

Para Kai Trial Phase Two Survey – End of Trial

**Final Report** 



#### **Report - Overview**

The following document provides results from the *Stage Two Para Kai Trial Surveys* that were undertaken following the 1 year trial period (invites were sent in November 2021). Where applicable, results have been compared with the Stage One Survey that was undertaken at the very start of the trial (invitations sent in October 2020).

Respondents were given the option to complete the survey either online, over the phone or via mail out/post back. This report includes results from n=395 completed surveys.



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- > Respondents agree that waste related issues are important and environmental purpose and goals are key motivation to take part.
- > When compared with pre-trial behaviours, respondents reported a number of positive changes during the trial, including:
  - the number of households putting at least some of their food waste in the general rubbish bag/bin declined significantly, including a significant decline in those using it as their main method (down from 60%, to 20%).
  - Three quarters (74%) used a "greener" main method during the trial, up significantly compared with pre-trial levels (28%).
  - The share of all households saying they did not put any food waste out in general rubbish bins/bags increased significantly from 22% prior to the trial, to 62% during the trial.



- At least four in five respondents across both trial groups are likely to continue to use the system they trialled if it was to continue, however those trialling the Bokashi System were significantly less likely to want to continue with the system (73% saying they are pretty sure they would or would definitely use it, compared to 87% for compost bins, 81% for worm farms, and 85% for the food waste collection).
- Those in the Food Waste Collection Trial were significantly more likely to say it was a more convenient way of managing household waste. While convenience ratings among compost bin users were similar, ratings were significantly lower among worm bin and (to a lesser extent) Bokashi system users.
- Cost saving is poorly understood, or disbelieved. While food waste has been diverted from general rubbish bins/bags, the impact of this on household costs is not obvious.



- While around one in five of those taking part in the Food Waste Collection Trial (22%) had periods of lower or non-use, those in the Home Composting trial (49%) were significantly more likely to say they had times when they used the bins less often or not at all. This was most notable among those using the Bokashi System (60%, significantly more likely) and worm farms (51%).
- Key concerns/queries in general across all bin types are around smell, attracting rodents, animals, and bugs (including being unsure of what bugs are wanted and what are not) and the volume of food to process (and, for the Home Composting Trial group, what to do if something goes wrong).
- > Some in the Home Composting Trial also feel they may have selected the wrong bin type for their household.



#### Key issues/questions around specific bin types include:

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- > While almost all respondents in both trial groups believe that the bin/system they trialled is a good idea for Wellington, those in the Food Waste Collection Trial are significantly more likely to think it is a very good idea. Note: This is the opposite to Survey 1, where those in the Home Composting group were significantly more likely to say it is a very good idea.
- Respondents were also given a brief description of a number of potential future services and asked how interested they were in each. The highest level of interest is in a food waste collection service collected by council and paid for via rates and a council provided compost bin. In contrast, there are much lower levels of interest in food waste services run by community groups.
- > Overall, the maximum respondents are willing to pay for any of the waste collection services (run by council or community groups) is a up to \$100/year for all services (note: this was the minimum amount respondents had to select from).



### Summary



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### **Summary**

The trial is viewed positively and the majority want to continue .....



Understanding of trial details is high, with the exception of cost savings.....



Convenience of use and periods of low or non-use varies by bin type.....



Found using the trial bins a more convenient way of managing waste (another 30% said it was about the same)

- higher convenience ratings for Food Waste Trial (59%) and those using compost bins (54%) lower convenience ratings for Home Composting
- Trial (37%), specifically those using worm farms (26%) & Bokashi (32%)



Had periods of time when they used the bin less frequently or not at all More likely among Home Composting Trial participants (49%), specifically those using Bokashi (60%) & worm farms (51%)

Less likely among Food Waste Trial (22%) and compost bin (37%) participants

#### **Considerations**

- > Respondents using either the worm bin or Bokashi System tended to find them less convenient than users of the other options and were more likely to have periods of lower use or non use.
- > For the worm bin in particular, this also resulted in lower levels of positive changes in food waste diversion from the general waste bins/bags.
- Siven respondents "opted in" to both the worm bin and Bokashi System for the trial will likely mean that they are more motivated and open to changing current behaviours and practices (even if they are inconvenient at times) than some members of the general public would be. If rolled out to the general public, the number of households pausing or reducing their use of these types of bins for periods of time or altogether (or not even attempting to use them to start with) is likely to be greater due to these perceived inconveniences and issues.



