

FOOD & GARDEN WASTE MANAGEMENT: WEST COAST COMMUNITY SURVEY RESULTS, JULY 2024

INTRODUCTION

Approximately 30 – 40% of waste that ends up in New Zealand’s landfills is food waste and other putrescibles¹. When these wastes rot, they produce methane, a powerful greenhouse gas. Waste audits completed in Buller and Grey in 2018 showed that food and putrescible waste amounts are higher than the national average, with 49% of kerbside waste being food waste. However, a recently completed West Coast Waste Audit (June / July 2024) was broadly consistent with national findings, with 26% of kerbside waste being food waste, and a further 8.8% being green or garden waste.

In March 2023, the previous Government announced that it would develop policies to help shift towards a circular economy that reduces waste and keeps materials in use for as long as possible. In support of this strategy, the previous Government announced a policy requiring district and city councils to collect food waste (or food and garden waste) for households in urban areas with over 1,000 people by 2030. Should the current Government pass the policy into regulation, it will apply to urban areas on the West Coast with more than 1,000 people, including Westport, Reefton, Greymouth, and Hokitika. Runanga and Carters Beach may also be included.

Beyond Government direction, reducing the amount of food and other putrescible waste that goes to landfills would have multiple benefits, including:

- saving costs through reducing the amount of waste that is transported and disposed to landfill,
- reducing the transportation of wastes (by volume) and therefore associated transportation emissions,
- reducing the amount of methane gas produced in landfills, and
- reducing the overall volume of waste going into landfills, thereby extending the operational life of existing facilities, improving efficiencies and providing further cost savings.

The three West Coast District Councils – Buller, Grey, and Westland – are working collaboratively with the Ministry for the Environment and Development West Coast to deliver a coastwide feasibility study into the collection and processing of food and garden wastes for urban centres on the West Coast. Engaging with mana whenua (Te Rūnanga o Ngāti Waewae and Te Rūnanga o Makaawhio) will help establish the project’s objectives and priorities.

The feasibility study comprises multiple stages (Figure 1). The Community Survey is an important upstream component of the project that will be used to help set the project’s

¹ Putrescible wastes include matter that rots or decays rapidly. It can be characterized as soft organic material which usually have high moisture content, are readily degradable, generate odor and attracts vermin ([Waste & Debris Fact Sheets | I-WASTE DST | US EPA](#)).

priorities, and inform the evaluation of collection options, including the identification of preferred option(s).

