2017, p20

²² This slight reduction is considered immaterial in terms of indicating a sustainable change in the trend.

²³ ibid

Opportunity 3

2.18 The various approaches and opportunities identified in this report will, <u>if</u>
<u>implemented</u>, serve to help the Council make noticeable and sustained progress
in reducing waste going to landfill; as well as achieve other waste management
and minimisation benefits.

Part 3 – The Waste Minimisation Taskforce

Introduction

3.1 The WMTF includes two elected Councillors and a small number of other members were invited to join the WMTF. They are drawn from a couple of community groups, and include three iwi representatives. The first meeting of the group was on 16 May 2019.

Who we are

3.2 The members of the WMTF are listed in Table 3; outline biographies of the members are at Annex D.

NAME	ORGANISATION/IWI	COMMENT
David Ledson (Chair)	Ōtaki Community	Community representative
Kevin Burrows ²⁴	Kāpiti Grey Power	Community representative
Deirdre Kent	Low Carbon Kāpiti	Community representative
Sophie Handford	Youth Advisory Council	Community/Youth representative
Kirsten Hapeta	Ngā Hapū o Ōtaki	Community/Iwi representative
Natalia Repia	Ngāti Toa Rangatira	Community/Iwi representative
Bill Carter	Te Ātiawa ki Whakarongotai	Community/Iwi representative
K Gurunathan	KCDC (Mayor)	Elected member representative. (Deputy Mayor Janet Holborow designated as the alternate in the case of the Mayor's absence.)
Jackie Elliott	KCDC (Councillor)	Elected member representative

Table 3: Members of the WMTF

What we were to do

- 3.3 The WMTF's Terms of Reference (TOR) are at Annex A. The purpose they established for the WMTF was to review the actions listed in the 2017-23 WMMP and to report back to the Council on how the actions are able to be implemented to 'achieve the most cost-effective reduction in the volume of waste materials in the District. The associated 'primary objectives' were to:
 - a. review the opportunities in the WMMP to achieve the most cost-effective reduction in waste to landfill to meet the 33 per cent reduction target for 2026 which is set in the WMMP:
 - b. for the opportunities develop options, both short and long term with timelines, including potential advantages/disadvantages and potential costs; and
 - c. report to Council.

²⁴ Represented by Trevor Daniell from 13 June to 30 July.

How we worked

- 3.4 The work cycle for the WMTF when it was established was an intended one-hour meeting fortnightly from 6pm on Thursdays. This was generally adhered to although it was not unusual for the meetings to extend to around two hours.
- 3.5 Three visits were undertaken to (1) Otaihanga, including Composting NZ, (2) the Southern Landfill in Wellington, and (3) the Hōkio Landfill in Levin. It had been intended to visit Christchurch for a benchmarking visit, but it proved impossible for the Christchurch end to arrange a convenient date. Additionally, a WMTF member was able to attend a Wellington Regional Waste Forum meeting in Upper Hutt and to visit Poly Palace in Porirua and members attended a Regional Waste Forum meeting hosted by KCDC in Paraparaumu. All of these activities, especially those that had a local context, provided useful insights into various aspects of waste management.
- 3.5 The WMTF also received presentations from Jonny Best qualified in the building and construction trade, he currently works as a Training Advisor for the Building and Construction Industry Training Organisation. The purpose of his participation was to provide insights into the construction and demolition (C & D) waste stream. Careoline-Charlotte Myers, the Director of Organic Wealth, a waste minimisation consultancy and education firm, also generously gave time to speak with the WMTF about a range of waste issues; in particular, the benefits of composting as a waste strategy.
- 3.6 In addition to regular briefings from Adrian Mitchell, briefings were also received from Council staff Katharina Kennedy and Jenny Carter and there was an introductory session with Nienke Itjeshorst, the newly appointed Sustainability and Resilience Manager.
- 3.7 The WMTF has made a submission to the Government's proposed product stewardship scheme, and is considering making a submission to the proposal to make changes to the Waste Levy and address a number of other waste related matters, including a review of the Waste Minimisation Act.
- 3.8 That it was possible to engage with only a very small number of industry representatives, and to do so 'in their place', was a great disappointment to the WMTF. Originally, the members had planned to get out and about; in part to address any community expectations that the group was intended to be a vehicle for community consultation on the WMMP. That the WMTF did not achieve this in any meaningful way, was primarily due to the reality that the available time members had was limited by their other commitments.
- 3.9 In terms of reviewing the WMMP, the WMTF agreed to a process that it was very quickly evident was too complex for the task that had been set. Consequently, it was decided that it would make the biggest difference by focusing on just a few 'game-changing' initiatives. Consequently, the WMTF sought the advice of Council Solid Waste staff as subject matter experts to identify potential focus areas. From this advice, the WMTF relatively quickly settled on an initial five focus areas, while also agreeing that other matters of interest to WMTF members would be discussed as they arose; a selection of these is at Annex E to provide a flavour of those discussions.

What we achieved

- 3.10 In many ways perhaps the greatest achievement of the WMTF is that, as a group, the environment at meetings was collegial and collaborative. All recognised, and appreciated, the opportunity to support the Council's efforts in waste management and minimisation; on the basis that what was delivered to the Council would not be ignored.
- 3.11 It soon became apparent that there were shortcomings in the 'taskforce' approach as a methodology for addressing the purpose and objectives in the Terms of Reference as there were in the WMMP as the foundation on which the work was to be built.

Nevertheless, the WMTF believes that the various opportunities and insights in this report, and in particular in Part 4, have the potential to shape the focus of the new Council on to the 'vital four' things that will make a positive contribution to the Council's waste management effort in the Kāpiti District.

Insight 2

3.12 The WMTF was a good idea, but it turned out in practice to have major operational challenges; including conducting its work across a Council election. While a taskforce approach is useful to facilitate community involvement in important Council activities, the form of the model used, including its members and the level of available Council support, needs to be more tightly aligned with the task and the tools available.

Insight 3

3.13 The purpose of any taskforce, and its expected outcomes, should shape the membership; and, in particular the mix of Council, community and subject matter experts. Having the right competencies across the membership will be vital to determining whether or not the taskforce will be successful.

Insight 4

3.14 The work cycle of the taskforce was not aligned to the task. Neither was the level of Council support available, nor the ambition of the WMTF with respect to engagement with community and industry stakeholders. Setting a cycle which enables the task to be characterised as 'a community service' does not always get it onto the path for a successful outcome.

Insight 5

3.15 Having specific iwi representation on the WMTF was an important component of its membership makeup and will be so in any 'group' set up to address waste matters. Waste, and its disposal or sequestration, has deep cultural importance to iwi. Nowhere is this truer than when waste is moved to another iwi's rohe/area, and emphatically when human waste (even after treatment) is concerned.

Opportunity 4

3.16 Whenever the Council uses a taskforce for any task, then the Chair, at least, should be formally debriefed by Council officers, so that a data base of 'lessons learned' can be established within the Council to facilitate the establishment of task forces that are optimally fit for purpose.

Part 4 – The Vital Four things for Kāpiti

Introduction

- 4.1 This Part of the report sets out the vital four things from among the plethora of detail in the WMMP that the WMTF believes will together have the biggest impact in enabling the Council to achieve the waste reduction target set out in the WMMP.²⁵ The principal drivers for identifying these four things, which complement and do not replace the WMMP, are:
 - The transformational policy and regulatory changes are driven by central government. Consequently, the Council, alongside other local government agencies, needs to be able to position itself as a valued partner and a persuasive voice with a seat at the table.
 - The two waste streams that provide the greatest potential for substantial reduction in waste going to landfill are Construction and Demolition waste and food and green (organic waste), and so this is where Council should make a focused effort to make a positive impact.
 - Ultimately, waste will be managed effectively and reduced substantially by people changing their behaviour – and understand the effects of it, in relation to waste, have local, regional, national, and global impacts. An effective approach to achieving this change can be summed up as – 'education by example, diversion by persuasion'.
- 4.2 They four things are outlined in Table 4 below:

PROJECT PRIORITY ²⁶	STRATEGY	PROJECT
1	 Position local government to shape government policy and regulatory decisions. 	Step Up . Step Up. Council take a leading role in developing collaborative local government waste related efforts at the regional and national levels.
2	 Focus on waste streams that provide the greatest opportunities for reductions Provide an accessible and integrated waste diversion facility at an appropriate site in the Kāpiti District. 	Otaihanga. Council establish an exemplar district waste management facility at the Council's Otaihanga site; with an initial focus on managing C & D waste.
3	 Focus on waste streams that provide the greatest opportunities for reductions Identify waste reduction approaches that are accessible to the community. Achieve an early success in reducing waste to demonstrate to the community what clear intent, a sense of urgency, and financial investment can achieve. 	Kai Tiaki. Council establish a food waste composting facility in the Kāpiti District — accompanied by a comprehensive education and engagement programme, focused on composting as an effective and accessible waste reduction strategy.

