Waste Management and Minimisation Bylaw Determination Report

Tauranga City Council

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Document status

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Contents

Executive Summary

This report summarises the process by which the Tauranga City Council (TCC) has identified a number of discrete and important waste management problems. These problems affect TCC's ability to meet their statutory, financial, environmental and social responsibilities.

The report content needs to be considered against a number of recent changes to waste management services. TCC undertook procurement alongside the Western Bay of Plenty District Council of kerbside collection services for refuse, mixed recycling, glass, food waste and garden waste and the associated consolidation, processing and disposal services. The new service contracts commenced in July 2021 and consists of:

- a fortnightly kerbside refuse collection (140L rubbish bin)
- a fortnightly kerbside recycling collection (45L glass crate + 240L recycling bin)
- a weekly kerbside food scraps collection (23L food scraps bin)
- An optional opt-in fortnightly or 4-weekly garden waste service (240L bin)

Other than the introduction of a glass collection service in 2018, this is the first time in 20 years that TCC will provide kerbside collection services. This significant change for the city is intended to reverse a legacy of declining waste diversion.

The waste management issues identified have largely been drawn from TCC's Waste Management and Minimisation Plan (WMMP) informed by the 2021 Waste Assessment. This identification has been supplemented with the outcomes of workshops conducted with other teams within TCC and engagement with waste stakeholders and operators in Tauranga.

The WMMP establishes TCC's vision to reduce waste to landfill. In meeting this vision, TCC has set itself the goals of:

- ensuring resources are valued
- facilitating effective and efficient waste management and minimisation practices
- promoting sustainable waste management

Targets for waste streams have been set to achieve these goals and are based on the successful implementation of the new kerbside collection services, the Te Maunga transfer station upgrade to a more comprehensive resource recovery park, and opportunities to divert biosolids from landfill. These activities will be supported by education and behaviour change programmes.

TCC's current Waste Management and Minimisation Bylaw 2012 includes regulation on cleanfill, events, kerbside collections and operator licensing. The regulation was drafted to satisfy the vision, goals and targets of TCC's previous WMMPs (adopted in 2010 and 2016) and requires updating to align with the 2022 WMMP and the new kerbside collection services introduced by TCC.

TCC's policy framework aligns with the legislative framework for waste in New Zealand, which includes the Waste Minimisation Act 2008 (WMA), Litter Act 1979, Local Government Act 2002 and the New Zealand Waste Strategy (NZWS) 2010). The WMA, Resource Management Act (RMA) 1991, Litter Act and NZWS are all currently under review. It is anticipated that the legislative review will provide stronger support for the investments TCC have already made to improve waste minimisation in Tauranga as well as future initiatives.

This report has largely drawn on TCC's 2022 WMMP informed by TCC's 2021 Waste Assessment. The table below (Table 1) presents a summary of waste management and minimisation issues derived from these

documents. A range of options which could address each of the issues is presented with a recommendation made on the most feasible action or combination of actions. The introduction of new bylaws is one of these possible actions presented. Table 1 also includes additional issues raised through stakeholder engagement for the bylaw review.

Table 1 Summary of issues and recommended options

Specific issue	Outcome sought	Mechanisms considered	Recommended option
1 The way we currently consume products leads to large quantities of waste.	• Focusing on reducing the quantity of waste is the first step in the waste hierarchy, after avoiding unnecessary waste by designing it out of the system in the first place.	Education	TCC can provide educational material at appropriate locations (including supermarkets, TCC offices/facilities, website, at local events, etc.) to inform and educate the community on reducing waste by buying products that have zero-waste or waste that is easily diverted from landfill (i.e. compostable or recyclable).
2 There is a high volume of household waste going to landfill that could be diverted.	• Separation of waste streams to maintain high rates of diversion and quality products • Improved data on waste stream separation for better diversion decision making • Data on differential pricing for refuse and recycling bin sizes and garden waste collection frequency for better diversion decision making • Upgraded Te Maunga refuse transfer station (RTS) • Cost effective and efficient services	Services Education Monitoring Bylaw	A combination of good services, education, monitoring and improved bylaw provisions are recommended. The bylaw could mandate diversion of specified waste streams to secure throughput for resource recovery processing facilities Introducing specific bylaw controls covering all aspects of recycling and organic collection services and comprehensive enforcement powers to deal with non-compliance resulting in contamination.
3 The proportion of our community living in multi-unit dwellings is growing.	• Education package for multi-unit residents to encourage accountability • Improved data on waste stream separation for better diversion decision making	Education Monitoring Bylaw Resource consent	A combination of education, monitoring, the introduction of a bylaw provision that is tied to building consents for new MUDs is recommended. Using this last mechanism, TCC will be able to specify waste storage at MUDs as well as require MUDs to provide waste management plans to