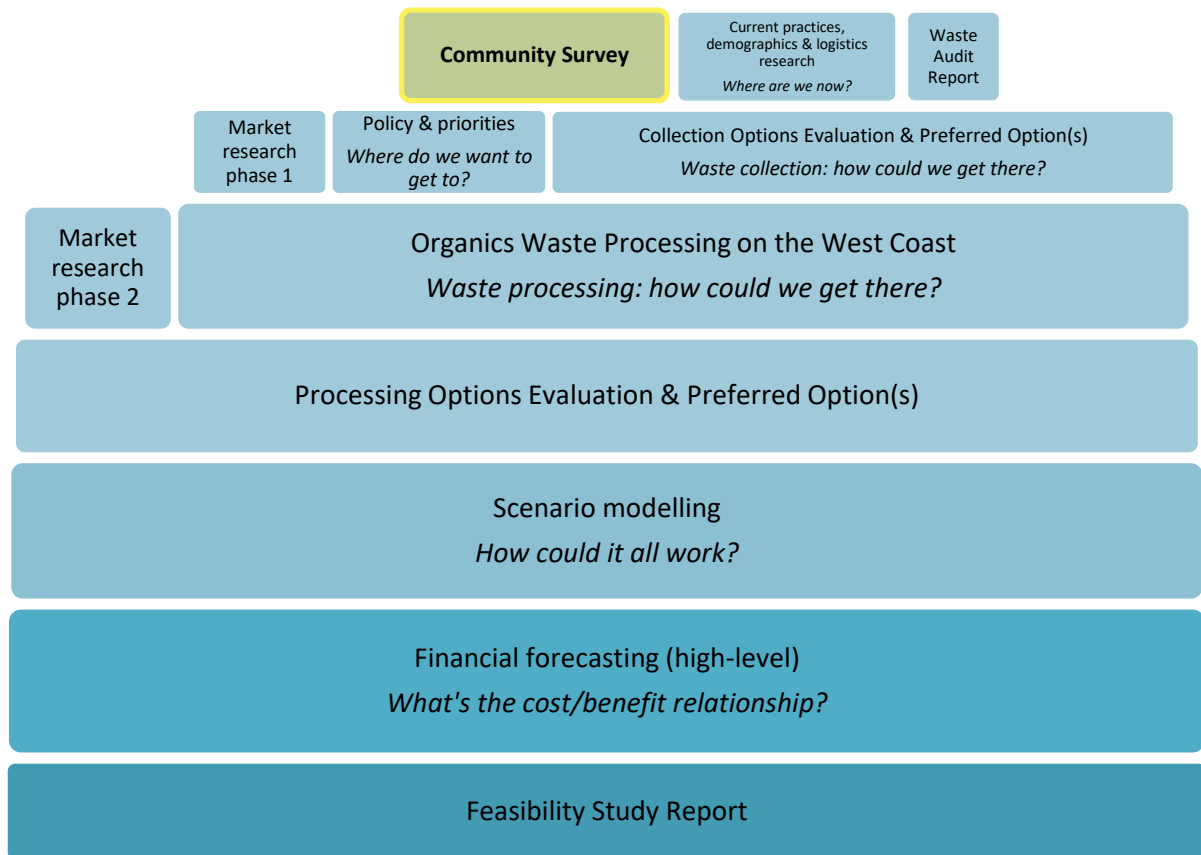


Figure 1: Project ecosystem. The Community Survey is an important upstream component of the feasibility study.

The community survey questionnaire had five objectives:

1. To improve the project's current understanding of waste management attitudes across different West Coast communities, including interest in improving the management of our food and garden wastes,
2. To improve the project's current understanding of waste management behaviours across different West Coast communities, including the ways in which food and green waste is currently disposed,
3. To gauge interest across the West Coast in Council-provided food and/or garden waste collection services, and understand the ways in which the services could be provided to best meet the needs of West Coast communities,
4. To gauge an understanding of community willingness to pay for collection services, should they be provided,
5. To seek input from West Coast communities regarding potential cost-effective solutions that address Central Government requirements and support more effective food and garden waste management.

METHODOLOGY

A community survey was delivered across the West Coast between 8 July and 29 July 2024.

It was available online (via Survey Monkey) and in paper form via Council service centres and libraries.

The community survey comprised thirteen questions and is shown in Appendix A.

RESULTS

SURVEY PARTICIPATION

A total of 478 survey responses were received. If only one person per household responded, then a total of 1294 people (or 3.93% of the West Coast population) are represented in the survey results.

Responses were received from residents across the three districts on the West Coast as shown in Table 1.

Table 1: Survey responses per West Coast district.

DISTRICT	RESPONSES
Buller District	122
Grey District	266
Westland District	87
Not specified	3
TOTAL	478

GEOGRAPHIC DISTRIBUTION

Survey responses came from as far north as Karamea, as far south as Harihari, and inland to Reefton. Responses came from various towns and rural localities across these districts, with strongest representation from the larger urban centres of Westport and nearby locations (Carters Beach and Waimangaroa), Greymouth and surrounding areas (Cobden, Blaketown, Karoro, and Paroa), and Hokitika and its vicinity.

Smaller towns such as Reefton, Runanga, Blackball, and Kumara were also well represented with the rural areas and less populated locations (e.g., Kowhitirangi, Arahura Valley, Punakaiki, Ross and Harihari) each returning a small number of responses.

AGE RANGE

There was a good spread of age ranges represented in the responses, with over 30% of respondents belonging to households with children aged 0 – 14 years (Figure 2).

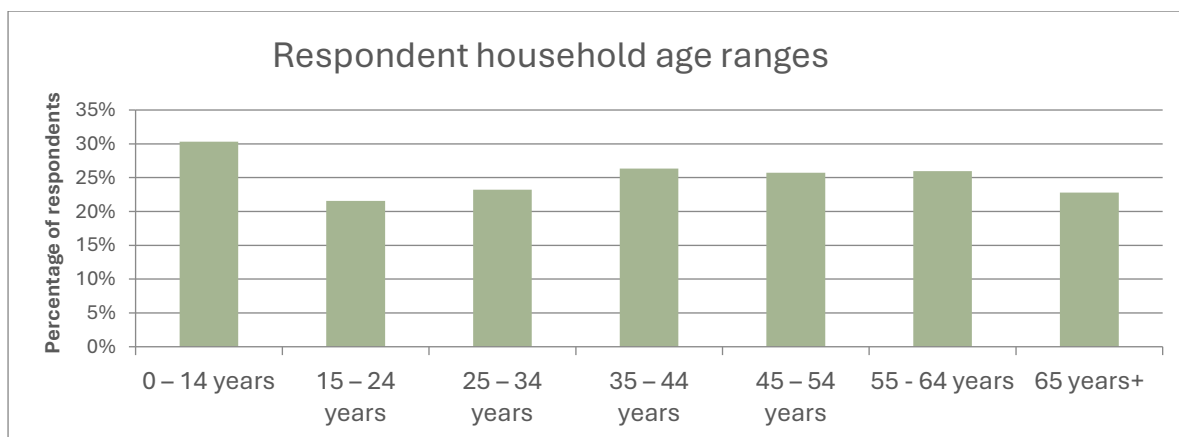


Figure 2: Respondent household age ranges.