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²⁵ The Regional WMMP sets a primary target of a reduction in the total quantity of waste sent to Class 1 landfills from 600kgs/person/year to 400kgs by 2026.

²⁶ The allocation of these priorities is not intended to encourage a sequential approach to seizing the opportunities they represent.

PROJECT PRIORITY ²⁶	STRATEGY	PROJECT
4	 Ensure every participant in the waste system, whether a domestic or commercial one, young or old, is a fully informed and engaged one. 	E2 . Council facilitate demonstrably effective education and engagement programmes across the Kāpiti District and into those areas where they will make the greatest difference in changing community behaviours.

Table 4: The Vital Four Things

- 4.3 In reviewing whether these four projects were indeed the best things to focus on, the WMTF spent some time reflecting on the impact they would have on the various waste streams that go to landfill; as illustrated in Annex G. Ultimately, it became clear to the WMTF that they had settled on the 'Vital Four' things that would make the biggest difference in reducing the amount of waste that goes to landfill in Kāpiti; as well as contributing to improved waste management and minimisation outcomes across the 'waste system'.
- 4.4 Organisations that aspire to excel, do not have a this <u>or</u> that mindset, rather they stretch to be able to do this <u>and</u> that. Consequently, it is not intended by saying, 'Execute the four vital things', that a range of the important things on the WMMP should be ignored and put off for another day. So, while taking steps to obtain a HotRot system, work should proceed, concurrently, to encourage households to adopt composting as a waste reduction strategy; and, while pursuing the development of Otaihanga, the existing transfer stations should be refreshed to provide both a waste reduction and waste education capability.

Project Step Up

- 4.5 The transformation waste related policy and regulatory actions will be initiated by central government. As Local Government NZ (LGNZ) points out, waste is a significant issue for local government to deal with, and it takes the position that 'a lack of supporting Government policy and action has constrained councils' ability to address waste issues effectively. ²⁷ Notwithstanding the validity of this point, and the unique and substantial obligations imposed by national legislation, arguably councils have allowed themselves to be regarded by central government as just another stakeholder; for example, the consultation process for the Government's product stewardship and Waste Levy proposals treat councils in this manner.
- 4.6 In January 2018, LGNZ released the Local Government (LG) Waste Manifesto. It sets out the waste management actions which Territorial Authorities believe will enable real reductions in waste to landfill and reduce the costs borne by councils and their communities.²⁸ They are²⁹:
 - a. Review the New Zealand Waste Strategy to set a clear programme for action
 - b. Expand the Waste Disposal Levy and progressively raise the levy to reduce waste to landfill
 - c. Officially adopt the National Waste Data Framework to enable better planning and monitoring
 - d. Introduce a Container Deposit Scheme to lift recycling rates and reduce litter and marine pollution

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²⁷ https://www.lgnz.co.nz/about-lgnz/

²⁸ Since the release of the LG Waste Manifesto the Government has initiated consultation on a proposed product stewardship scheme and on changes to the Waste Levy.

²⁹ 'd' and 'e' below are included in the Government's product stewardship proposal currently undergoing consultation.

- e. Declare tyres, e-waste and, agrichemicals and plastics as priority products³⁰
- 4.7 The LG Waste Manifesto appears to be a very good piece of work from LGNZ and the Council should actively promote it. However, it is not apparent whether it was able to be developed because of the LGNZ governance structures, or despite them. A very superficial look at the organisation indicates that the structures are overly cumbersome, notwithstanding that it is 'the sector voice for all 78 councils in the country.' It has, for example, provision for 19 members on the National Council, 15 on the Governance and Strategy Advisory Group (GSAG), and 17 on the Policy Advisory Group (PAG).
- 4.8 A telling example of the nature of local government's relationship with central government, is the Waste Advisory Board (WAB) which provides 'independent advice to the Minister for the Environment on matters relating to the Waste Minimisation Act 2008 and waste minimisation.' There is no legislative provision in the WMA for the WAB to have local government representation, and of the current members, one is a Councillor and the other seven are either 'consultants' or in business. Given the WAB's responsibilities and ability to shape matters that have a substantial impact on local government waste matters, this would, from a waste system perspective, seem to be a less than ideal situation in terms of delivering the best outcomes for councils.
- 4.9 It is also instructive to note a conclusion in the Productivity Commission's inquiry into the funding and financing of local government:

'Right now, central and local government too often treat each other with suspicion and mistrust. Central government has also tended to treat local government as an agent, rather than as a genuine partner. An improvement to the poor state of relations will be crucial to the success of other improvements to the local government funding and financing framework. The Commission recommends the adoption of a "Partners in Regulation" protocol to support this shift. 31

Insight 6

4.10 The Council, and other local government authorities, are not the same as the many other 'interest groups' in the waste space in terms of their obligations and the implications government policies, or the absence of them, can have on their work load, costs, and their communities. Consequently, the current relationship they appear to have with central government, does not serve them as well as a more strategically based one could.

Insight 7

4.11 LGNZ has an important relationship-building role with central government and an important role, too, as an advocate for matters of importance to local government. However, notwithstanding the success of the LG Waste Manifesto, it is not readily apparent whether the organisation is focussed on, and appropriately structured for, generating a step change in the central/local government relationship.

³⁰ https://www.wasteminz.org.nz/wp-content/uploads/2018/01/Local-Government-Waste-Manifesto-final-22012018.pdf

³¹Productivity Commission Draft Local government funding and financing report dated 4 July 2019 p 252

Opportunity 5

4.12 The Council should review the means by which it can influence national decision making and should, for example, form a view of whether LGNZ is fit for purpose in terms of generating the best possible local/central government relationship and in its ability to advocate on behalf of local government bodies on those issues that matter the most.

Opportunity 6

4.13 Local government should be specifically represented with provision for two to three members on the Waste Advisory Board.

Project Otaihanga

- 4.14 The concept to establish the Council's site at Otaihanga as an exemplar waste management facility represents the merging of what were two separate projects being considered by the WMTF.
- 4.15 Of these, the first was planned to address the current situation in which the two District transfer stations at Otaihanga and Ōtaki have layouts that facilitate only limited opportunities for waste diversion. Consequently, the project aimed at converting the transfer stations to a configuration that optimised waste diversion, including recycling and reuse, at the station. It was envisaged that there would be a smaller capacity at Ōtaki, and a much larger one at Otaihanga.
- 4.16 The intention of the second project was to exert more effective reduction and management of construction and demolition (C&D) waste. In Kāpiti the majority of this material goes to C&D landfills in Wellington, or is disposed of in farm dumps with only a small amount of recovery, such as concrete crushing, occurring locally.
- 4.17 As a consequence of the amalgamation of the two projects, the plan now is to use land at the old Otaihanga landfill site to create a district aggregation and processing facility to take excavation materials; including topsoil, clays, peat, gravels, sand and roading; concrete; timber and metals. These would be processed to produce; topsoils, clays, aggregates (perhaps using crushed glass), rounded stones, timber (treated and untreated for resale or use in a chipped form for compost or as fuel), and metals for scrap sale. The residual material would be disposed of as C&D landfill. As identified in Annex G, the WMTF believes that by providing an effective C & D facility at Otaihanga, the amount of this type of waste going to landfill could be reduced by at least 20%.
- 4.18 After a WMTF visit, and walk around the Otaihanga site with staff and compost operator, and further discussion, it was agreed that the real strategic opportunity lay in focussing on the development of the site to provide the range of facilities at the standard that is not compromised a 'number 8 fencing wire' mindset, and which support the transition from a linear to a circular economy.³²

³² See Annex F for an illustration of these concepts.

- 4.19 Noting that this strategic area is already held by the Council, and that transfer station contracts can go to tender in 2023, the WMTF considers that the Council should agree to develop it along the lines outlined in this section of this report, and illustrated at Annex H; which shows (1) the present layout of the site and (2) a possible approach to the site's future development. This would provide an integrated and accessible facility focused not on waste disposal, but on effective management of waste and it would do so over the long term.
- 4.20 While developing the Otaihanga site will not be without its challenges, the WMTF view is that it will be worth it. The challenges include:
 - a. The potential tendering of waste transfer station contracts in 2023 sets a time flag that will need to be taken into account in planning.
 - b. Funding will be required, the amount as yet to be determined, and noting this, as well as the need to determine the best business model, it will be important to develop a comprehensive business case early on.
 - c. Determining the physical configuration of the site will require significant work, and the planning process will need to take into account the inevitable requirement for Resource Management Act (RMA) consents.
 - d. A risk that needs to be sensitively mitigated with sites such as this is the likely environmental impacts and the Māori view of these. It is critical that lessons from the Hōkio landfill are assiduously applied here. In this case, there a particular risk of this type that relates to the adjacent tributaries of the Mazengarb Stream in the event of a major weather disturbance. Effective consultation throughout planning and development with affected iwi, Ātiawa ki Whakarongotai, will be essential.