				improve collection and better manage hygiene and nuisance in and around MUDs.
4	Litter and illegal dumping, which has environmental and financial costs, is increasing.	• Reduce instances of litter and illegal dumping due to a lack of waste infrastructure and services, rising costs, behaviour, and accidents. • Reduce environmental and financial costs of littering and illegal dumping.	Services Education Monitoring Bylaw	A combination of education, encouragement, advocacy, monitoring and the updating of bylaw provision is recommended.
5	Businesses and organisations need better services to divert waste from landfill.	• Improved information transfer to businesses through an education package • Data on differential pricing for refuse and recycling bin sizes and garden waste collection frequency for better diversion decision making • Upgraded Te Maunga RTS	Services Education Monitoring Bylaw	A combination of good services, education and monitoring. Investigate the provision of additional waste services to businesses. In particular, TCC may be able to leverage off its recycling collection services and newly introduced organic collection services to be able to offer a corresponding business collection services. There is no specific requirement for a bylaw to address waste issues with businesses that would not already be covered by general control provisions. These could and should extend to any services introduced by TCC specifically for waste collection for businesses.
6	There is a high volume of construction and demolition material going to landfill.	• Encouragement of material separation at construction sites. • Support the use of technology and events to sell, exchange or re-use C&D material • Diversion of C&D waste away from cleanfill • Advocating for sustainable practices in national building code • C&D sorting facility and reuse/upcycle facility at Te Maunga RTS	Services Education Encouragement Advocacy Monitoring Bylaw	A combination of education, encouragement, advocacy, monitoring and the introduction of a bylaw provision is recommended. A bylaw requiring a Waste Management Plan for developments over a certain value is recommended. This is until such time as there is national regulation that includes C&D diversion requirements. TCC could also consider including in the bylaw specific

				controls that provide the ability to set controls for the types and categories of acceptable and prohibited C&D waste that is able to be deposited at a waste management facility.
7	Disposing of biosolids to landfill affects cultural, environmental, social, and economic values.	• 100% diversion of biosolids generated from TCC's wastewater treatment plants	Services	Diverting biosolids from landfill through a contract for processing services e.g. with an appropriately consented vermicomposting facility. In the meantime, alternative options for the disposal of biosolids should be actively considered by TCC.
8	Cost and volume uncertainty has risen due to legislation change or service interruption.	• Participation in national product stewardship schemes • Separation of waste streams to maintain high rates of diversion and minimise cost impacts • Cost effective and efficient services • Participation in waste legislation development by responding to the Government's consultation documents	Services Education Advocacy Bylaw	A combination of good services, education, advocacy, monitoring and improved bylaw provisions are recommended. Funding, from national standardisation initiatives, for assets that better recover more diverse waste streams should also be investigated as a priority. It is recommended that TCC include a full suite of enabling provisions that will provide the ability to set controls for the types and categories of acceptable and prohibited waste and recyclables. This provide TCC with flexibility to adopt new changes consistent with National policy and legislation.
9	Unforeseen events can result in high volumes of waste in a short period.	• Consideration of disruption to waste services during an event in TCC's business continuity planning • Consideration of resilience of infrastructure when planning location of resource recovery facilities	Monitoring Education	Monitoring It is recommended that TCC rely on influencing regional disaster recovery plans and procedures for better integration and clarity, including investigation of the resilience of assets and determining contingent assets. Once tested and homogenised, adopt a

			regional education campaign and programme that will ensure the Tauranga and surrounding community know the 'drill' for each category of disaster/critical incident.
10 Other potential waste issues	• Harmonisation of waste bylaws within the region alongside (Western Bay of Plenty District Council) • Ability to enforce against persistent non-compliance.	Bylaw	Consider updating existing 2012 bylaw event waste management requirements to include for the provision of a waste management plan. Consider including a number of additional provisions covering nuisance, litter, unaddressed mail and inorganic collections, primarily to enable regional consistency and have regulatory tools to assist with managing local waste-related activity and enforcement for non-compliance.

The draft bylaw, updating the 2012 bylaws, is attached as Appendix A for consideration.

1 Introduction

1.1 Background

Waste management is a complex and critical service provided by TCC. Community expectations of the service are high, but a successful delivery of the service requires TCC, waste operators, businesses, residents and the general public (whether residents or visitors) to all play their part.

A number of discrete but important waste management problems have emerged for TCC:

- The way we currently consume products leads to large quantities of waste.
- There is a high volume of household waste going to landfill that could be diverted.
- The proportion of our community living in multi-unit dwellings is growing.
- Litter and illegal dumping, which has environmental and financial costs, is increasing.
- Businesses and organisations need better services to divert waste from landfill.
- There is a high volume of construction and demolition material going to landfill.
- Disposing of biosolids to landfill affects cultural, environmental, social, and economic values.
- Cost and volume uncertainty has risen due to legislation change or service interruption.
- Unforeseen events can result in high volumes of waste in a short period.

These issues were identified through the development of the WMMP and updated to reflect feedback from:

- Other service areas within TCC; and
- customer and operator enquiries and complaints.

TCC have considered mechanisms to address these issues and make recommendations on the most appropriate options to address them. These mechanisms include the appropriateness of updated or new bylaw provisions. These mechanisms are discussed in greater detail in Section 2.

1.2 Legislative framework

The primary pieces of legislation driving waste management and minimisation planning is the Waste Minimisation Act (WMA) 2008, the Local Government Act (LGA) 2002, and the Resource Management Act (RMA) 1991. Other pieces of legislation contribute to the regulatory environment including the Litter Act 1979 (which prohibits littering), the Health Act 1956 (a significant piece of legislation which gives, amongst other things, the power to territorial authorities to manage waste that may cause a hazard to human health), the Climate Change Response Act 2002 (which introduces the Emissions Trading Scheme including obligations for owners of landfills), and the recently passed Climate Change Response (Zero Carbon) Amendment Act 2019.

Taken together, these Acts provide the legislative imperative and tools to support progress toward the high-level direction outlined in the New Zealand Waste Strategy (NZWS).

The WMA, RMA, Litter Act and NZWS are all currently under review. Changes to the legislative framework will not likely be enacted prior to this bylaw coming into effect. It is anticipated that changes to areas such as CRS introduction, national licensing of operators and kerbside standardisation initiatives will reinforce TCC's current direction, but this is yet to be determined.