WASTE MANAGEMENT BEHAVIOURS – FOOD WASTE

476 respondents answered the question:

“How does your household dispose of food scraps and waste?

(please rank the options below 1 – 5, where 1 = most common to 5 = least common)

- ***I put it in the general household waste***
- ***I home compost or have a worm farm***
- ***I feed animals (chooks or dogs etc)***
- ***I have an in-sink waste disposal unit***
- ***I burn or bury my food waste***
- ***Other (please tell us)”***

The most common method for disposal of food scraps and waste was to home compost or worm farm with almost 43% of respondents indicating they undertake this activity at home. The second most common disposal method was to the general household waste (31%), followed by feeding food scraps and waste to animals (chooks or dogs etc) (18%). Less common methods included using an in-sink waste disposal unit (4%) and burning or burying waste (5%) (Figure 3). Other specified methods included having food scraps collected by a local in a ‘pig scraps’ bucket and using a Bokashi system – a small-scale fermented compost system.

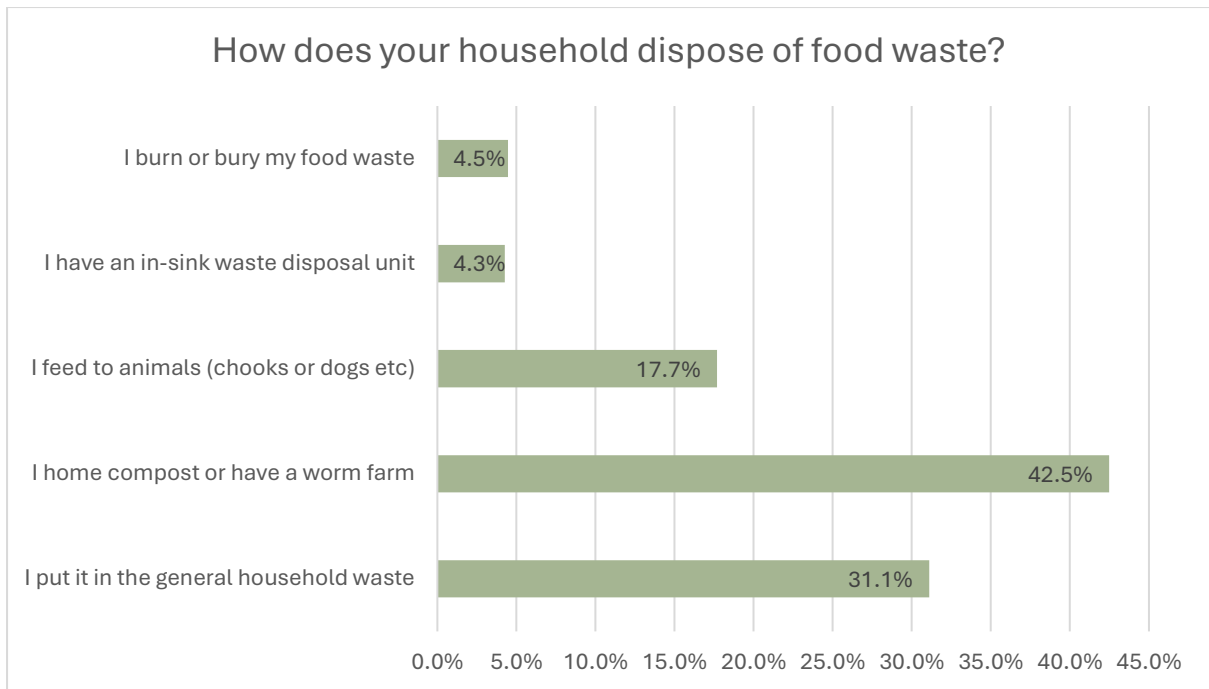


Figure 3: Food scraps and food waste disposal methods on the West Coast.

WASTE MANAGEMENT BEHAVIOURS – GREEN WASTE

478 respondents answered the question:

“How does your household dispose of its garden waste?

(please tick all that apply)

- ***I put it into the general household waste bin***
- ***I use it for my compost***
- ***I take it to a facility that accepts green or garden waste***
- ***I burn or bury my garden waste***
- ***Other (please tell us)”***

The most common method for disposal of green or garden waste was to home compost with 37% of respondents indicating they undertake this activity at home. The second most common disposal method was to the general household waste (21%), followed by disposing of it at a facility that accepts green or garden waste (20%). Over 13% of respondents indicated that they burn or bury their green or garden waste, and a further 9% use an alternative method, including disposing to a local’s property where free dumping is offered, using it as mulch around the garden or otherwise disposing of it on the property, letting animals break it down (goats, chooks), or dumping it at the beach or river (Figure 4).