Insight 8

4.21 While the waste transfer stations at both Otaihanga and Ōtaki have deficiencies which could be resolved by some changes in layout, to signage, and to staffing, it would be unlikely that the changes would have a substantial impact on waste management practices or performance. Nevertheless, these changes should be progressed because any difference, no matter the scale, is of value.

Insight 9

4.22 The Council owned site at Otaihanga has significant potential to be developed as an integrated and accessible waste management facility shift that will transform the District's approach to waste minimisation and management. That site and the adjacent waste water treatment plant land have critical value to future Council needs.

Insight 10

4.23 Any planning and development processes associated with development at Otaihanga need to be particularly sensitive to iwi environmental impact interests; especially in the event of a major weather event.

Opportunity 7

4.24 The Council should, in addition to carrying out work to improve the operation of the current transfer stations, make an early decision for work to start on developing a proposal to develop the Otaihanga site along the lines described in this section of this report.

Project Kai Tiaki

- 4.25 It was clear, given that Annex G identifies that food and green waste make up about 35 per cent of waste going to the transfer stations, and they make up 50 per cent, (evenly split), of kerbside collections, and it is a large Greenhouse Gas (GHG) contributor, this was a waste stream the merited close attention. And so, unsurprisingly, getting stuck into reducing food waste going to landfill makes the 'vital four' and the WMTF believes that a reduction of up to 15% in organic waste collected at the kerbside is possible if this project is implemented.
- 4.26 Rather than being disposed of to landfill, food waste can be composted, either commercially or domestically depending on scale, to produce soil and fertilizer, fed to animals, or used to produce energy or fuel; again, depending on scale; for example, as was pointed out to the WMTF by Careoline-Charlotte Myers of Organic Wealth³³, it could be possible to achieve a 70% reduction in organic waste to landfill by collecting food scraps and green waste together in identifiably separate bins - by using different coloured bin lids.
- 4.27 There was considerable discussion within the WMTF on the multiple methods of domestic composting, (for example, trenching, worm farming, plastic compost bins, larger heaps or wooden/pallet bins, and direct composting)³⁴, and the considerable benefits of this approach to waste reduction. This project aims to complement those approaches by acquiring the ability to manage the food waste stream on a larger (commercial) scale.
- 4.28 As originally envisaged by the WMTF, the project was to be a scalable food waste composting capability - situated in the District and funded from the Provincial Growth Fund (PGF). The focus on food waste was due, in part, to the composting of green waste already being done by Composting NZ at its Otaihanga facility, and the conversion of such food wastes to methane in landfill.
- 4.29 By composting food waste 'safely', substantial inroads would be made into the domestic waste reduction target; as illustrated at Annex G. A further consideration was that such a capability was an ideal candidate for a targeted education and engagement programme to energise the Kāpiti community around the benefits of composting food waste specifically. and organic waste more generally. Finally, it provides an opportunity for the Council to demonstrate it is prepared to invest, directly or indirectly, in waste capabilities that will deliver transformational benefits to the District's waste reduction performance.
- 4.30 A joint approach with Porirua City Council (PCC) has been initiated by Council staff with the potential aim of making a KCDC/PCC application to the Waste Minimisation Fund (WMF) for In-Vessel Composting facilities – at least one in each District – to address food waste streams from households, small to medium businesses and organisations, and large businesses and organisations, institutions and conglomerated activities.
- 4.31 In-vessel composting units, (such as HotRot composters), use a U-shaped horizontal composting chamber with a central tine-bearing shaft. Each chamber is individually controlled and monitored to ensure a consistent and predictable compost product. Rotation of the shaft both forward and reverse allows for independent process control of residence time and aeration.
- 4.32 The central shaft moves the material through the unit and folds air in to the mix from the overhead airspace. Supplementary low-volume air injection ensures that the material is

³³ https://www.organicwealth.nz/

³⁴ https://www.kapiticoast.govt.nz/our-district/on-to-it/greener-gardens/greengardener-soil/compost/

maintained in an aerobic state and the compost process proceeds at an optimum rate.³⁵ A HotRot 1811 system is illustrated in Figure 2. This system, which costs around \$550,000 with annual operating costs for power and maintenance estimated as about \$4000, is being used commercially in Whanganui.³⁶



Figure 2: HotRot 1811 system

- 4.33 Among the benefits claimed for in-vessel composting systems are that they:
 - a. are robust and mechanically simple, easy to install and use.
 - b. require only a small operational footprint, and are cost effective to purchase and to operate.
 - c. allow local, even on-site processing of organic wastes, thereby reducing transportation costs.
 - d. do not 'out-gas', release odours, or organic liquids and residues into soil and ground water, ensuring both human and environmental health.
 - e. are modular in design, so processing capacity can be expanded over time, or individual units configured for particular feed-stocks.
 - f. are fully enclosed and designed for outdoor use, without additional protection from the elements.
- 4.34 However, it is not just a one-way street, and there are a number of risks associated with this project, including:
 - a. The fund will not cover the entire cost of the project. Applicants need part funding from other sources; which may, in this case, include from the Council.
 - b. If waste reduction/recycling systems are to be commercially successful they need, ironically, waste of sufficient volume, sustained over time, needed to ensure the business model works. This means the competing pressures of waste at scale versus

³⁵ http://www.closingtheloop.co.za/9-composting/4-the-hotrot-system

³⁶ Careoline-Charlotte Myers

waste reduction need to be carefully managed to guard against unintended consequences as in the Case below.

CASE

A \$7 million recycling plant to be built in Auckland by Australian packaging company Pact Group, with a \$3 million subsidy from the Government's Waste Minimisation Fund, will convert 10,000 tonnes of PET³⁷ a year into food packaging, including meat and bakery trays. The company would prefer to source PET locally, but until our recycling recovery rate improves, it will import PET waste from overseas. 38

4.35 This project has three elements, (1) the acquisition of a HotRot capability, (2) a reenergised programme promoting the effectiveness of composting as an organic waste reduction strategy, and (3) an education and engagement strategy focused on enabling a reduction in the amount of organic waste that currently finds its way into landfills.

Insight 11

4.35 Reducing food and green waste going to landfill will enable significant and noticeable progress to be made towards achieving, and even exceeding, the 2026 waste reduction targets in the WMMP. The WMTF estimates that kerbside reduction of up to 15% is achievable should Project Kai Tiaki be implemented.

Insight 12

4.36 HotRot systems have demonstrated their effectiveness and efficiency as a means of composting food – and green waste – at a variety of scales; and funding for these may be available through the Waste Minimisation Fund.

³⁷ Polyethylene Terephthalate (PET) can be used to make lower grade products, such as carpets make a food grade plastic, the bottles need to be hydrolysed down to monomers, which are purified and then repolymerised to make new PET. In many countries, PET plastics are coded with the resin identification code number "1" inside the universal recycling symbol, usually located on the bottom of the container.
³⁸ https://www.noted.co.nz/planet/planet-planet/plastic-how-new-circular-bio-economy-could-deal-with-problem

Insight 13

4.37 Working collaboratively with other Councils, and especially Porirua City Council, to acquire waste – and other – infrastructure has the potential to deliver a range of strategic benefits.

Insight 14

4.38 Food waste at an appropriate level of supply is available and accessible in the District.

Opportunity 8

4.39 The WMTF understands the proposal for the Food/Green waste funding application to the Waste Minimisation Fund is being managed within Council staff delegation. Council should engage directly in the process so that the full range of strategic benefits can be assessed.

Opportunity 9

4.40 A formal communication and engagement programme should be developed for Project Kai Tiaki and integrated into the project's acquisition, installation and operational phases; promoting both the HotRot capability and the benefits of composting in reducing organic waste going to landfill.

Project E2: Education and Engagement

- 4.41 Recognising the crucial role played by education in moving community waste management behaviours in the direction that would generate effective waste managers, a Regional Waste Minimisation Education Strategy (RWMES) was developed from the 2011-2017 WMMP. The RWMES states that:
 - a. the RWMES is seen by all Councils as playing '...a fundamental supporting role to all areas of the waste actions planned (within the WMMP) and all aspects of the waste hierarchy. It is paramount in the reduction of waste to landfill and plays a key role in supporting many of the operational elements of this WMMP. ^{'39}
- 4.42 Its purpose was to:

'Prioritise and provide a framework for delivering collaborative education initiatives, communications and supplementary community development activities across the Wellington Region that change behaviour, minimise waste, increase efficiency and support the other actions in the WMMP."⁴⁰

4.43 The areas for action identified in the RWMES are listed, together with the Kāpiti programmes, in Table 5 on p27.⁴¹ A comparison of the two, planned versus implemented, appears to show a substantial delivery gap.