To mitigate any potential inconsistencies with TCC's bylaw, the intent and purpose of a bylaw will be to

enable Council to set controls around fundamental areas of waste management under overarching bylaw provisions. This will provide the flexibility for Council to adjust the implementation of the bylaw in practice when needed, and where necessary, in response to any changes bought about through national legislation.

1.2.1 The Waste Minimisation Act (WMA) 2008

The enactment of the WMA in 2008 represented a change in the Government's approach to managing and minimising waste. The WMA recognises the need to focus efforts higher on the waste hierarchy in terms of reducing and recovering waste earlier in its life cycle, shifting focus away from treatment and disposal. The purpose of the Act (s3) is to *"encourage waste minimisation and a decrease in waste disposal in order to protect the environment from harm; and to provide environmental, social, economic and cultural benefits".* The WMA introduced a range of useful tools. These include a framework for developing accredited product stewardship schemes and the creation of a national waste disposal levy, half of which is distributed back to councils on a population basis.

While the WMA provides many benefits to local councils it also establishes a range of responsibilities. Part 4 is fully dedicated to the responsibilities of councils which *"must promote effective and efficient waste management and minimisation within their districts"* (s42).

Section 56 of the WMA gives councils the power to make bylaws for the following purposes:

- prohibiting or regulating the deposit of waste
- regulating the collection and transportation of waste
- regulating the manner of disposal of dead animals, including their short-term storage pending disposal
- prescribing charges to be paid for use of waste management and minimisation facilities provided, owned, or operated by the territorial authority
- prohibiting, restricting, or controlling access to waste management and minimisation facilities provided, owned, or operated by the territorial authority
- prohibiting the removal of waste intended for recycling from receptacles provided by the territorial authority by anyone other than
    - the occupier of the property from which the waste in the receptacle has come, or
    - a person authorised by the territorial authority to remove the waste.

It also allows for the promulgation of bylaws which regulate the licensing of persons who carry out the collection and transportation of waste.

Bylaws can be used to:

- provide regulatory support
- provide a framework to drive councils' waste strategy development and waste management strategy initiatives
- ensure efficient and effective waste management in accordance with legislative requirements and with councils' waste minimisation and management plans

The WMA is in need of redrafting to enable Government to deliver an updated NZWS in order to transform the waste sector. This revision will reset national waste purposes and principles, governance arrangements, roles and responsibilities and, strengthen regulatory and enforcement powers.

Te kawe i te haepapa para (issues and options paper for the new waste strategy) outlines the aims of the new WMA:

- embed a long term strategic approach across central and local government for achieving change, supported by consistent data collection, evaluation and reporting
- create the governance and administrative framework needed to support effective investment and use of waste levy funds
- put individual and collective responsibility for how we deal with unwanted material at the heart of a new regulatory framework of obligations on organisations, households and individuals, building on the duty-of-care model used in other jurisdictions
- provide new and enhanced regulatory tools and levers to support the waste strategy and emissions reductions
- create stronger accountability and reporting provisions
- update and broaden compliance, monitoring and enforcement powers, and
- fix miscellaneous aspects of the existing legislation.

1.2.2 Local Government Act (LGA) 2002

Bylaws made under the Local Government Act 2002 (LGA02) may be made:

- to protect the public from nuisance
- to protect, promote and maintain public health and safety
- minimise the potential for offensive behaviour in public
- to control the use of liquor in a public place, and
- regulating waste management.

However, any breaches of bylaws made under the LGA can only be proceeded against summarily, unless specified as infringement offences in separate regulations (this has not occurred for waste or litter offences). A person who is convicted of breaching a bylaw is liable to a fine which is in a range defined by the Act (of up to $200,000). Fines are generally not more than $20,000, which is consistent with fines for breaches of bylaws made under the WMA.

The enactment of any bylaw needs to be preceded by consideration of certain criteria. The bylaw, as it relates to waste, needs to be:

- consistent with a WMMP
- an appropriate and proportionate response to any perceived waste problem
- have the same effect as any bylaw being replaced, and
- be consistent with the Building Act 2004 and subordinate legislation in relation to construction and demolition waste.

The LGA also requires consultation and notification with additional notification requirements for trade wastes before any bylaw can be enacted.

Bylaws are reviewed at least every five years.

1.2.3 Other relevant legislation

Litter bylaws (made under the Litter Act 1979) allow local authorities to issue infringement notices for littering. The maximum fee for a breach is $400. However, local authorities can only take action if the offender is caught in the act or if they can be identified by the litter left behind. Breaches of the Litter Act can also be pursued summarily and, if the court convicts, a penalty may be imposed on the offender and the offender may be ordered to pay a sum that compensates the local authority for the cost of removing the litter. The Litter Act is included in the suite of legislation and policy under review.

The Health Act 1956 enables local authorities to make bylaws for the protection of public health. Every person who contravenes or fails to comply with any bylaw made under the Health Act commits an offence and is liable to a fine not exceeding $500 and, in the case of a continuing offence, to a further fine not exceeding $50 for every day on which the offence has continued. The local authority may, after the conviction of any person for a continuing offence against any bylaw, apply to any court for an injunction to restrain the action.

1.3 New Zealand Waste Strategy 2010 (NZWS)

The NZWS provides high level direction to guide the use of tools available to manage and minimise waste in New Zealand. To convey the high-level direction, the NZWS has two goals:

- reducing the harmful effects of waste, and
- improving the efficiency of resource use.