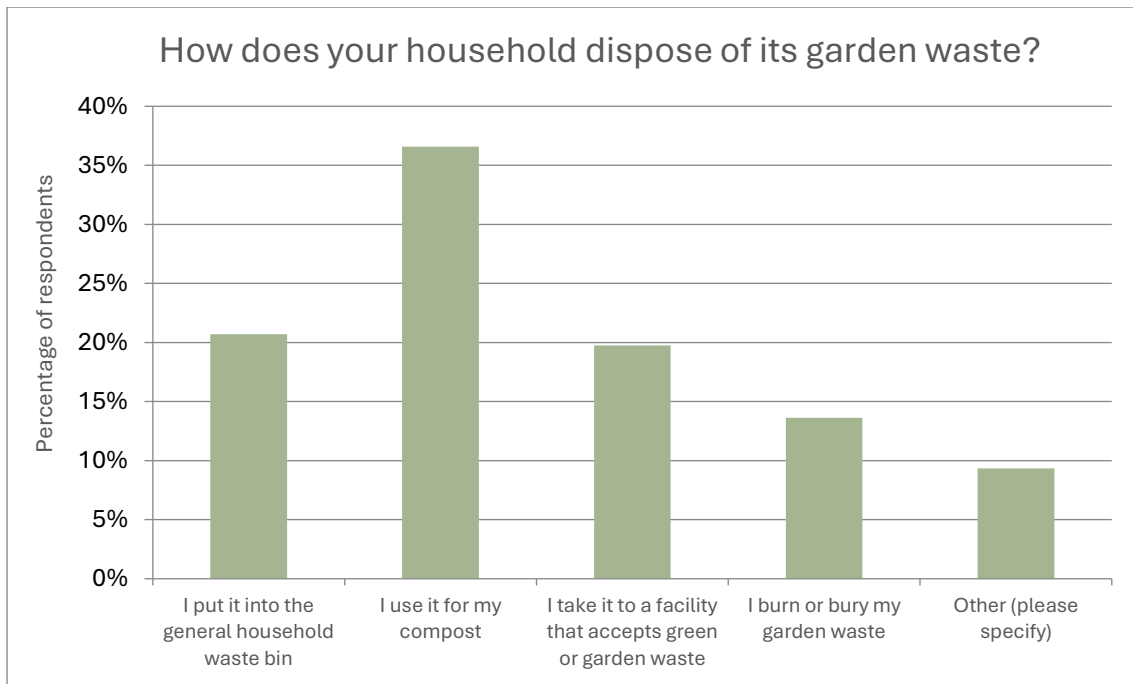


Figure 4: Garden waste disposal methods on the West Coast.

WASTE MANAGEMENT ATTITUDES – IMPORTANCE OF GOOD WASTE MANAGEMENT

477 respondents answered the question:

“How important is good waste management, recycling, and reuse to you on a scale of 1 – 5?”

Almost 92% of respondents reported that good waste management was either somewhat important (31.50%) or very important (60.47%) to them (Figure 5). This resulted in a weighted average score of 4.48 out of 5 for all respondents.

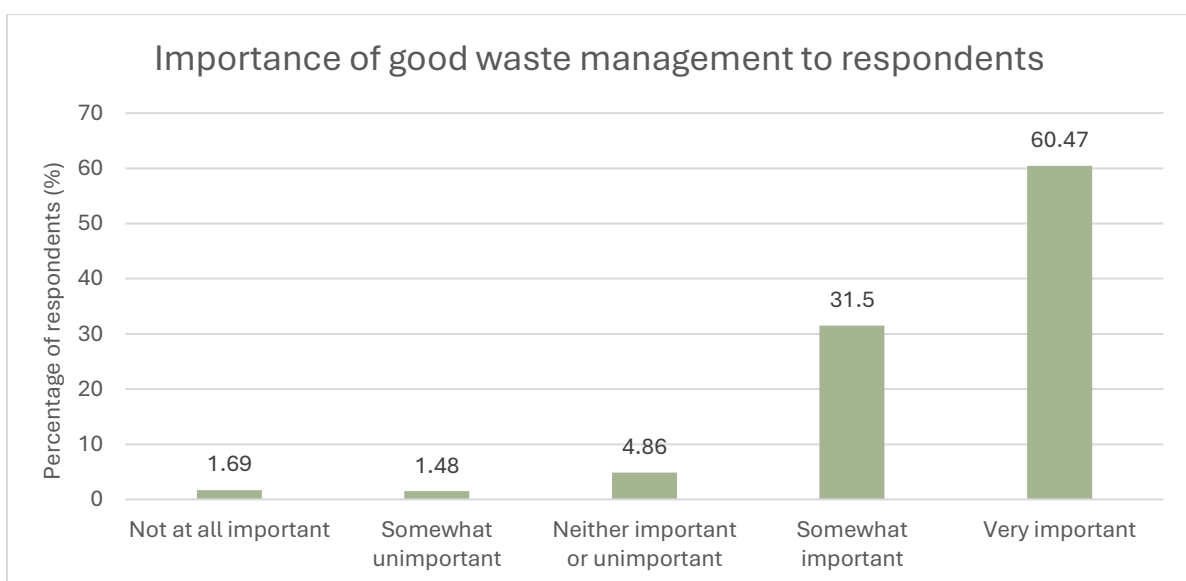


Figure 5: Importance of good waste management to survey respondents.