### **Considerations**

- If the Food Waste Collection Service or any/all of the Home Composting options were to be rolled out, specific and ongoing communication will be useful to:
  - Galvanise support behind the big environmental goal, demonstrate cost benefits
  - Cement understanding and prevent decline in use
  - Clarify food types accepted/to be excluded in different bins
  - Provide tips and suggestions for set up and ongoing use (particularly for changes in weather or food volumes or the "death" of the system)
  - Provide contact details and/or information sheets around changes in pick-up days, what to do about lost/damaged bins, and (for Home Composting option) what to do if they have selected the wrong bin for their household
  - Celebrate progress and success and model best practice through ongoing communications that support the services – progress on environmental targets could be a key element.





#### General Attitudes Towards Waste



# **General Attitudes Towards Waste – Total Agree**

The majority of respondents agree that waste related issues are important. Results are in line with Survey 1 results at the start of the trial.





### **General Attitudes Towards Waste**

While the share agreeing to some extent is high and similar across all 3 statements, the share *strongly agreeing* ranges from 56% for making an effort to reduce as much waste as possible, up to 80% for waste reduction being an important issue.

Results are similar to Survey 1, however there has been a slight (but not statistically significant) change in the strength of agreement that respondents make an effort to reduce waste as much as possible (those *strongly agreeing* up from 51% to 56%).



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## Waste Reduction is an Important Issue

by Trial & Bin Type

Agreement is high across both trial groups and all bin types. There has been a slight increase in agreement among those in the Food Waste Trial since Survey 1.



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# **Responsibility for Impact on Environment**

by Trial & Bin Type

Agreement is slightly higher among the Food Waste Collection participants, and has increased slightly since Survey 1.



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### **Conscious Effort to Reduce Waste**

#### by Trial & Bin Type

#### Agreement is similar across all sub-groups, with no significant differences.





# Council's Rubbish and Recycling Collections Rated More Positively By Food Waste Collection Trial Participants

Those in the Food Waste Collection Trial are significantly more likely to rate Councils rubbish and recycling collections positively, including being significantly more likely to rate them as *very good*. In contrast, those in the Home Composting Trial are significantly more likely to rate the Councils collections negatively.





Arrows indicate significant differences between groups - green arrow indicates a significantly higher positive/lower negative result, red a significantly lower positive/higher negative result

# **Overall Ratings of Rubbish & Recycling Collections**

#### by Trial & Bin Type

#### Agreement is similar across all sub-groups, with no significant differences.



Overall Rating for Councils Collections (% Very Good/Good)





#### Trial Impact on Method(s) and Volume of Food Waste Disposal



### Pre-Trial Method(s) Used to Dispose of Food Waste

**All Trial Respondents** 

Prior to the trial's beginning, the majority of households put at least some of their food waste in the general rubbish bag/bin, including 60% who used this as their main method of waste disposal. Around a quarter (28%) used a "greener" main method.



# Method(s) Used During Trial to Dispose of Food Waste

**All Trial Respondents** 

During the trial, the number of households putting at least some of their food waste in the general rubbish bag/bin declined significantly.

Three quarters (74%) used a "greener" main method up significantly compared with pre-trial levels.



#### Any Food Waste Disposal to General Rubbish Reduced Substantially Across All Categories

**Results by Trial & Bin Type Over Time** 

The use of general rubbish bins/bags to dispose of food waste in general declined significantly across all sub-groups, with Food Waste Collection and Compost Bin use showing the greatest reductions (over 60%).



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Green arrow indicates a significant decline in use of general rubbish bags/bins to dispose of food waste when compared with use pre-trial Red star indicates significantly higher use when compared with the total, green star indicates significantly lower use.

### Use of General Rubbish Bin/Bag As Main Method to Dispose of Food Waste

#### by Trial & Bin Type Over Time

While the use of general rubbish bins/bags as the main method used to dispose of food waste declined significantly across all sub-groups when comparing use pre-trial versus during the trial, there are some differences by sub groups. The decline in bin use is most notable for those in the Food Waste Collection Trial and for those opting for a compost bin, while the decline is lower overall among those who opted for a worm farm.