Section 44 of the WMA requires that councils "have regard to" the NZWS, or other such policy that is subsequently developed, when preparing a WMMP. The flexible approach within the NZWS will ensure that waste management and minimisation activities are appropriate to local situations and desired community outcomes.

The NZWS is currently under review. What underpins the review is an inability to export waste to key Asian markets. In *Te kawe i te haepapa para* (Issues and options paper for the new waste strategy) the Ministry of Environment has set an ambition to increase onshore processing of waste. The case for change is modelled on strategies, policies and legislation by the European Union and other countries and uses New Zealand's waste issues such as, poor waste data poor diversion and remediating some 20, 000 waste sites to prevent contamination as a baseline. It also recognises that predictions of an increasing frequency of extreme weather events is likely to increase certain waste stream volumes.

The issues and options paper proposes:

- investing in resource recovery infrastructure
- expanding the waste levy
- rethinking plastics - to innovate plastics recovery and phasing-out a number of single-use and hard-to recycle plastic
- regulating product stewardship and,
- supporting industry to reduce waste and divert material from landfill.

For the waste strategy to succeed, it will need to be supported by good information (including public education campaigns) and analysis, have a quick implementation period and provide effective regulatory, financial and other tools for operation and evaluation.

Any TCC bylaw change will need to be consistent with the revised NZWS and related regulation. To avoid any inconsistency, bylaw drafting could incorporate the flexibility to adopt the approaches articulated in *Te kawe*

i te haepapa para by allowing for:

- controls to be set covering waste types and kerbside collection systems;
- using controls to promote diversion of organic waste from landfill; and
- other disposal controls (including transport, storage, treatment and disposal quality standards)

1.4 Council's waste management and minimisation plan

Section 56 of the WMA requires that bylaws *"must not be inconsistent with the territorial authority's waste management and minimisation plan."*

This WMMP is a guiding document which identifies TCC's vision, goals, objectives, targets and methods for achieving efficient and effective waste management and minimisation. TCC's vision for waste management and minimisation is:

"Reduce waste to landfill"

The goals and objectives to meet TCC's vision are outlined below.

Table 2 Goals and Objectives

Goals	Objectives
Goal 1: Resources are valued	Objective 1: Promote a shift up the waste hierarchy to focus on avoiding and reducing resource use that generates waste, before reusing, recycling, and recovering. Objective 2: Reduce the total quantity of waste disposed to landfill. Objective 3: Measure and report progress against targets.
Goal 2: Facilitate effective and efficient waste management and reduction	Objective 4: Provide everyone in the community with an opportunity to access waste services and infrastructure in a way that is equitable. Objective 5: Reduce contamination within kerbside recycling and organic collections, and in public place recycling bins. Objective 6: Collaborate with local iwi, central government, other councils, businesses, the community, and private waste companies on waste management and reduction initiatives. Objective 7: Investigate, consider, trial, and implement new technologies and service methodologies for efficient waste reduction.
Goal 3: Promote sustainable waste management	Objective 8: Be led by tikanga and mātauranga Māori to adopt a holistic approach in taking responsibility for our waste. Objective 9: Influence and empower the community to take responsibility for their waste. Objective 10: Reduce greenhouse gas emissions associated with waste.

	Objective 11: Reduce the harmful environmental, societal, and economic impacts of waste.

2 The Key Waste Issues

2.1 Definition of the issues

TCC has reviewed progress against the previous WMMP action plan and has identified waste issues that need to be addressed in its new WMMP. The options considered to deal with these issues include services, education, encouragement, advocacy, monitoring and updated or new bylaw (regulation) introduction.

In the 2021 Waste Assessment, options were assessed for alignment with the vision, goals and objectives, costs and ease of implementation before a preferred option was identified.

The major issues that will be potentially dealt with via a new bylaw have been tested through a targeted engagement with stakeholders from the waste and building/development industries. The intent was for TCC to seek specific feedback on the proposed new measures and their potential impact prior to any formal public consultation on the WMMP and draft waste bylaw.

2.2 Mechanisms for achieving waste management and minimisation objectives

There are a range of mechanisms available for achieving the waste minimisation and management outcomes that TCC seeks.

In his book, *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving* Eugene Bardach[1] identifies eleven "Things Governments Can Do." These are: taxes (or rates in the case of local government), regulation, subsidies and grants, services, budgets, information, modification of structure or private rights, modification of framework of economic activity, education and consultation, financing and contracting, and bureaucratic and political reforms.

The options most frequently considered in relation to the type of waste problems identified by TCC are:

- regulation (by means of a bylaw or through the district plans) or influencing national regulation through advocacy
- services and associated fees and charges
- education (including all aspects such as signage, programmes, relevant information and materials circulated, provided and/or delivered)
- encouragement of voluntary industry agreements e.g. codes of practice.

This report discusses the merits of each option and provides a recommendation as to the preferred option(s).

No additional action by TCC (a 'do nothing' option) was considered. Generally, a 'do nothing' course of action relies on the existing programmes, actions and initiatives, which is effectively already embedded within the range of options. In all instances however, this approach has not delivered the required outcomes sought

[1] Bardach, E. (2005). A Practical Guide to Policy Analysis: the eightfold path to more effective problem solving (2nd ed.). Washington DC: CQ Press

and has not proved effective in addressing the identified problems.

2.3 Analysis of the issues

This section of the report outlines the problems identified by TCC that can be addressed by a Bylaw, the outcomes sought, the mechanisms identified by TCC to achieve the outcome sought.