WASTE MANAGEMENT ATTITUDES – INTEREST IN USING COUNCIL-PROVIDED FOOD WASTE COLLECTION SERVICE

477 respondents answered the question:

“Would you use a Council-provided collection service for food scraps and food waste?”

- **Yes**
- **No**
- **Sometimes**

Please tell us why:

Over 66% of respondents indicated that they would (47%) or would sometimes (19.5%) use a Council-provided food waste collection service. Almost 34% of respondents said they would not use such a service (Figure 6).



Figure 6: Respondent interest in using a Council-provided food waste collection service.

Reasons provided for supporting the provision of a collection service included:

- Reducing smells from general waste bins
- Reducing attraction of rodents to home compost
- Disposing of food waste that could not go in home compost e.g., meat, bones, shells
- Saving space in general rubbish bins / bags
- Current bin sizes not being large enough for waste disposal needs
- Being committed to seeing better separation and management of waste to reduce environmental impacts and emissions
- Having used a similar service elsewhere in New Zealand or the world and would like to see the service provided as a right
- Being particularly supportive of community collection and composting schemes

Reasons provided for not supporting the provision of a collection service included:

- There being no need as they meet their own disposal needs at home e.g., compost, worm farms, Bokashi, bury, or in-sink disposal
- It being a pointless exercise for a rural setting

A few respondents indicated conditional interest in the provision of a collection service, where it would depend on:

- Cost
- It being user pays
- Potential odour
- Dog-proof collection bins (as roaming dogs have knocked over current collection bin multiple times)

WASTE MANAGEMENT ATTITUDES – INTEREST IN USING COUNCIL-PROVIDED GARDEN WASTE COLLECTION SERVICE

477 respondents answered the question:

“Would you use a Council-provided collection service for garden waste?”

- ***Yes***
- ***No***
- ***Sometimes***

Please tell us why:”

Over 78% of respondents indicated that they would (61%) or would sometimes (18%) use a Council-provided garden waste collection service. Around 21% of respondents said they would not use such a service (Figure 7).

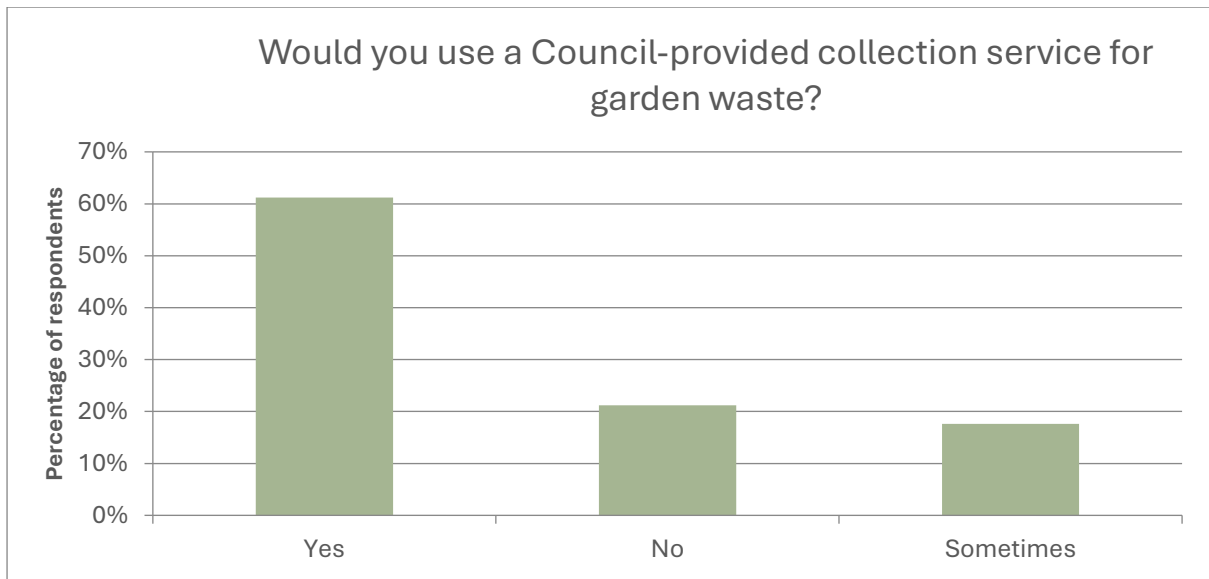


Figure 7: Respondent interest in using a Council-provided garden waste collection service.