³⁹ RWMES Article 2.1

⁴⁰ Ibid

⁴¹ Waste Assessment Table 14

- 4.44 That this is likely to be the case is no surprise to the WMTF. It was clear in the views of the community representatives, and of those in the community with whom we spoke, that:
 - a. the community and engagement capacity in direct support of waste management and reduction efforts is too small, and
 - b. the Council is disengaged from the community in this area of its operations.
- 4.45 However, things may be about to change. It is understood that personnel numbers in the Sustainability and Resilience area will be restored with the established positions for two full time staff expected to be filled in the current financial year. While this is welcome progress, there are other opportunities that may lift the Council's performance in this area. They include:
 - a. an increased commitment to digital communication, so that online education of the public in issues such as waste separation, home composting, purchasing to minimise waste and reduction of excessive packaging can be done across a wide range of social networking platforms; including YouTube, Facebook and Instagram to the many different groups of ratepayers. These include construction businesses, restaurants, householders with big gardens, and those who live in apartments or flats.
 - updating of the website and downloading content from other platforms and avenues to ensure that content is accessible and readily available to people living in the Kāpiti District.
 - c. promoting and reinstating community events such as the 'Sustainable House and Garden Show' and investigating the feasibility of an annual zero waste expo to be held in Kapiti annually.

Education (E) Initiatives	Sectors					
	Residential	Businesses	Schools			
E1: Organics	Organics investigation and subsequent WMES funding proposal. The key sectors to be addressed will be further clarified after a more detailed investigation of the regions organics waste stream. Interim promotion of diversion options for residents and businesses while the investigation is on-going.					
E2: Paper	Regional (generic) promotion of kerbside recycling					
E3: Plastics		waste minimisation, thereby reducing waste related costs for consumers and businesses alike	promoting uptake of regionally available			
E4: Timber	Timber investigation (R11) and subsequent WMES funding proposal (if required) – acknowledging the very low cost of some C&D waste disposal options within the Wellington region as a potential barrier to local council influence in this area. Interim promotion of diversion options for residents and businesses while the investigation is on-going.					
E5: Events	Develop and promulgate regional resources for waste minimisation at events					
E6: Communications	The communication of consistent messaging using a common brand is important to ensure communities and businesses are able to recognise and easily access relevant and useful information. For example, generic promotion of kerbside recycling. This is also important for achieving stakeholder input and buy-in on shared/common goals					
E7: Littering	Investigate a regional approach to education on littering and promoting community led clean-ups					
E8: e-Waste	The promotion of reuse and recycle centres around the region					
čniti Education	Kāpiti Community	Kāpiti Businesses Waste Reduction Grants	Kāpiti Schools			
Kāpiti Education nitiatives	 Eco Design Advisor (Sustainable home advice) Waste Reduction Grants Para Kore programme (in marae) 	waste reduction Grants	Eliviroschools			

Table 5: RWMES Actions and Kāpiti District education programmes

- 4.46 The education space appears to have many players and yet there is no indication that there is a systematic approach in place to 'measure', rather than 'judge', the effectiveness of each of the programmes being used across the district. Because it is difficult to improve performance that is not being measured, this is a gap that must be closed.
- 4.47 The lack of a strategic plan and associated measurable goals and associated strategies is obvious. There is no evidence that the RWMES has been recently reviewed. This should be done as soon as practical.

Insight 14

4.48 Education and engagement is critical in the context of waste minimisation. In spite of the strenuous efforts of current staff, and their commitment to make positive contribution, feedback from the community supports the view that the Council could and should be doing more in this area.

Opportunity 10

4.49 The Council should use the extra organisational capacity that will be provided by the two additional staff in this area, to increase the education and engagement effect across the whole community; particularly through digital media.

Part 5 - Other Matters

Introduction

5.1 As well as giving attention to the principal areas in which the biggest difference could be made, in the course of the WMTF meeting a range of other matters were discussed in the course of the conversation. While some of them lie outside the WMTF's Terms of Reference, they are provided here, in part, because they are matters of particular community, and iwi, concern.

Providing a 'fit for purpose' waste management and reduction system 42

- The Council's corporate documentation mentions 'waste' as being important. However, the references to it are scarce and essentially brief; especially when compared to the references to roading, footpaths, the three waters, green spaces and to those celebrating the Council's efforts in minimising rate increases and managing debt. Consequently, in a relative sense, the Council's corporate effort to be persuasive that 'managing and reducing waste matters to us', is unconvincing.
- 5.3 A 'fit for purpose' waste management and reduction system across Kāpiti would be a very clear demonstration of the importance the Council does attach to discharging its waste obligations. And, such a system would not only be effective in reducing the amount of waste going to landfill, it would be financially and environmentally sustainable over the long term. Of vital importance, too, is that the approach it takes would be sensitive to, and appropriately aligned with, the values/tikanga that are core in defining the character of the District.
- 5.4 Among the areas in which the fitness for purpose are somewhat compromised are:
 - Contracting out of waste collection. The community representatives on the a. WMTF discussed the fact that the kerbside collection of waste was a topic of discussion at the recent Local Body candidates' meetings. The contracting out of the kerbside collection began in 2013 and the time is right for a review of the contracting out model. Any review should cover a cost benefit analysis to ratepayers of contracting out versus 'in house' collection and what levers, if any, are available to Council to minimise waste by bringing the kerbside collection 'in house'. The WMTF found that the lack of this financial information made it impossible to have any meaningful discussion on this option. Furthermore, it was of particular interest that the lever that would be expected to influence Council behaviour in this area would be to reduce waste going to landfill. It may well be that, in contrast, the lever driving the contractor is to maintain waste going to landfill at its current level, or if it reduces, to increase the cost to customers. It will be very important to ensure that the current review of the Waste Bylaw is used as an opportunity to ensure that the vital elements of a 'fit for purpose' contractual arrangement are incorporated into the revised Bylaw.
 - b. **Hōkio Landfill**. The issues around this landfill are known to be a significant concern to local iwi **and a statement by the lwi representatives on the WMTF is at Annex I**. It may be less appreciated that discomfort about the use of this site are also evident across the wider community. While the WMTF has no role to play in resolving the matters that surround the Hōkio Landfill, it is able to say that there are vital tikanga/values based matters in play, and the choice the Council makes between being an observer or being a participant sends a strong and clear signal

⁴² This particular section incorporates viewpoints from only the community/iwi members of the WMTF.

on how it sees its role in relation to the various elements of the waste management system; including community/iwi interests.

- c. Council resources committed to waste management. Leaving to one side financial resources, there are only limited Council staff committed to waste management and minimisation. The three staff with whom the WMTF has engaged, all work part time and two are funded by the Waste Levy Fund. An independent organisational review of the Council is underway, with an expected report back early next year. Noting that the review will address whether:
 - i. there is reasonable cause for concern that KCDC does not have the resources or capability to meet its deliverables (planned and unplanned), statutory obligations, duties and powers as outlined in the KCDC Annual Plan and Long Term Plan documents; and
 - ii. KCDC can add greater value (ie. being effective not just efficient) to Kāpiti residents by becoming a more responsive organisation at all levels of engagement with stakeholders and the public.

The community/iwi members of the WMTF expect that this report will be included in the information that the Council makes available to help ensure the review team is as well informed as possible.

d. **Biosolids**. The management of biosolids, sometimes referred to as sewage sludge, is an activity in which iwi have a particular concern; the movement of this type of material from one's area into another's is, within a tikanga context is anathema. In the Kāpiti District biosolids from the wastewater treatment plants at Ōtaki and Paraparaumu are initially dewatered before being dried at a kiln in Paraparaumu to around 65 per cent dry solids, then transported to the Silverstream landfill for disposal. This year the Council granted funds to Nufuels Ltd to undertake trial of pyrolysis (incineration in the absence of oxygen), with the aim of identifying an alternative disposal option. It will be important to ensure that iwi are, at the very least, kept directly up to date with developments in this area.

Insight 15

5.5 While the Council's corporate documentation may mention dealing with waste is important to it, in terms of leading the community towards a 'fit for purpose' waste management and reduction system, there are gaps from a community perspective in the Council's performance.

Opportunity 11

5.6 The Council should identify and exploit opportunities to demonstrate leadership in establishing a 'fit for purpose' waste management and waste reduction system in Kāpiti.

Recycling

5.7 Unsurprisingly, recycling was an area at which the WMTF looked closely to see if there was a strategic opportunity in relation to this particular waste stream. After all, in a national context: 'We may be perceived as clean and green by the rest of the world, but we have significant problems in NZ. In New Zealand we discard 15.5 million tonnes of

waste each year. That is 3,200kg for every kiwi! Right now we only recycle 28% of this waste.' 43 Kāpiti provides a recycling opportunity of the same sort of scale.