2.3.1 High volume of household waste going to landfill that could be diverted

The volume of kerbside waste disposed to landfill in the TCC district has hardly reduced below TCC's 2015/2016 measure of 200 kg/capita/year in the last 5 years. Recent disruption to recycling markets has impacted the range of materials collected for diversion from landfill. This has impacted the cost of the service and the achievement of diversion targets.

TCC introduced its own household kerbside waste services in July 2021 determined to increase diversion through having greater control over the kerbside services.

Prior to the new kerbside collections commencing, there was a high volume of residential organic waste disposed to landfill, both food waste and garden waste. TCC's introduction of a kerbside food waste collection service aims to address this issue. While garden waste can be separated at the RTS, there remained a high volume disposed to landfill. TCC therefore also introduced an optional garden waste collection service.

Three options to address the problem of residential divertible material going to landfill have been identified.

Influence	Education and information sharing is an on-going approach that the TCC uses, particularly in conjunction with any new initiatives or changes to the way a service is to be provided.
Regulate	Restrict/ban specific types of waste in kerbside rubbish collection bins to ensure the kerbside services introduced are being used effectively
Service	Monitor effectiveness of kerbside services for refuse, glass, mixed recycling, food waste and garden waste
	Monitor provision of differential pricing for refuse and recycling bin sizes and garden waste collection frequency and option use (currently an opt-in service)
	Develop Community Resource Recovery Centre at Te Maunga RTS
	Continue providing targeted public place refuse and recycling bins

Discussion of the options

Educational material distributed at strategic locations (including supermarkets, TCC offices/facilities, website, at local events, with rates information etc.) is a low-cost option to inform and educate the community on positive waste minimisation behaviours. TCC presence at public events, galas, and less traditional opportunities could also be explored. Taking a marketing approach to communicating waste goals and making it real to people living and working in the city also improves penetration. The use of apps and social media, to encourage waste diversion behaviours (e.g. Love Food Hate Waste) too is helpful.

A TCC Kerbside Contamination Officer works with kerbside contractors to assist them in identifying contamination in kerbside recycling bins and equally works with residents to reduce contamination.

The provision of differential pricing for bin sizes for kerbside refuse and recycling services and frequency of garden waste collection encourages diversion of waste from landfill. Ongoing monitoring of the effectiveness of the pricing and frequency options as well as opt-in options will determine if diversion has

increased.

Community Resource Recovery Centres are a service enhancement enabling a wider range of residential materials to be diverted from landfill and supporting the community sector, however TCC will need to investigate scope and delivery options to determine financial sustainability of a Centre.

Additional or replacement public place litter and recycling bins will be targeted at high impact areas such as near service stations, shops, supermarkets, outside schools, tourism hot-spots, and in locations that will encourage the use of the facilities.

With TCC taking control over the residential kerbside collection services, this has an enhanced their ability to use its service contracts to control the material collected in different receptacles.

A bylaw that allows TCC to set controls over the types of waste allowed in specified collection points and receptacles would be consistent with the ability to influence and define:

- the composition and separation of waste types;
- The use of different kinds of receptacles; and
- timeframes and locations for collection services to operate

The 2012 bylaw directs residents to put waste in approved containers on the day of collection in a secure way. It also gives TCC powers to prescribe other control provisions including the separation of recyclables from other waste, the use of approved containers for recyclables for example, the time a container can remain on the road before and after collection and the weight of containers. The bylaw also bans liquids, hot ashes, hazardous wastes and medical waste (and sharps in rubbish bags).

A control-focussed bylaw replacing the existing bylaws could consolidate its current arrangement through more specific requirements about all aspects of recycling and organic collection services and comprehensive enforcement powers to deal with non-compliance resulting in contamination. Matched with new council delivered services, this will provide TCC with more influence over the waste composition of different collection streams moving forward.

Recommendation

It is recommended that TCC rely on monitoring and education campaigns and programmes as the primary mechanisms to increase diversion, particularly as delivered through their new collection services. However, the introduction of a bylaw that allows TCC to specify approved materials, use of receptables, specifics of collection services and enforcement measures is a useful backstop measure to reduce contamination levels. It provides Council with the means to prosecute a user of the service for intentionally and persistently misusing the service, should it choose to do so.

2.3.2 Growing proportion of residents living in multi-unit developments (MUDs)

Approximately 10% of TCC's households live in MUDs and this is expected to grow. Access and storage restrictions mean that TCC are unable to offer standard kerbside services to all these premises, but still want to be able to offer the range of services to these customers as elsewhere in the city.

Three options to address the growing portion of customers in MUDs without a comparable service have been identified.

Influence	Develop education package for MUD residents to encourage accountability
Regulate	Include appropriate waste storage areas in planning requirements for new MUDs

	Require new MUDs to have a waste management and minimisation plan that must be complied with by owners/occupiers/managers
Service	Monitor provision of tailored high frequency kerbside service

Discussion of the options

Existing MUDs need to be assessed on a case-by-case basis regarding how best to service the property based on the building layout. Assigning responsibility for managing recycling and waste through a bylaw is an appropriate backstop provision. For existing MUDs, education for owners/occupiers on their responsibilities and the services that are available is an additional useful tool to promote compliance and positive waste minimisation.

Access and storage problems can be addressed for new MUDs through good planning provisions and requirements to have a plan and approach for waste management which is linked to approval/consent for development of the MUD. One of the issues with providing waste services to MUDs is establishing clear ownership for how waste will be managed at the MUD and what the responsibilities will be for owners/occupiers. This is particularly true for ensuring that waste is disposed of in the right receptacles and those receptacles are easily accessible for both residents and where applicable, collection service contractors.