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Green arrow indicates a significant decline in use of general rubbish bags/bins to dispose of food waste when compared with use pre-trial. Red star indicates significantly higher use when compared with the total, green star indicates significantly lower use.

### Substantial Growth in Households Not Sending Any Food Waste Waste to Landfill

The share of all households saying they do not put any food waste out in general rubbish bins/bags increased significantly from 22% prior to the trial, to 62% during the trial.

Similarly, around two thirds of all respondents (66%) said they put general rubbish bags/bins containing at least some was food waste prior to the trial, including 20% describing the amount as *quite a bit* or *a lot*. This dropped significantly during the trial, with only 18% of all respondents saying that they put out general rubbish bins/bags containing at least some food waste, and only 5% describing the amount as *quite a bit* or *a bit* or *a lot*.





Arrows indicate significant differences between "pre-trial" and "during trial" amounts - green arrow indicates a significantly higher positive/lower negative amount during the trial, red a significantly lower positive/higher negative amount during the trial

#### Decline in Amount of Food Waste Disposed of in General Rubbish across Both Trial Groups

The same pattern can be seen in the results across both trials, with significant declines in the share putting out general rubbish bags/bins containing at least some and quite a bit or a lot food waste and significant increases in the share of all households saying they do not put any food waste out in general rubbish bins/bags, during the trial period. However, it should be noted that the difference for those in the Food Waste Collection trial is more positive than the change for the Home Composting Trial group.



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Arrows indicate significant differences between "pre-trial" and "during trial" amounts - green arrow indicates a significantly higher positive/lower negative amount during the trial, red a significantly lower positive/higher negative amount during the trial

#### **Decline in General Rubbish Containing at least Some Food**

by Trial & Bin Type Over Time

The share with at least some food waste in general rubbish bins/bags declined significantly across all sub-groups. The decline is most notable for those in the Food Waste Collection Trial and for those opting for a compost bin, while the decline is lower overall among those who opted for a worm farm.





Arrows indicate significant differences between "pre-trial" and "during trial" amounts - green arrow indicates a significantly higher positive/lower negative amount during the trial, red a significantly lower positive/higher negative amount during the trial Red a significantly lower positive/lower negative amount during the trial Red a significantly lower use.

### Increase in No Food Waste in General Rubbish Bin/Bag

by Trial & Bin Type Over Time

The increase in the share not putting out any food waste in bins/bags is most notable for those in the Food Waste Collection Trial and for those opting for a compost bin, while the increase is lower overall among those who opted for a worm farm.



Arrows indicate significant differences between "pre-trial" and "during trial" amounts - green arrow indicates a significantly higher positive amount during the trial, red a significantly lower positive amount during the trial

Red star indicates significantly higher share when compared with the total, green star indicates significantly lower share.

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# **Overall Attitude and Participation in Trial**



# **Actual Participation Rates in the Trial were High**

by Trial & Bin Type

The majority of respondents from both trial groups actually used the bins for at least part of the time. Those who signed up for a compost bin were significantly more likely to take part.



Did your household take part in the trial (even for only part of the time) (% Yes)



# **Reasons for Not Taking Part**

Below are a selection of comments made by respondents for why they did not take part in the trial. Common reasons include: signing up for the trial but once underway realising they had selected the wrong method for their household, that is was more work than they expected, and not generating enough food waste to use the new system.

"I have too small an amount of food waste to be bothered. I'm a one person household." Respondent assigned to the Food Waste Collection Trial

"I did call and email that we wouldn't have a need for the bin and that the bin should go to a family that would use it. I never got any replies." Respondent assigned to the Food Waste Collection Trial

"The bin was too big for our garden and I changed my mind." Respondent assigned to the Compost Bin Trial

"Should've been a part of the rubbish collection trial instead. Don't really make enough food waste to compost myself" Respondent assigned to the Bokashi System Trial "I was not prepared for what was involved in using the Bokashi method." Respondent assigned to the Bokashi System Trial

"I want to do my bit for environment and I thought one system would take care of food waste that didn't go down kitchen sink disposal. But this was wrong." Respondent assigned to the Bokashi System Trial

> "We have two compost bins and a mulcher already." Respondent assigned to the Food Waste Collection Trial

"I must confess I just never got around to it....." Respondent assigned to the Bokashi System Trial

"I was keen, but too lazy." Respondent assigned to the Worm Farm Trial "The bins smell and were blown away."