5.8 As Table 6 below illustrates, there are a variety of approaches to 'maximise the value of recyclables' 44:

Material	Current Grade	Current Value	Potential Grade	Potential value	Potential value Increase	Market opportunity	Intervention required
Paper and	Mine	1.	Sorted paper	М	н	Local paper manufacturers	Source separation Market development
Cardboard	Mixed	L	Sorted cardboard	М	Н	Local carton manufacturers	Source separation Market development
Glass	Mixed VL crushed	VL	Mixed crushed/ fines	L	М	Increased use as road base/ replacement for natural sand	Market development including commitment from markets, specific development, trials Investment in product facilities
			Sorted glass/ cullet	LM	М	Local container manufacturers	Source separation (kerbside. CDS)
	L Mixed 1-7	L	Sorted 1-2	Н	Н	Strong international market	Source separation (kerbside, CDS) Post collection sorting
Plastics		L	Mixed 3-7	VL	-	Plastic roads Energy from waste	Product development Market development Infrastructure develop
Contamination	Mixed	-	N/A	Н	Н	Elimination of contamination Energy from waste	Household education Improved labelling

Table 6: Opportunities and interventions required to unlock the value in recycled materials

This 'solution rich' environment characterises most of the waste streams which the WMTF considered and, given this, there is a very strong temptation to take action – and to do so quickly – and without the appropriate level of analysis to determine whether it is a good idea. Getting the right technical and financial evidence to make the right decision is vitally important. So, too, is ensuring any actions that are taken are situationally practical; for example, what suits a household on a 'half acre block' may not be appropriate in, say, a retirement village; the effect of the 'new recycling guidelines' in Pembrokeshire (Wales), illustrated in Figure 3 below, provides a useful example of what may not be a practical solution right across a community.

⁴³ https://www.recycle.co.nz/problemsize.php

⁴⁴ https://www.ey.com/en_au/climate-change-sustainability-services/how-we-can-find-the-treasure-in-our-trash



You will be able to recycle everything you can recycle now however this will now be separated into different containers, as detailed below:

- Blue Reusable Sack Cardboard & Card
- Blue Box Paper, newspapers and magazines
- Red Reusable Sack Plastic bottles, pots, tubs and trays (excluding black and brown plastic), food and beverage cartons and metal packaging including cans, tins, foil and foil trays
- Green Caddie Food Waste
- Green Box Glass Bottles and Jars
- Household-provided clear bag Household Batteries

Figure 3: Pembrokeshire (Wales) County Council: New Kerbside Sort Recycling Guidelines⁴⁵

5.10 There is scope to improve the District's recycling performance, and one obvious area is improving signage. As the Ernst & Young report on recycling in Australia notes:

'There is also evidence that the most effective behavioural interventions happen as close as possible to the decision being made. This means that information provided at the point of putting something in the bin (or other key decision points like buying products that have more or less waste) is likely to be more effective. These sorts of interventions are a type of education, but it doesn't require as much recall or cognitive attention on the part of individuals.'46

5.11 So, while there are opportunities to refresh the District's recycling stations, and these should be exploited, the Council should proceed with caution in relation to making any significant investment in this waste stream – until the Government makes its final decisions about the proposed product stewardship scheme and the implications of those decisions on waste stream is able to be quantified.

Insight 16

5.12 There are opportunities to improve the performance of the District's recycling system. However, until decisions are made by the Government about the proposed product stewardship scheme – and the implications of these on associated waste streams are able to be determined, the Council should focus on implementing relatively minor

⁴⁵ https://www.pembrokeshire.gov.uk/kerbside-collection

⁴⁶ Ernst & Young report, 'Finding treasure in our trash', p11

improvements to recycling stations and avoid making substantial changes that may require significant financial investment.

Opportunity 12

5.13 The Council should take an active interest in the progress and outcomes of the proposed product stewardship scheme so that it is positioned to respond proactively to whatever it delivers.

Opportunity 13

5.14 The Council should, in the meantime, implement changes that will improve the recycling and educational capabilities of the current recycling sites.

Part 6 - Conclusions

- This report is the result of the work of a very small number of Kāpiti citizens, including iwi representatives, and two elected member representatives, all of whom as members of the WMTF, were willing to give their time over seven months, to contribute to the Council being able to improve its waste management and minimisation performance.
- 6.2 Over the past eight years, using the WMMP as its key change vehicle, and spending \$1.6 million in total, the Council has not achieved a sustained or a substantial change in its key waste reduction metric the amount of waste, per person, per year, going to Class 1 landfills. It would appear, therefore, that a change in the current approach to both waste management and waste minimisation is warranted. This report provides the opportunity for the Council to make that change.
- 6.3 While the focus of the WMTF was on what the Council could do, they were aware that substantial and sustained progress in lifting the District's approach to the waste challenges it faces now, and in the future, depends on the Council and the community, including businesses, agreeing that it is <u>our</u> problem, and it is up to <u>us</u> to do what needs to be done to get on top of it.
- 6.4 This report provides an opportunity for the Council, to not only participate alongside the community in reducing the amount of waste going to landfill, but in identifying a number of opportunities which will help towards providing a fit for purpose waste management system in Kāpiti, it sets out an approach which supports the Council in taking the leading steps in encouraging the community including households and businesses in the right direction.

Part 7 – Recommendations

- 7.1 The WMTF recommends that the Council:
 - a. **accept** this Final Report dated 28 November 2019 from the Waste Minimisation Taskforce; and
 - b. **note** that with the completion of this report, the work of the Waste Minimisation Taskforce, approved by the Council for establishment in March 2019, has come to an end.

Annexes:

- A. WMTF Terms of Reference
- **B**. Planning and funding levers
- C. Progress against the 2017-23 WMMP
- **D**. Biographies of WMTF members
- **E**. A sample of various items raised by WMTF members
- F. Linear and Circular economies
- **G.** Kāpiti waste streams going to landfill
- **H**. Proposed Otaihanga development
- I. Statement by Iwi representatives on the WMTF
- J. Glossary

Annex A: WMTF Terms of Reference

ITEM	DETAIL
Purpose	The purpose of the Taskforce is to review the actions listed in the 2017 Wellington Region Waste Management and Minimisation Plan (WMMP), and report back to Council on how these actions can be implemented to achieve the most cost effective reduction in the volume of waste materials in the District.
Background	As part of the 2018 Long Term Plan Process it was agreed to established a Waste Minimisation Taskforce with the above purpose. In late 2017 Council adopted the WMMP after undertaking a special consultative process. This WMMP is required under the Waste Minimisation Act, and covers a six year period. This WMMP was undertaken in conjunction with the Councils of the Wellington region, and has both local actions for each Council and joint regional actions. The Taskforce will be established in an environment of significant challenge in the Solid Waste Management field, for example: Continuing increases in waste per capita coupled A significant decline in the global market for recycling. Industry and Local Government New Zealand calling on Central Government to legislate on issues such as product stewardship (take
	back schemes for items such as tyres and e-waste) and container deposit schemes (refundable deposits for drink containers).
Primary Objectives	 Review the opportunities to achieve the most cost effective reduction in the amount of residual waste (waste destined for landfill disposal) produced in the District in accordance with the actions listed in the WMMP For these opportunities develop options, both short and long term, with timelines, including potential advantages/disadvantages and potential costs for Council to consider
	3. Report to Council
Primary functions	 Capitalise on connections between individuals and community organisations to identify potential opportunities for waste reduction Recommend support, including delivery and funding opportunities, for possible projects in support of the WMMP actions
Constitution (and relationship to Council)	 Council-led information gathering Taskforce to feed into Council processes (e.g. Annual Plans and Long Term Plans) and identify other potential funding opportunities.

ITEM	DETAIL
Members and term	The Chair will be an appropriately skilled community member nominated by Council
	 The Taskforce will consist of up to eight to ten members, including the Chair
	The Taskforce will include lwi representatives
	The Taskforce will include a youth representative
	 The Taskforce may include up to two elected members (and nominated alternates)
	 Further members will be selected by the Chair and Council Officers in accordance with the following specification
	Potential membership specification:
	 Is nominated by community groups A representative of Grey Power Has networks to distribute ideas and receive feedback Is able to understand legal and planning processes and constraints Has integrity and mana to represent others Is active and widely respected in their communities Is able to appreciate the needs of the wider community and not just the needs of their interest or sector group
	 The term will be six months following the appointment of all members to the taskforce.
Primary relationships	Build on existing relationships with key community stakeholders with an interest in waste minimisation
Operating principles	To be agreed by the Taskforce
	 Any public statements about Taskforce business will be made by the Chair in consultation with the Group and council officers
Procedural detail	Regular meetings as determined by the Taskforce (Dates TBC)
Resources and requirements	This Taskforce will be supported by Council staff for administration services and provision of advice/information as requested by the Taskforce from time to time.
Risks and constraints	Constraints: To be identified by the Taskforce
	Risks: To be identified by the Taskforce

Terms of Reference updated to include amendments from Strategy and Policy Committee, 21 March 2019.