Monitoring ongoing implementation of TCC's waste services for MUDs and investigating improvements in delivery of these services and how they will be funded will provide options for servicing MUDs with restricted storage or difficult access to public areas for accessing kerbside collection services.

Recommendation

It is recommended that TCC introduce a bylaw that requires new MUDs to have a Council approved waste management plan that identifies MUD waste hardstands and storage facilities in accessible locations for easy collection and how waste will be managed at the MUD. The bylaw should also be clear about who is responsible for producing the plan and it should be linked to the consenting process to ensure it is produced and delivered as a requirement of the development proceeding.

More broadly, TCC should consider specific controls that enables Council to establish specific MUD requirements to reflect the different waste services that may apply to MUDs.

It is also recommended that TCC use monitoring and education campaigns and programmes to support the delivery of services to MUDs and increase the level of compliance of MUD residents with respect to sorting and disposing of waste and recyclables in the appropriate receptacles.

2.3.3 Availability of diversion services for Small and Medium Enterprises (SMEs)

The SWAP data shows that readily recoverable dry recyclables, organic material and re-usable items are disposed of at TCC's RTS. An unknown proportion of this waste comes from SMEs, which includes commercial premises, not for profit, community organisations, early childhood centres, schools, etc. TCC currently does not provide kerbside services to SMEs. SMEs either engage private waste collection services or dispose of their waste directly at the RTS. There is an opportunity to develop more services for these enterprises to divert and dispose of their waste either at kerbside or at the RTS.

At this point in time extending services to large enterprises is not considered an opportunity, because they generally require bespoke arrangements that are not suited to kerbside services.

Three options to improve servicing of SMEs has been identified.

Influence	Develop an education package and provide information to SMEs
Regulate	Restrict/ban specific types of waste in collection bins to ensure kerbside services introduced are being used effectively
Service	Upgrade RRP at Te Maunga RTS including the Community resource recovery area and re-use shop
	Provide recycling and food scraps collection services to SMEs

Discussion of the options

Tailored communication with a focus on the needs of SMEs, across a variety of mediums would help. This could be an extension to the current education service provided in the recycling area at Te Maunga RTS that encourages users to recycle and would therefore be relatively simple to implement.

Differential pricing currently in place motivates the majority of users to divert materials however some make the choice not to spend time sorting waste in order to save money and a different strategy may need to be considered to guarantee sorting.

Some investment has been planned to upgrade the Te Maunga RTS. Future development should consider what services would be valuable to SME's.

TCC could provide a kerbside collections service to businesses inside their services area. Consultation with the business community could generate service options as business needs vary in relation to solid waste, organics and recycling. Prior to consultation, Council would ideally identify appropriate options such as the option to opt-in to a household-type collection or offer more bespoke business waste service similar to MUD servicing as part of the consultation package.

A cost and benefits analysis will need to determine the feasibility of the options.

Recommendation

It is recommended that TCC rely predominantly on monitoring and education campaigns and programmes, continue with differential pricing and investigate solid waste, organics and recycling waste services feasibility for SMEs.

A further recommendation is to investigate the provision of additional waste services to SMEs. In particular, TCC may be able to leverage off its recycling collection services and newly introduced organic collection services to be able to offer a corresponding collection services to qualifying SMEs in Tauranga City.

There is no specific requirement for a bylaw to address waste issues with SMEs that would not already be covered by general control provisions. These could and should extend to any services introduced by TCC specifically for waste collection for SMEs.

2.3.4 High volume of divertible C&D material going to landfill

There is a high volume of construction and demolition (C&D) material going to landfill. The most recent SWAP data (October and November 2020) of waste being processed at the Tauranga Refuse Transfer Stations had construction and demolition waste at 23% of all waste by weight. This is the equivalent of 26,000 tonnes per annum. In addition, there is an unknown volume of waste that is likely being sent directly to landfills and cleanfills that are not controlled by TCC. For example, prior to its closure in July 2020, it is understood that that the Jack Shaw cleanfill was processing approximately 50,000 tonnes of waste per annum.

With such a large a large volume of C&D waste being generated and a construction boom underway in Tauranga, there is an opportunity to educate the construction sector and work with the private sector to provide collection services to complement services at the RTS in order to reduce, re-use, or recycle a

proportion of this waste.

Three options to improve servicing have been identified.

Influence	Proactively collaborative with industry to change behaviours via education and promotion of waste minimisation
	Support the use of technology/events to sell/re-use construction material
	Work collaboratively with the private waste sector to encourage the provision of C&D waste collection services
Regulate	Introduce bylaw prohibiting disposal of certain C&D material in landfill and clean fills
	Introduce a bylaw requiring contractors to provide a waste management plan for their site
	Change TCC building standards to include sustainable practices
	Advocate for national building code to include sustainable practices
Service	Establish facilities for C&D material sorting and recovery at Te Maunga RTS
	Establish reuse/upcycle facility at Te Maunga refuse transfer station for C&D waste
	Provide land and facilities at Te Maunga refuse transfer station for building deconstruction

Discussion of the options

Working collaboratively across Tauranga and the surrounding region will have benefits in reducing C&D waste. A critical service gap that might be filled by the private sector is the onsite processing and collection of C&D waste. Additionally, working with the construction industry on waste minimisation activities such as waste separation, recycling of materials and beneficial reuse will also provide a means to change behaviour. There is potential for this area to be enabled by technology. Off the shelf ICT is a low-cost way for TCC to influence C&D diversion knowledge and habits including providing a platform for trading of materials.