Respondent assigned to the Food Waste Collection Trial

#### **Convenience of Using Trial Bin to Manage Household Waste**

Around three quarters of all respondents found using the trial bins either more convenient (44%) or about the same as usual (30%) to manage household waste. Food Waste Collection Trialists were significantly more likely to say it was much more convenient.



#### **Convenience Highest for Food Waste Collection and Compost Bins**

Those in the Home Composting Trial, and specifically those who signed up to a worm bin, are significantly less likely to find the addition of the trial bin convenient.

However, it should be noted that convenience ratings for those who were using a compost bin are similar to those in the Food Waste Collection Trial.



Convenience of Using Trial Bin to Manage Household Waste (% more/much more convenient)

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#### Periods of Reduced or No-Use Twice as High for Home Composters

#### by Trial & Bin Type

While around one in five of those taking part in the Food Waste Collection Trial had periods of lower or non-use, those in the Home Composting trial were significantly more likely to say they had times when they used the bins less often or not at all. This was most notable among those using the Bokashi System (significantly more likely) and worm farms.

Were there any stretches of time when you used the bin less often or not at all? (% Yes)



# **Reasons for Low or Non-Use – Food Waste Bin**

Below are a selection of comments made by respondents for why they used the food waste bins less often, or not at all, for periods of time during the trial. Common reasons include: fluctuations in the number of people in the household and/or volumes of food waste, issues with smell and/or pests, damaged or missing bins and decreased motivation.

"It depended on how many people were staying here - on my own there is not a lot to put out."

"I stored food waste in a 4L container in the freezer so don't need to empty it every week."

"The trial was a waste of time. Bins blowing around in the wind discharging contents."

"Our bin got run over (a replacement would be good)."

"Family members away, fewer meals at home."

"Lazy, bin needed cleaning before reuse. But felt really positive when I did get my act together."

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"The bin was attracting pests and was gross and impractical." "For 3-4 weeks our bin ended being missed each week and we got fed up with it sitting there and it ended up smelling so we stopped using it."

"It smelt foul and there were bits in the bottom that were somewhat stuck and had gone rotten. Needed cleaning badly."

"Don't use much now as I now live alone and have no food waste." "I reverted to my normal compost system. The bin was smelly and hard to clean."

"Because the people I live with are less motivated to use the bin and I often forgot to put it out."

"Tended to just out it out when taking out other rubbish - convenience." "Didn't get email to start using again after Covid-19 stopped."

# Reasons for Low or Non-Use – Bokashi System

Below are a selection of comments made by respondents for why they used the Bokashi System less often, or not at all, for periods of time during the trial. Common reason include: not having the space/land to bury the compost, unanticipated effort (especially in winter) and different volumes of waste at times.

"It didn't meet my expectations of fitting on "Because it needs a hole in the ground to put the waste "I was the instigator of the composting trial at my kitchen bench and then needing to bury in and I didn't have space to allocate to that. I simply home but I found I didn't have the it. I have very little land to bury it in." didn't realise it was like a delayed compost bin." discipline/desire to maintain the effort required." "We filled both bins but found it was more time consuming "Reduced use as I got too busy to take downstairs to than using a standard compost or worm farm." bin. I used it less often when weather was bad as I "I ess food waste at times" got put off taking it down to dig a hole & bury it." "During the hottest summer month it was easier to not use the bokashi bin as we didn't have a cool place for it "Away on holiday." "Because once 'pickled', the waste in the bokashi bin still needs to but started again when weather cooled ... " be put into a compost bin or dug into a garden to finish breaking down. We have neither of these, and it just became unmanageable trying to find a compost bin to take the bin to and "The bokashi was advertised as good for small spaces but actually required digging large empty it. It was all just too much effort and not practical.." trenches. We did this once but was not something we had repeated space or time to do.." "Because they would get full and I wouldn't have time or "Winter - I found it too wet to take the bokashi outside and "Ran out of room both in the space to dig a new hole to bury the compost. Eventually bury in the garden. It rains too much in Wellington."

bokashi buckets and in the

garden to burry the compost."

my neighbour told me I had to stop using it because her

dog dug it up and ate it and was vomiting everywhere."