Annex B: Planning and funding levers

The Waste Minimisation Act

- 1.1 The Council has clear legislative obligations that it is required to meet as it sets about managing and minimising waste in the District. In New Zealand, the principal waste legislation is the Waste Minimisation Act (2008) (WMA). The purpose of the WMA is to:
 - a. protect the environment from harm; and
 - b. provide environmental, social, economic, and cultural benefits.

Waste Management and Minimisation plans

- 1.2 The WMA requires Councils to promote effective and efficient waste management and minimisation within their district. This is consistent with Section 10 of the Local Government Act which states that one of the two purposes of local government is 'to promote the social, economic, environmental, and cultural well-being of communities in the present and for the future.' 47
- 1.3 The WMA requires councils to 'adopt a waste management and minimisation plan' which 'must provide for the following:
 - a. objectives and policies for achieving effective and efficient waste management and minimisation within the territorial authority's district:
 - b. methods for achieving effective and efficient waste management and minimisation within the territorial authority's district, including:
 - i. collection, recovery, recycling, treatment, and disposal services for the district to meet its current and future waste management and minimisation needs (whether provided by the territorial authority or otherwise); and
 - ii. any waste management and minimisation facilities provided, or to be provided, by the territorial authority; and
 - iii. any waste management and minimisation activities, including any educational or public awareness activities, provided, or to be provided, by the territorial authority:
 - c. how implementing the plan is to be funded:
 - d. if the territorial authority wishes to make grants or advances of money in accordance with section 47, the framework for doing so.'

Waste Disposal Levy

1.4 A \$10 levy on each tonne of waste sent to landfills is collected from landfill operators. Half of the money collected through this waste disposal levy is paid to territorial authorities quarterly each year. The amount of levy each territorial authority receives is determined by the number of people in each district. Waste management and minimisation plans (WMMP) prepared by each territorial authority set out how the levy will be used.

Waste Minimisation Fund

1.5 The Waste Minimisation Fund funds projects that promote or achieve waste minimisation. By supporting these projects, the fund increases resource efficiency, reuse, recovery and recycling and decreases waste to landfill. The waste disposal levy is the source of revenue for the fund.

⁴⁷ The Local Government Section 14 (c) states, '... when making a decision, a local authority should take account of....(iii) the likely impact of any decision on each aspect of well-being referred to in section 10:

Annex C: Progress against the 2017-23 WMMP

Activity	Description	Progress (November 2019)
R.1: Licensing under the current Solid Waste Bylaw	Issue and review licenses for waste collectors and operators in the district, gather and manage data supplied by licensees, monitor performance/compliance.	
R.2: Review and adapt licensing system to comply with Regional Solid Waste Bylaw	Implement and oversee monitoring and enforcement of Regional Solid Waste Bylaw once it becomes active.	
D.1: Collect and manage data in accordance with the National Waste Data Framework	This includes working with licensed waste collectors and operators to improve the quality and comprehensiveness of data reported to Council, as well as conducting SWAP surveys and other measures to improve data availability and management.	
E.1: Provide educational support to educational institutions on waste minimisation	This includes delivery of the Zero Waste Education Programme, support and funding for programmes like Enviroschools and Paper4Trees, provision of educational resources (for example litterless lunches brochure), and other educational support and resources.	
E.2: Assist educational institutions with waste minimisation projects	Provide advice and assistance with waste minimisation infrastructure and projects such as conducting waste audits, setting up recycling systems, composting or worm farms, and further projects.	
E.3: Support residents to minimise waste through education and information	Support residents to undertake waste minimisation through the provision of information and education via the Council website, social media, newspapers, brochures and posters, talks, stalls at local events, workshops, and via other channels as appropriate.	
E.4: Support community projects and events	Support community lead projects and events that promote and undertake waste minimisation, such as the Greener Neighbourhoods programme, community workshops, waste minimisation at events, clean up events and others, through promotion, partnerships and funding.	
E.5: Targeted educational campaigns and projects	This includes the support and implementation of targeted educational projects and campaigns with links to regional and national projects and campaigns, such as Love Food Hate Waste, Green Parenting Workshops, Seaweek, Plastic Free July and others, or targeting specific materials such as e-waste, chemicals, batteries, food waste etc.	
E.6: Optimise regional communications	Work collaboratively with the WMMP partner councils on waste related communications.	

Activity	Description	Progress (November 2019)
E.7: Work with local businesses to achieve waste minimisation	Work with local businesses and organisations to achieve waste minimisation.	
E.8: Support marae and iwi groups to minimise waste	Support iwi and marae to promote and undertake waste minimisation by the provision of information, services and events. For example (but not limited to), support for the Para Kore programme.	
C.1: Review kerbside collections and investigate improvement options	Review the effectiveness of the kerbside collection systems in terms of diversion targets, cost, customer satisfaction and street amenity, and investigate improvement options. This may include changes to the bylaw, licensing conditions and delivery methods, involve exploring the benefits of shared services, and potentially result in extending access to recycling collections beyond current collection areas.	
IN.1: Enhance waste diversion from transfer stations	Work with operators of transfer stations to increase recovery and diversion of divertible and/or hazardous materials. Establish new, and review existing contracts/lease agreements to increase diversion. This may also include upgrades of physical infrastructure or funding support to enable recovery of specific materials.	
IN.2: Green waste Recovery and recycling	Recover and recycle green waste recovered from transfer stations in the district. Recycling by composting or similar.	
IN. 3: Explore establishment of additional diversion facilities	This may include supporting the establishment of facilities to divert and recover waste streams such as C&D waste or other waste streams for which facilities are currently not available in the district.	
IN.4: Provide clean Public Places	This includes the provision of public litterbins, regular street cleaning, and the removal of illegally dumped waste from public land. Investigate public place recycling infrastructure.	
IN.5: Effluent Waste	Council will explore options to reduce the volume of waste to landfill and to lessen the hazardous components of waste from its waste water treatment plants.	
IN.6: Aftercare of Closed Landfills	Council will monitor and manage closed landfill to ensure relevant environmental and safety standards are met.	
LM.1: Contestable Waste Reduction Grants	Waste levy funds are made available annually as grants for waste minimisation projects, as detailed in the relevant Council Policy. Funding is through contestable processes such as for Community Projects and Business & Innovation.	
LM.2: Waste Minimisation Staff	Employ staff to implement the goals and actions of the RWMMP at the local and regional level.	
LM.3: Internal Waste Minimisation	Continue to seek opportunities to reduce waste generated at Council facilities. Use learning's to encourage other organisations to minimise their waste.	

Activity	Description	Progress (November 2019)
LM.4: Embed waste minimisation into Council activities	Explore opportunities to embed waste minimisation principles into relevant council activities. This could include procurement, regulatory processes, infrastructure projects and other activity areas.	
LM.5: Explore benefits of shared services	For example, organics collection, expansion of kai to compost, etc.	
LM.6: Explore & actively encourage additional waste diversion initiatives	This may include the support of community or business led resource recovery operations and initiatives that increase diversion and create additional benefits such as employment and economic development.	

Table C1: 2017-23 WMMP and progress to November 2019





Progress cannot be determined

Annex D: Biographies of WMTF members

Kevin Burrows was a seafarer in the British Merchant Navy. On arriving in New Zealand in 1974, he was employed by the Wellington Harbour Board and was the Secretary of the Wellington Harbour Board Union, the PSA (Public Service Association/Te Pukenga Here Tikanga Mahi), and then of NZEI Te Riu Roa. Since retiring, he has held a number of positions in Kapiti Grey Power; including President for three years; he is presently the Vice President.

Bill Carter represents Te Ātiawa ki Whakarongotai on its Taiao Environmental Group and the Greater Wellington Regional Council Taiao Environmental Committee, together with the KCDC Strategy and Policy Committee and Water Working Group. He has had a long involvement with water and waste water treatment and disposal. He proposed the design of the process that takes the water from the Waikanae borefield and, after natural degassing and tempering, aerates it before discharge into the river as an alternative to its addition to the domestic supply and to the benefit of the river's natural habitat. He is also actively involved in the administration of Māori fisheries.

Councillor Jackie Elliott lives in Otaki with her husband and family. She is in her third term as a Districtwide Councillor. She chairs the Grants Allocation Committee and holds the Sustainable Waste Management portfolio. She also represents Kāpiti on the Regional Waste Forum and Waste Policy steering group. Jackie is a Resource Management Act Hearings Commissioner.