The introduction of a bylaw prohibiting disposal of certain C&D material in landfill and cleanfills could lead to an increase in illegal dumping or transportation of waste out of district. Alternative disposal facilities would need to be provided by TCC before this option could proceed to mitigate that risk. With other councils in the region and nationally looking to address similar issued with C&D waste, there is opportunity to take a regional approach to diversion activities and initiatives.

While the Building Act 2004 has a reduction in the generation of waste during the construction process as a principle, there is no national regulations in place with requirements to divert C&D waste from landfill. A bylaw requiring a waste management plan for any development (or developments over a certain size), submitted to Council prior to the commencement of building work, could fill the gap until such time as there is a more prescriptive and certain national regulatory regime in place covering C&D diversion. Any initiative designed as a national model may be subject to central government funding.

TCC will also have to consider how they will monitor compliance with waste management plans and any post plan activity required, such as the assessment and recording of waste diverted from landfill.

C&D sorting and recovery and, reuse and upscale facilities at Te Maunga will significantly increase opportunities for diversion. The range and quality of diverted materials requires major capital works at the existing facility that includes the operation and maintenance of a complex sorting line and management of markets for a larger quantity of diverted material. Consideration to providing an area at Te Maunga or elsewhere in Tauranga to deconstruct buildings could also be part of the considerations.

Recommendation

A bylaw requiring waste management plans for construction sites over a certain size will promote diversion and enable a better understanding of the C&D waste stream through enhanced reporting requirements under the bylaw. This will serve as an incremental improvement and will allow TCC to progress with diverting C&D waste until such time as national frameworks are formalised. This would sit alongside the upgrades to the Te Maunga facility that are underway. If influencing national building code amendments to include sustainable practices is successful, then this will provide a secure throughput into the expanded facility.

TCC should also consider including in the bylaw specific controls that provide the ability to set controls for the types and categories of acceptable and prohibited C&D waste that is able to be deposited at a waste management facility.

It is also recommended that TCC use mechanisms of influence, monitoring, education campaigns and programmes to increase C&D waste diversion. In particular, working with local private providers to potentially provide onsite processing and collection services may prove to be a successful approach.

2.3.5 Increased volume of biosolids needing to be managed

The volume of biosolids to landfill has increased due to process changes as a result of consent conditions. The recent increase of biosolids at the Te Maunga WWTP due to a change in consent conditions was a catalyst to begin a vermicomposting trial. This trial was successful but has not yet moved into a full production phase. A vermicomposting facility requires appropriate resource consents in place to scale up to meet the demand for processing increased volume of biosolids.

A service mechanism is recommended to address the potential volume of biosolids to landfill that has arisen from the changes in WWTP process.

Service	Divert biosolids from landfill to private vermicomposting

Discussion of the options

The vermicomposting trial has been successful. Converting this to a long-term arrangement for up to 100% of biosolids is likely to be more cost effective than disposing at landfill as well as supporting sustainability and the circular economy. However, this is dependent on the vermicomposting trial operation being granted consent by Bay of Plenty Regional Council Toi Moana to continue the activity. In the meantime, TCC will continue to look at other options for the disposal of biosolids to manage the risk of consent not being granted.

Recommendation

It is recommended that TCC rely on strong service provision to provide assurance to the community that biosolid diversion will be forthcoming. In the meantime, alternative options for the disposal of biosolids should be actively considered.

2.3.6 Cost and volume uncertainty due to legislation change

The government's programme to increase the Waste Disposal Levy and Emissions Trading Scheme (ETS) costs is underway. These price increases, along with the possible introduction of a Container Return Scheme and other product stewardship schemes, may impact recycling bin composition and RTS waste composition. These changes may impact the range and type of services offered by TCC.

Three options to address regulatory uncertainty have been identified.

Influence	Advocate for changes, providing a Tauranga perspective
Regulate	Review bylaws to make sure they are consistent with national legislation
	Ban certain waste to landfill
Service	Introduce diversion services and facilities to minimise the cost impact

Discussion of the options

The waste standardisation across New Zealand, currently undertaken through the changes to the waste legislative framework has the benefits of creating an even playing field, meaning all Councils are operating with the same recovery and sustainability imperatives, as well as securing throughput for waste and resource recovery assets Council operates. Initiatives and strategies from the review will also provide TCC with opportunities to partner with Government for greater investment in waste assets.

The 2012 bylaw bans could be extended beyond liquids, hot ashes, hazardous wastes and medical waste to ensure national consistency of service and diversion.

Recommendation

It is recommended that TCC influence national policy settings on waste and resource recovery as well as investigate qualification for funding made available as part of the legislative review. In this way they can keep abreast of regulatory change and quickly address and incongruence in the drafting of TCC's bylaws.

Funding, from national standardisation initiatives, for assets that better recover more diverse waste streams should also investigated as a priority.

In terms of bylaw provisions, it is recommended that TCC include a full suite of enabling provisions that will provide the ability to set controls for the types and categories of acceptable and prohibited waste and recyclables. This will allow TCC to be able to set controls for the current circumstances, while still having the flexibility to adopt new changes that are consistent with National policy and legislation without have to change any aspect of the bylaw.

2.3.7 Resilience for dealing with waste in the event of service disruption

Natural and man-made disasters, and pandemics, apply a different pressure upon waste services and other inter-related services by potentially creating a significant volume of waste, which may be contaminated, in a very short timeframe. The earthquakes in Christchurch, the Covid-19 pandemic and the management of waste following the Rena disaster, re-emphasise the need for planning. Lessons can be learnt from these events to assist in preparing for future natural disaster events in Tauranga.