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## **Reasons for Low or Non-Use – Worm Farm**

Below are a selection of comments made by respondents for why they used the worm farm less often, or not at all, for periods of time during the trial. Common reasons include: worms not processing the food fast enough/more food waste than the worms can handle, worms dying and being unsure of what the right conditions for the bin and worms are.

"I lost my worms and had to restart."

"The worms didn't eat the scraps fast enough to keep up with our production."

"I forgot to feed them for weeks at a time, also got confused about what to do with changing the trays around, I was a bit useless in winter!"

"The worms were not as active over winter and could not process scraps as quickly. More food waste went into the wheelie bin at that time."

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"Another person was responsible who felt worms were 'too much work' and forgot that they were there."

"Got a bit disheartened at times, it was slow starting."

"Worms didn't take to eating the food. I would take out the scraps and start fresh,

but I still had trouble."

"Going away for holidays."

"When the worms didn't seem to be getting through any of the waste already in there. I didn't want it to build up and smell." "I stopped using it after a while as it just did not seem to work, I couldn't get it up and running as described at the initial session I attended."

"Heavy rain for many days shortly after receiving the worms. They all ran away during the rains and never ate any of the food I left prior to them leaving."

"While establishing itself the worm farm could not take ALL of our fruit & veg waste. A year later it can manage it all now."

> "Honestly the problem I had was the place I put the worm bin was not Ideal because of the way the property is laid out which made it difficult to maintain."

"Because we are a family of four we produced too much food waste for the worm farm and the worms were too slow to eat the waste and it attracted flys so we gave up."

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"My worms all moved out :-("

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### **Reasons for Low or Non-Use – Compost Bin**

Below are a selection of comments made by respondents for why they used the compost bin less often, or not at all, for periods of time during the trial. Common reasons include: being too busy, away, or not wanting to go outside during winter and having issues with flies and smells.

"We had a short break for three weeks

when we went on holiday."

"We moved, and the bin wasn't set up."

"There were too many flies when we opened the lid. Also it got to full so we only put fruit and veggie scraps in over the last few months."

"Forgot to use it at the start as not used to it - but now its getting to be a habit it's become more used!"

"Just busy with two children under three. Sometimes it was just remembering to take food scraps outside to the compost bin rather than putting them in the bin in the kitchen."

"It started attracting lots of flies so we got put off using it."

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"Used it less in winter when didn't want too keep going outside to put food in the compost bin." "Stop when it's get too smelly when waiting for the contents to compost."

"The bin was full."

"Work kept us busy."

"As the bin was outside and due to weather it was easier to bag and put into rubbish waste bin at work.."

"I think placement of the composting bin was important. We put it in the perfect spot in the back of the garden but during winter and being pregnant I was less likely to want to go outside. Once I became less inclined then my partner followed suit which was just a product of being mid home renovations (us completing them), both working 10-14 hrs a day and me being pregnant. Another point in time that didn't see us so exhausted and time poor then we would have been star players. I feel disgraced just writing this down :/."

# **Overall, the Trial is a Good Idea for Wellington**

While almost all respondents in both trial groups believe that the trial is a good idea for Wellington, those in the Food Waste Collection Trial are significantly more likely to think it is a *very good idea*.

Note: This is the opposite to Survey 1, where those in the Home Compositing group were significantly more likely to say it is a *very good idea*. The share saying it's a *very good idea* is unchanged since Survey 1 for the Food Waste Collection respondents, but has dropped significantly among the Home Composting Group – from 87%, to 63%)





Note: 14 respondents (1 in the Food Waste Collection Trial and 13 in the Home Composting Trial said they are not sure yet or don't know. Arrows indicate significant differences between groups - green arrow indicates a significantly higher result, red a significantly lower result.