Mayor K Gurunathan was born in Kuala Lumpur, and initially came to Wellington in the 1970s to attend university and obtained a degree in political studies. Returning to Malaysia with his New Zealand wife Claire in the mid-1980s, Guru spent several years as a senior journalist and well-known political commentator. In 1995 he returned to New Zealand on the Kāpiti Coast. Working as a reporter/journalist and a councillor, Mayor Guru established deep connections within the Kāpiti community and assumed office as Mayor in 2016; he was re-elected in 2019. Guru and Claire have three children and live in "Sunny Otaki".

Councillor Sophie Handford is 19 years of age and has grown up in Paekākāriki. She attended Paekākāriki School and then graduated on to Kāpiti College. Her main passion is climate justice and sustainability, and this year she coordinated the nationwide School Strike 4 Climate movement in Aotearoa. Sophie has very recently been elected to the Kapiti Coast District Council as the Paekākāriki - Raumati Ward Councillor.

Kirsten Hapeta is a member of Ngāti Raukawa, Ngati Toa Rangatira, & Te Āti Awa. She represents Ngā Hapū o Otaki on Te Whakaminenga o Kapiti. Kirsten is a kaihautū in Te Tari o te Tumuaki at Te Wānanga o Raukawa and has spent most of her working life there contributing to the progress of iwi Māori through education. Her current interests include papakainga development and iwi self determination and care of the environment.

Deirdre Kent is a long-time environmentalist starting from being a Values Party councillor on Tauranga City Council. She worked as a full-time paid lobbyist for smokefree laws and has written and taught campaigning skills. Author of two books on local currencies and relocalisation of politics, founder of Transition Town Otaki, she is a member of Low Carbon Kapiti.

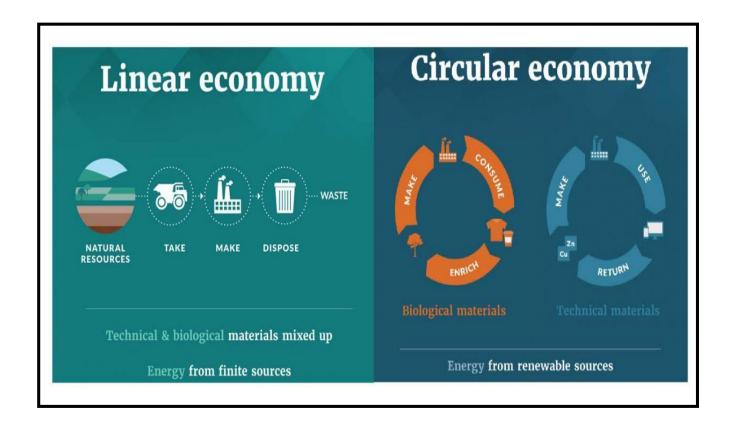
David Ledson is an Ōtaki resident. He spent forty-two years in the Royal New Zealand Navy – the last five of which were as Chief of Navy. Since retiring in 2009 he has had a variety of governance jobs including Chair of Maritime NZ and Chair of the National War Memorial Advisory Council.

Natalia Repia is the current Te Whakaminenga Iwi Representative for Ngāti Toa Rangatira at Kāpiti Coast District Council. As the Iwi Representative she collaborates with Kāpiti Coast District Council on numerous advisory boards including the current Waste Minimization Management Plan Taskforce, Kāpiti Coast Creative Communities Grant Allocation Board and Open Spaces & Parks Review Strategy Board. She is studying Māori Natural Resource Management and Marine Biology at Victoria University of Wellington, for future focus in consultation and facilitation within the environmental spectrum, with a particular emphasis on Tāngata Whenua Taiao Perspectives & Iwi Engagement Education.

Annex E: A sample of various items raised by WMTF members during meetings

- Council should structure its Council committees to include a
 committee dealing with waste. For instance, given the fact that
 construction waste is two thirds of our total waste to landfill, the
 building inspectors could employ someone to help educate builders
 to separate waste, and reuse and recycle to the maximum extent.
 There needs to be someone there to teach composting and
 advance the total composting taking place in the district.
- Staff dealing with waste minimisation should be upgraded to ensure there is adequate permanent staff.
- The Council should be able to provide the relative costs of in-house and contracted waste collection.
- In order to monitor progress, the Council should annually review the progress of waste minimisation.
- Given that methane emitted from landfills is around 25-72 times as potent a greenhouse gas than carbon dioxide, urgency should be given to diversion of food and green waste from landfill to forms of composting. It is imperative, too, to put a stop to burying green waste and food scraps.
- Waste minimisation policies should include the progressive reduction in the volume of domestic waste bins.
- Council should re-evaluate and strengthen its participation in the Regional Waste Forum.