Reasons provided for supporting the provision of a garden waste collection service included:

- Producing too much garden waste to deal with via home compost
- Avoiding disposing of noxious weeds in home compost
- Avoiding throwing away a useful resource
- It being useful for large woody materials too large for home composting and bin disposal
- Providing greater independence and less reliance on others
- It being too difficult to take to the transfer station themselves
- Dealing with hard to dispose of garden waste e.g., cabbage tree leaves and flax
- It being too expensive to take to the transfer centre / dump
- Saving space in general rubbish bins / bags
- Saving time and money
- Having used a similar service elsewhere in New Zealand or the world and would like to see the service provided as a right
- Not wanting the garden waste to go in general waste but used in composting instead
- This being an improvement on transporting it to a waste facility or burning it responsibly
- This helping to stop the dumping of garden waste on empty sections or roadside verges
- Helping to keep yard and garden tidy
- More convenient than having to borrow truck to take to transfer station / dump

Reasons provided for not supporting the provision of a collection service included:

- There being no need as they meet their own disposal needs at home e.g., compost or disposing in surrounding bush
- It being a pointless exercise for a rural setting
- Unlikely that the bin provided would be large enough to deal with the volume produced on some larger properties
- Concern that this would increase the cost of rates

A few respondents indicated conditional interest in the provision of a collection service, where dependencies included:

- Cost
- What the rules are and what can be disposed of as garden waste

Furthermore, some respondents indicated that they would only use the garden waste collection services at particular times e.g., once or twice per year during pruning season.

WASTE MANAGEMENT ATTITUDES – COLLECTION METHOD

478 respondents answered the question:

“If your Council collected food and garden waste, how would you like to see that happen?”

- ***I would like Council to collect food waste and garden waste together (one bin)***
- ***I would like Council to collect food waste and garden waste separately (two bins)***
- ***I prefer to drop off food and/or garden waste at a Council or community facility***
- ***I would like Council to collect only my food waste***
- ***I would like Council to collect only my green waste***
- ***I don’t want Council to collect food or garden waste”***

Over 44% of respondents preferred collection of food and garden waste to occur in one bin, while almost 19% preferred collection of food and garden waste to occur separately in two bins. A further 6% would prefer to drop food and/or garden waste off at a waste management facility.

Almost 16% of respondents did not want Council to collect either food or garden waste.

Almost 14% of respondents want Council to collect only garden waste, and 1% of respondents want Council to collect only food waste (Figure 8).



Figure 8: Respondent food and garden waste collection method preferences.

WASTE MANAGEMENT ATTITUDES – COLLECTION FREQUENCY

472 respondents answered the question:

“If your Council was to start collecting food waste and garden waste, how often would you like to see that happen?”

- ***Weekly***
- ***Fortnightly***

Other, please specify”

37% of respondents preferred weekly collection, and 43% preferred fortnightly collection (Figure 9).



Figure 9: Respondent food and garden waste collection frequency preferences.

A further 20% preferred a different frequency, including:

- Every 3 days
- On demand / by request using a smart app
- Weekly for food waste and monthly for garden waste
- Weekly in summer and fortnightly in winter
- Biannually

WASTE MANAGEMENT ATTITUDES – WILLINGNESS TO PAY

474 respondents answered the question:

“Would you be willing to pay for a regular collection of food and/or green waste?”

Over 28% of people indicated they would be willing to pay for a Council-provided collection service, and over 71% said they would not be willing to pay for such a service (Figure 10).

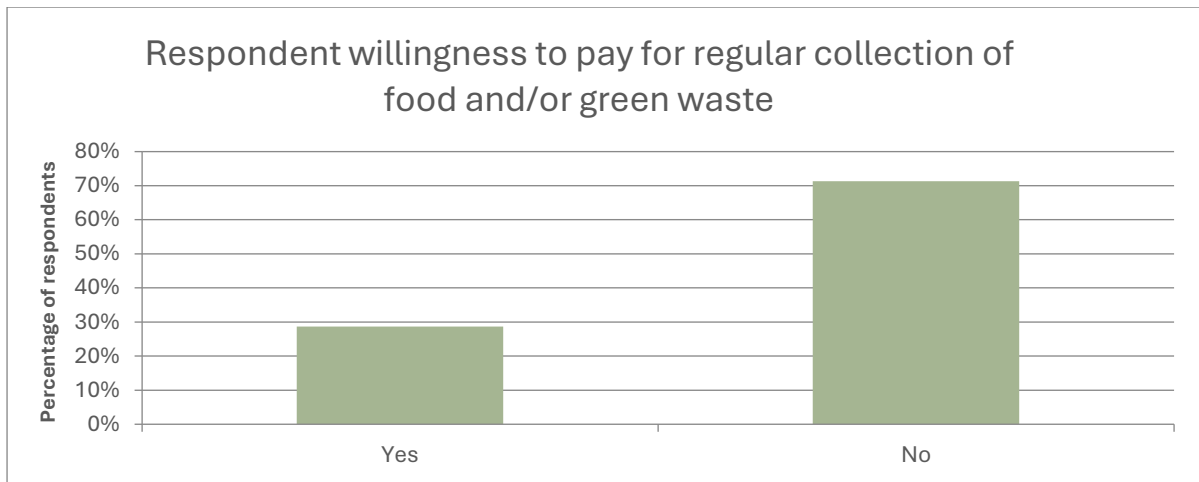


Figure 10: Respondent willingness to pay for a regular Council-provided food and garden waste collection service.