## **Trial is Seen as a Good Idea**

#### by Trial & Bin Type

Agreement that the trial is a good idea is high across all groups.

Whilst still viewed positively, all ratings have declined significantly when compared with Survey 1, and would likely impact overall participation rates to a degree.





Green arrow indicates a significantly higher result when compared with the total across both trials, red arrow indicates a significantly lower result. Green star indicates a significantly higher result when compared with the total for the Home Composting Trial, red star indicates a significantly lower result. Orange arrow indicates a significantly higher/lower result in Survey 1 when compared with Survey 2.

## Levels of Commitment to Continue Using are High

At least four in five respondents in both trial groups indicate they are likely to continue to use the system trialled if it was to continue, those in the Food Waste Collection were significantly most likely to say they would definitely use it.



Arrows indicate significant differences between groups - green arrow indicates a significantly higher result, red a significantly lower result

### Compost Bin and Food Waste Collection Show Higher Levels of Intention to Continue

by Trial & Bin Type

Those in the Home Composting Trial, and specifically those who signed up to a Bokashi System are less likely to want to continue using the system.



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#### Maximum Willing to Pay for Food Waste Collection to Continue

The largest share of those in the Food Waste Collection Trial show no willingness to pay (49% of those keen to continue/42% of all respondents).

Overall, 43% of those keen to continue with the service would consider paying (or 36% of all food waste trial respondents), however the majority of these (37% of those wanting to continue; 36% of all) would consider up to \$100/year the maximum amount they would be willing to pay.



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Satisfaction with Services and Information



# Satisfaction with Aspects of the Trial – Total Satisfied

Satisfaction is reasonably high across all four aspects, ranging from 93% for the Food Waste Trial collection schedule, down to 73% for customer service.

However, ratings for all four aspects have declined when compared with Survey 1, including significant declines for customer service and the trial/recycling/rubbish collections service overall as a way to manage household waste.



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## **Satisfaction with Aspects of the Trial**

Aspects with lower satisfaction levels tend to have higher shares of neutral ratings (rather than large shares of negative ratings).



### Satisfaction with Information Higher for Food Waste Collection

by Trial & Bin Type

Satisfaction with information provided for the Trial is significantly higher among Food Waste Trial participants.

Ratings among Home Composting participants have declined since Survey 1, most notably for Bokashi and worm farm users (although the differences are not statistically significant)





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## Satisfaction with Trial/Recycling/Rubbish as Way to Manage Household Waste Dropped Off Markedly for Home Composters

by Trial & Bin Type

Satisfaction with the addition of the trial as a way to manage household waste is significantly higher among Food Waste Trial participants. It should also be noted that positive ratings among the Home Composting group have declined significantly when compared with Survey 1 (down from 85%, to 75%).

Satisfaction by the Home Composting bin types ranges from 80% among those using a compost bin, down to 72% of those with a Bokashi system (all ratings have declined since Survey 1, including a significant decline for Bokashi users).





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### **Satisfaction with Customer Service Similar for both Trials**

by Trial & Bin Type

Satisfaction with customer service varies by trial and bin type in the end of trial survey, however none of the differences are significant.

Although, it should be noted that when compared with Survey 1, positive ratings have declined across all sub groups, including significant declines for Home Composting participants overall, as well as worm farm users specifically.



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# **Overall, the Information Provided was Helpful**

While levels of agreement are high across both trial groups, those in the Food Waste Collection Trial are significantly more likely to agree to some extent that the information provided as part of the trial was helpful.





### Agreement that information was helpful is significantly higher among Food Waste Trial participants.

Ratings among Home Composting participants is similar across the three bin types.



Information provided was helpful (% agreeing)

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Green arrow indicates a significantly higher result when compared with the total across both trials, red arrow indicates a significantly lower result. Green star indicates a significantly higher result when compared with the total for the Home Composting Trial, red star indicates a significantly lower result.

### **Overall, the Information Provided was Easy to Understand**

While levels of agreement are high across both trial groups, those in the Food Waste Collection Trial are significantly more likely to agree to some extent that the information provided as part of the trial was easy to understand.



#### Worm Farm Users Rated Ease of Understanding Information Lower

Agreement that information was easy to understand is significantly lower among Home Composting participants, with ratings notably lower among those who opted for a worm bin.