Annex F: Linear and Circular economies⁴⁸



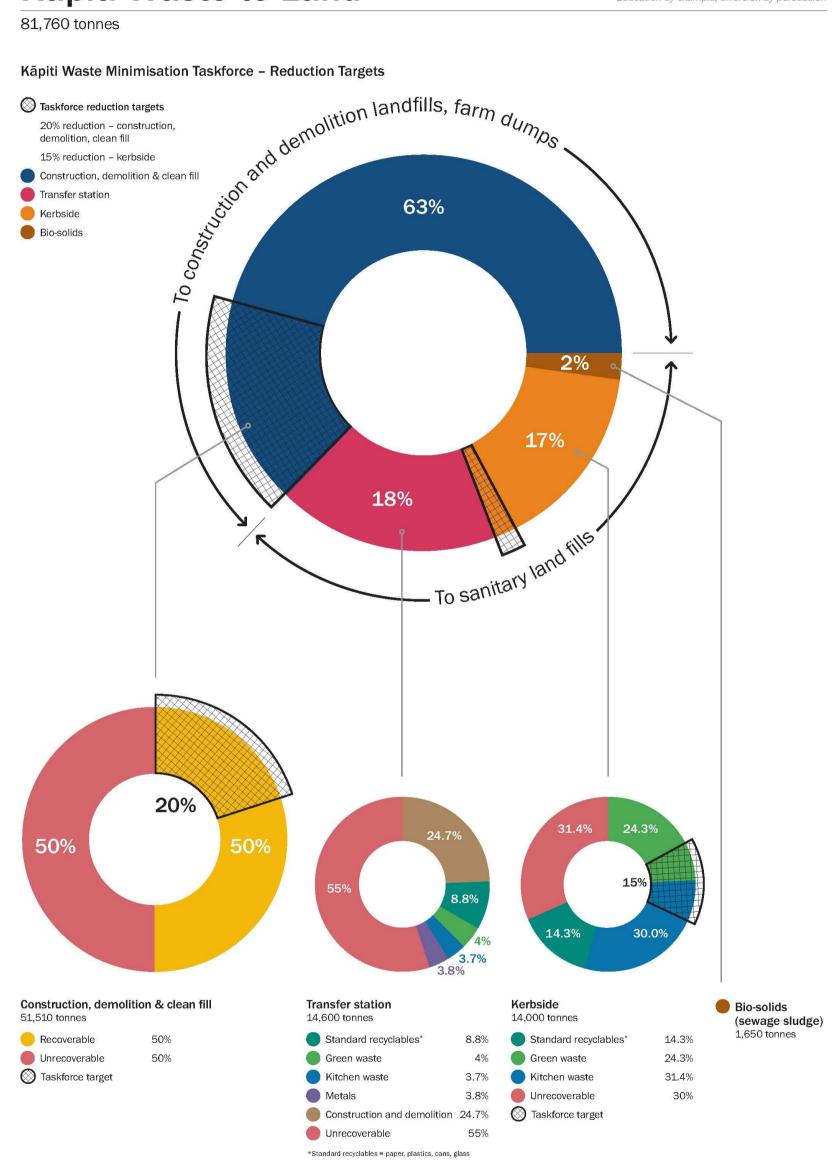
⁴⁸ https://www.mfe.govt.nz/node/24055/

Kāpiti Waste to Land

Education by example, diversion by persuasion

81,760 tonnes

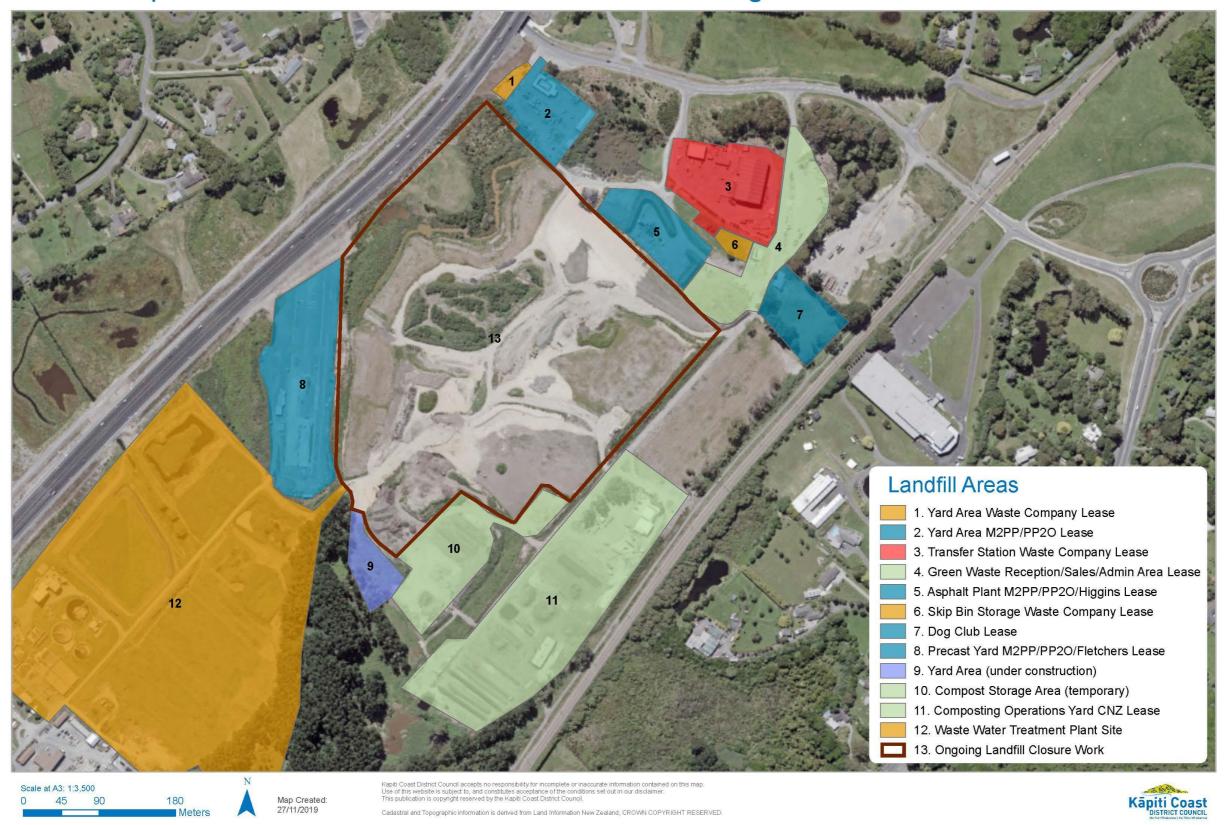
Kāpiti Waste Minimisation Taskforce - Reduction Targets



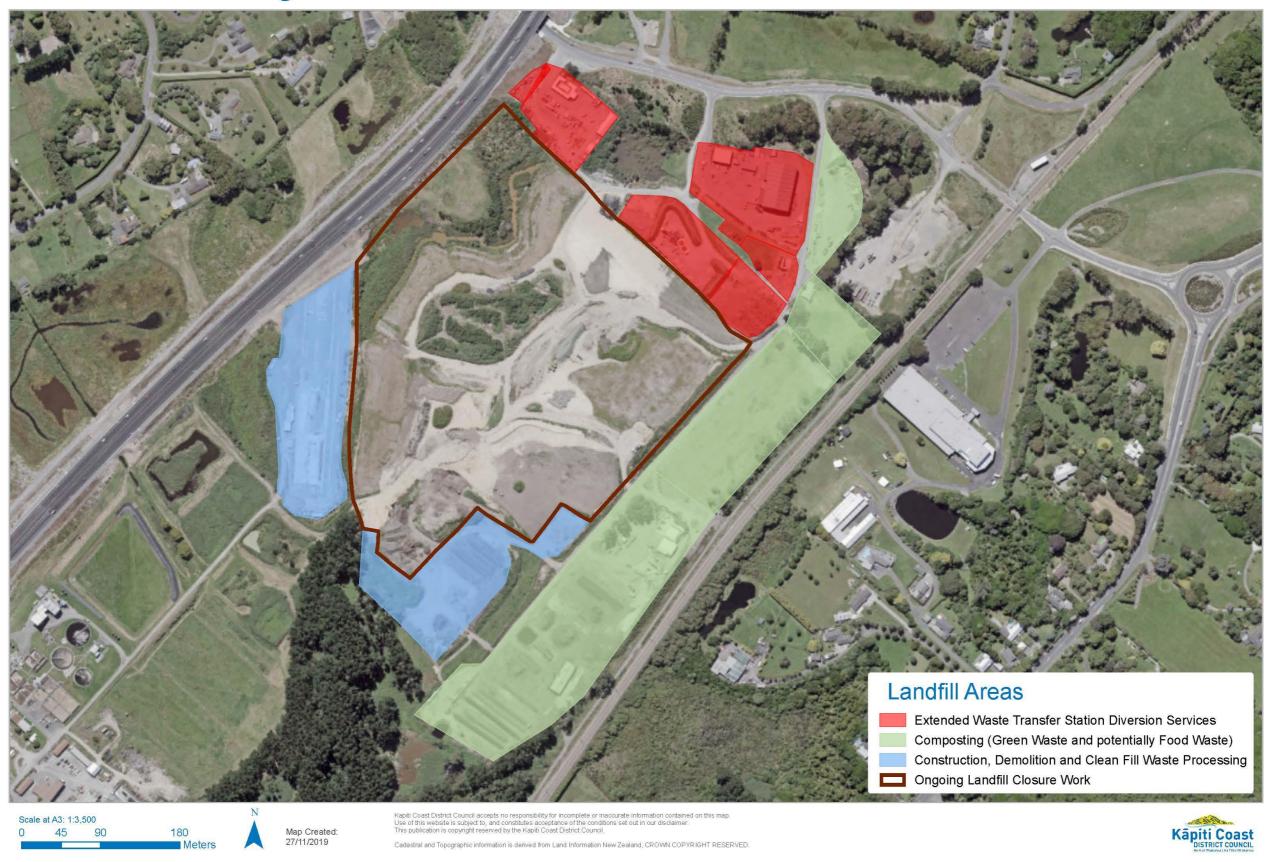
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Annex H: Kāpiti waste streams going to landfill

Kāpiti Coast District Council - Current Otaihanga Landfill & WWTP Sites



Otaihanga Landfill Site - Potential Waste Diversion "Hub" Activities



Annex I: Statement by Iwi representaives on the WMTF

Representatives of Ngā Hapū o Ōtaki, Te Ātiawa ki Whakarongotai and Ngāti Toa took part in the Kāpiti District Council Taskforce on waste minimisation and endorse the general recommendations of that group within its terms of reference. Their participation endorsed the shared Treaty partnership responsibility of Council and Iwi.

However, those terms of reference did not enable the taskforce to give consideration to concerns that are shared by the three lwi with regard to the continued disposal of waste at the Hōkio Landfill by contractors employed by Kāpiti District Council. These concerns were raised prior to the establishment of the Taskforce by a deputation to the KCDC Policy and Strategy Committee from the hapū Pareraukawa and, in the view of the lwi representatives, should have been made part of the Taskforce brief.

As with the noted concerns of Te Ātiawa ki Whakarongotai relating to residues from the Kāpiti waste water plant being transferred to Silverstream, the use of the Hōkio Landfill to take Kāpiti waste is offensive to the tikanga of Pareraukawa. In addition to that principle, Pareraukawa has particular concerns with regard to the Hōkio Landfill and its impact on the nearby stream that are not the responsibility of KCDC.

The lwi representatives urge KCDC to recognise this concern and to take appropriate action.

William Carter, Te Ātiawa ki Whakarongotai Kirsten Hapeta, Ngā Hapū o Ōtaki Natalia Repia, Ngāti Toa Rangatira

Annex J: Glossary

C & D Construction and Demolition (Waste)

E2 Education and Engagement

GHG Greenhouse Gas

KCDC Kāpiti Coast District Council

LG Local government

MfE Ministry for the Environment

OECD The Organisation for Economic Co-operation and Development (an

intergovernmental economic organisation with 36 member countries, founded

in 1961 to stimulate economic progress and world trade.)

PCC Porirua City Council

PET Polyethylene terephthalate

PGF Provincial Growth Fund

RMA Resource Management Act

RWMES Regional Waste Minimisation Education Strategy

RWMMP17 Wellington Regional Waste Management and Minimisation Plan (2017-2023)

RWA Regional Waste Assessment

WAB Waste Advisory Board

WMA Waste Minimisation Act

WMF Waste Minimisation Fund

WMMP Kāpiti District Waste Management and Minimisation Plan (2017-2023)

WMTF Waste Minimisation Taskforce