COMMUNITY SUGGESTIONS

Hundreds of suggestions were made regarding how Councils can meet Government policy and improve food and garden waste management on the West Coast. These additional comments included:

Collection or disposal:

- Create specific areas at transfer stations / landfills where food waste and garden waste can be disposed of and include incentives
- Provide a collection service, but only on a user-pays basis
- Provide free bins for collection to those who need them
- Provide a separate green bin for all compostable waste
- Provide low-cost home compost bin scheme and education
- Provide a chipper truck service
- Issue small bench-top tubs to households with compostable bag liners, and then dispose of these to a green waste bin
- Consider placing larger bins/covered skips around town as collection sites
- Don't add more bins – is already too crowded on footpaths
- Green waste should be free to dump at refuse sites
- If green bins are not provided, red bins should be made larger
- Food and garden waste facilities need to be readily accessible 7 days / week for this to work well
- Provide one day / year for collection of larger garden waste to reduce the amount of green waste being dumped in the bush, river ways, and reserves

Community education:

- Provide community education (e.g., workshops) on home composting, biochar, Bokashi and how to reduce food and garden waste

- Provide community education on reducing food waste smells in the week leading up to collection
- Start educating children in schools as a great start to drive better waste management practices and the necessary cultural shift
- Work with EnviroSchools and community groups
- Tell the story and show the true cost of what currently happens and the value from improving our waste management
- Love Food, Hate Waste courses

Creating value:

- Stop treating it as waste and treat it as a resource
- Use the waste to increase the region's ability to grow its own food locally
- Work with pig farmers who could then provide the collection service from a communal dumping site
- Council should provide support to community groups who want to collect and process waste as community initiatives
- Make commercially available a compost product to provide to industrial sites for rehabilitation e.g., mine sites and quarries
- Start local composting sites and sell the compost made from food and garden wastes back to the community so we have a "closed loop system"
- Work with community groups like Poutini Puawai Project Group
- Start soil restoration projects in the community e.g., in community spaces and develop the sites with compost to become productive urban vegetable gardens. Encourage people to drop their green waste at these composting sites
- Use compost for local native nurseries to then plant natives in local reserves

Cost / benefit:

- Compare the costs of current approaches (food waste in general rubbish and paying for green waste disposal at top) versus costs of implementing a collection and compost production service
- Find a way to make the costs of collection balance against the potential profit from selling the recycled food and garden waste
- Provision a small fee on rates to cover the cost of pick-up
- Make garden waste disposal free or offer a collection service through general rates

Noxious weeds:

- It is about time a service offered through general rates is provided to households of the west coast, as there are many agencies and people spending lots of money dealing with the consequences of its absence - it needs to be as easy as possible for people to make the correct choice in this matter
- Better green waste management options to reduce the spread of noxious weeds from illegal dumping

- Illegal dumping results in the spread of the worst environmental pest plants. If given time to establish, they disrupt local ecosystems, threaten native biodiversity and in some cases (depending on species) can damage infrastructure, increase risk of flooding and impact primary industries. Other agencies and people are currently paying for the consequence of its absence.

Other suggestions:

- Look at whole waste system, including recyclables and general waste and figure out incentives rather than punitive approaches
- Fine those who dump green waste at beaches and rivers
- Start earlier than 2030
- Include commercial premises as well as residential
- Reduce food waste through food waste redistribution to address community food insecurity
- Provide service for people with mobility issues e.g., elderly
- Need strict control on herbicide and other chemical contamination
- Lobby against Central Government requirements

DISCUSSION AND KEY FINDINGS

The community survey has provided Councils with very useful information regarding current food and garden waste behaviours and attitudes across the West Coast, with approximately 3.93% of the West Coast population across all age demographics represented in the survey².

Approximately 43% of survey respondents currently home compost their food waste or have a worm farm, yet almost a third (31%) disposes at least some food waste in their general rubbish.

At least 37% of survey respondents home compost or mulch their garden waste, yet almost 21% disposes at least some garden waste in their general rubbish.

These results indicate that there are significant gains to be made in the way some West Coasters currently manage their food and garden waste.

Importantly, it can be concluded that good waste management is important to West Coasters. The survey results reflect a community that is conscious of the importance of improved sustainable practices. Key concerns included the importance of keeping food and garden waste out of landfill to reduce methane emissions, and improved garden waste disposal options to better protect the environment from the spread of noxious weeds.