Two options to improve waste resilience have been identified.

Influence	Initiate discussion with other councils for a sub-regional approach and discuss disaster response plan with Bay of Plenty Regional Council
Service	Establish/update an incident response plan as part of Business Continuity Plan to include for waste services
	Review the criticality and resilience of Resource Recovery Parks assets and adopt operation, maintenance and renewal strategies as appropriate
	Look at options for future temporary facilities (e.g. closed landfills) if access to one or more facilities becomes unavailable and investigate residual capacity

Discussion of the options

Resilience and business continuity planning is critical in the ability for TCC to deal with the on-going provision

of waste services in the event of major service disruption. Continuity planning is also a staple of any emergency planning by governments. TCC's Sustainability and Waste Asset Management Plan consider continuity however a more comprehensive review will need to be undertaken of the Plan and other policy setting and procedural documents to ensure integration and consistency and inclusion of resilience strategies and procedures and temporary facility options.

Critical incidents are rarely limited to a single local government area so TCC should also consider regional disaster response co-ordination with other council. Any documentation should also be consistent with national procedures.

Recommendation

It is recommended that TCC rely on influencing regional disaster recovery plans and procedures for better integration and clarity and this includes the investigation of the resilience of assets and determining contingent assets.

Once tested and homogenised, a regional education campaign and programme will ensure the Tauranga and surrounding community know the 'drill' for each category of disaster/critical incident.

2.3.8 Other waste management issues

While not specifically raised as pressing issues through the development of the draft 2022 WMMP, there is an opportunity to harmonise the waste management framework covered in the bylaw with Western Bay of Plenty District Council (WBOPDC) and other councils throughout Aotearoa/New Zealand. It is beneficial for all waste operators and resident communities if there is consistency, as it promotes good behaviours and practices.

The opportunity is for TCC to consider using a comprehensive bylaw using the model waste bylaw as a base, modified where necessary to take into account TCC's specific waste management issues and needs. In addition to the provisions outlined through this discussion document, the model bylaw could introduce changes and improvements over the 2012 bylaw in the following areas:

Discussion of the options

The 2012 TCC waste bylaw has a short provision requiring event organisers to complete a waste questionnaire outlining how they intend to manage waste at the event. There is an opportunity to strengthen this provision by allowing for mandatory waste management plan with a prescribed set of requirements for managing waste at events that could lead to better diversion of waste. By encouraging promotors and organisers of events to consider how waste would be managed, this would also contribute to better choices about the use of packaging and the provision of appropriate receptacles at events.

There are also standard provisions in the model bylaw which cover prohibition of certain activities which lead to waste becoming a nuisance, litter and unaddressed mail. These activities are perennial and standard issues for most councils. Being clear about what constitutes unacceptable activity and being able to enforce in the case of non-compliance is something that TCC should consider for inclusion in the updated bylaw.

Inorganic waste deposited as part of an inorganic collection service is also an area that is covered by control provisions in the model waste bylaw. Having this provision allows TCC to be quite flexible in providing a framework for offering or monitoring an inorganic collection service provided by private sector waste operators. This is an area that is carefully controlled by other councils to ensure that any service does not create a public nuisance and safety hazard when inorganic material is deposited on the street by residents.

Recommendation

It is recommended that TCC consider implementing bylaw provisions that update the event waste management requirements to include for the provision of a waste management plan. It is also recommended that TCC consider including a number of additional provisions covering nuisance, litter, unaddressed mail and inorganic collections, primarily to enable consistency with the intended bylaw approach of WBOPDC. Having these provisions will also make the overall bylaw comprehensive, covering all areas where it is useful to have regulatory tools to assist with managing local waste related activity and enforcement for non-compliance.

3 Conclusions

In summary, this report determines that a waste management and minimisation bylaw pursuant to the Waste Minimisation Act 2008 and the Local Government Act 2002 should be introduced to:

- restrict/ban specific types of waste in kerbside collection bins to ensure kerbside services introduced are being used effectively
- improve landfill diversion of waste generated by SMEs
- require new MUDs to have a waste management plans covering requirements for waste storage and management
- allow for the setting of restrictions on disposal of certain types of C&D waste to landfill and cleanfill
- require developments over a certain estimated value to provide a waste management plan
- require events to have a waste management plan
- improve harmonisation of existing bylaws.

A draft bylaw is attached to this report as Appendix A.

4 Next Steps

The Local Government Act 2002 prescribes the process for making a bylaw. The first step in this process is to determine whether making a bylaw is the most appropriate way of addressing the perceived problem.

This report has considered each of the waste related problems, discussed the possible mechanisms to address these problems (both regulatory and non-regulatory) and determined the most appropriate option.

The introduction of a bylaw is the recommended option (or part of the recommended option) for a number of the waste problems identified through an examination of the WA and stakeholder engagement.

The next step is to consider whether the proposed bylaws gives rise to any implications under the New Zealand Bill of Rights.

TCC must then prepare a statement of proposal which will include the draft bylaw as proposed. The statement of proposal must also identify the bylaw or bylaws to be revoked, include a reason for the proposal and consideration of the appropriateness of a bylaw to address the perceived problems.

The statement of proposal and a summary document should be put on TCC's Commissioner agenda and adopted for public consultation. Following receipt of public submissions, TCC must hear and consider the submissions and make any amendments as they see fit. The final bylaw is then adopted by resolution and publicly notified.

Appendix A Draft 2022 Tauranga City Council Waste Bylaw