A key message from respondents included the importance of helping people reduce their food waste and increase home composting or mulching rates. However, there are barriers that currently adversely affect good waste management behaviours and outcomes, including:

² If only one person per household completed the survey. If more than one person per household responded, then survey representation would be lower than 3.93%.

- Cost of garden waste disposal which has led to an increase in illegal garden waste dumping in the bush, on beach and river margins, in reserves, and along road verges
- Limited options for effective disposal of non-compostable (at home) materials, including meat and bones, or high quantities of food waste and garden waste, especially at certain times of the year
- Lack of awareness, knowledge, skill or ability to dispose of food and garden wastes at home via composting or other treatment methodology.

Regarding a Council-provided collection service for food waste, two-thirds (66%) of respondents indicated they would use the service, at least sometimes. Regarding a Council-provided collection service for garden waste, over 78% of respondents indicated that they would use the service, at least sometimes.

The preferred collection approach for the largest proportion of respondents (44%) was with a single bin for both food waste and garden waste with a fortnightly (43%) collection frequency. Some survey respondents indicated that there would likely be greater need for collection of garden wastes at certain times of the year, and collection frequencies could be adjusted accordingly.

The most common reasons respondents did not support a collection service included:

- Cost associated with using a collection service
- Existing disposal methods, such as home composting or feeding animals, being sufficient to their needs
- A perceived insignificance of food waste or garden waste needing collection
- Concern regarding practical issues including odour and hygiene concerns and space constraints both inside and outside of the home
- Concern regarding the reliability and adequacy of collection services, particularly the frequency of pick-ups

The economic cost of improved food and garden waste management is a key concern to survey respondents. There was concern that improvements in waste management could lead to higher costs for ratepayers and many respondents reported being interested in cost-effective solutions that do not result in increased costs to ratepayers. In support of this is the fact that only 28% of respondents indicated a willingness to pay for a Council-provided collection service with many respondents emphasizing the importance of a user-pays approach.

There was strong support voiced in many survey responses for community composting and community gardening initiatives as lower-cost solutions for food and garden waste collection, the development of native plant nurseries using waste-generated compost, and the production of local food. Many observed the importance of turning what is currently seen as waste into a community asset by creating a valuable commercially available compost product. Cost / benefit analyses were also suggested to identify the best workable models that could then be delivered as community schemes.

CONCLUSION

These findings indicate that the West Coast community is aware of many of the current issues surrounding food and garden waste and many community members have expressed an interest in better waste management practices. There is a clear need for more support, through the provision of collection and processing solutions, resources, and/or education, to achieve the improved outcomes.

Significant concerns were raised regarding additional costs associated with the provision of food waste and garden waste services. Innovative solutions, particularly through supporting and working with community groups, was seen as a key strategy for achieving necessary improvements.

APPENDIX A: COMMUNITY SURVEY QUESTIONNAIRE

1. Where do you live?
2. How many occupants are living in your household (including you)?
3. What is the age range of people living in your household? (please tick all that apply)
 - 0 – 14
 - 15 – 24
 - 25 – 34
 - 44 – 54
 - 55 – 64
 - 65+
4. How important is good waste management, recycling and reuse to you on a scale of 1 – 5? (please tick the option that applies to you):
 - Not at all important
 - Somewhat important
 - Neither important nor unimportant
 - Somewhat important
 - Very important
5. How does your household dispose of food scraps and waste? (please rank the options below 1 – 5, where 1 = most common to 5 = least common)
 - I put it in the general household waste
 - I home compost or have a worm farm
 - I feed animals (chooks or dogs etc)
 - I have an in-sink waste disposal unit
 - I burn or bury my food waste
 - Other (please tell us)
6. How does your household dispose of its garden waste? (please tick all that apply)
 - I put it into the general household waste bin
 - I use it for my compost
 - I take it to a facility that accepts green or garden waste
 - I burn or bury my garden waste
 - Other (please tell us)
7. Would you use a Council-provided collection service for food scraps and food waste?
 - Yes
 - No
 - Sometimes

Please tell us why:

8. Would you use a Council-provided collection service for garden waste?
 - Yes
 - No
 - Sometimes

Please tell us why:

9. If your Council was to start collecting food waste and garden waste, how often would you like to see that happen?
- Weekly
 - Fortnightly
 - Other, please specify
10. Would you be willing to pay for a regular collection of food and/or green waste?
11. If your Council collected food and garden waste, how would you like to see that happen?
- I would like Council to collect food waste and garden waste together (one bin)
 - I would like Council to collect food waste and garden waste separately (two bins)
 - I prefer to drop off food and/or garden waste at a Council or community facility
 - I would like Council to collect only my food waste
 - I would like Council to collect only my green waste
 - I don't want Council to collect food or garden waste
12. Do you have any suggestions on how Councils can best meet the Ministry for the Environment requirements to collect food and green waste in urban areas of over 1,000 people by 2030?
13. Is there anything else you would like to share about managing food scraps, food waste, and green and garden waste?