Information provided was easy to understand (% agreeing)

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## **Reasons for rating the information provided negatively**

"Not very detailed instructions and bin came apart in the wind."

Respondent assigned to the Worm Farm Trial

"I had no idea when to move to the next area of the bin. I listened to the presentation at the beginning but I still don't know."

Respondent assigned to the Worm Farm Trial

"Crucially the initial information to help people to choose a method did not state that composting is not actually a method for disposing of food scraps it's a method for disposing of a large quantity shredded dry brown waste (of which most people have next-to-none) while adding a small quantity of food waste. It doesn't work without large quantities of unavailable brown waste. My compost bin is not actually composting. It's just rotting."

Respondent assigned to the Compost Bin Trial

"It was confusing, came in trips and drags and seemed more complicated than it needed to be."

Respondent assigned to the Worm Farm Trial



## **Enough Information & Support to Use**

While the majority of respondents in both trial groups feel they had enough information and support to use the trial bins, a significantly higher share of those in the Home Composting Trial disagree.



# **Enough Information & Support by Trial & Bin Type**

Those in the Home Composting Trial, and specifically those who signed up to a Bokashi System are less likely to feel they had all the information and support they need (and their ratings have declined significantly since Survey 1).





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# **Additional information Needed – Food Waste Trial**

Below are a selection of comments made by respondents in the Food Waste Trial about additional information that would have been useful.

"Maybe who to call if your bin broke? Our handle clip system snapped when my flatmate accidentally drove over the handle."

"When the initial letters were sent to households they mentioned a date that the trial would end. However, the trial continued past that date and still continues but as far as I can ascertain most people didn't get advice of this and some stopped using the trial bins."

"Where I could get a new one once it went missing/blown away by the wind."

"How to deal with annoying fruit flies that get into the bin during the warmer months."

"What to do if bin is not collected."

"There are some common waste items where it was never quite clear whether they could be recycled or not."

"Opt in and opt out options."

"Why Miramar was being used as the pilot."

"The only thing that was missing was when the collection would not happen, or due to public holidays or covid lockdown."

> "Better advice up front about using paper bags e.g. grocery paper bags to line the bin with to help contain the food scraps and for tidy emptying process.."

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# Additional information Needed – Bokashi System

Below are a selection of comments made by respondents who signed up for the Bokashi System about additional information that would have been useful.

"I was led to believe the system would take chicken bones....the only food scrap I can't sink dispose. It was only after I signed up that I discovered that none of the systems take bones."

"Where to get further supplies of Bokashi sawdust"

"It would have been useful to know beforehand that the bokashi bin was not a complete system, that the 'pickled' waste could not be put straight on a garden. If I had known that the waste would still have needed to be composted or dug into a garden, I would not have opted for one as that does not suit our situation." "I just didn't know what I was signing up when I signed up. If I had known I would have chosen the compositing bucket. That would have been more appropriate for me."

"Where to deposit food waste after all space in a very small garden had been exhausted."

"The bokashi bin information could have benefitted from greater detail about how to dispose of the Bokashi pre-compost / pickle. Felt content was light on this as I wanted to use that content for my own garden benefits vs a community space to bury/leave it. Including even a soil layer bin system to deliver final pre-compost breakdown for adding to garden. Bokashi being highly acidic generally can't be added direct to the garden soil/plants."

"I didn't think about the financial savings on rubbish bags, but having been reminded of it during this survey, it could be a good point to promote more, to motivate people"

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## **Additional information Needed – Worm Farm**

Below are a selection of comments made by respondents who signed up for the worm farm about additional information that would have been useful.

"The bugs that will also use the bin and ones to be aware of or ones to ignore. Also what to do when it is ready to be used as compost."

"More information about things that can go wrong and how to resolve them.."

"It would have been great to have more pictures of what to do - size of things to go into the bin, when to add browns and how often, when to switch to next level etc."

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"Where to buy more worms."

"More information around the volume of food to put in the worm farm."

"That the worm farm should be located out of the wind and the lid for the farm should be secured to stop it blowing off in the wind."

"What insects can co-exist with worms. We got a lot of other insects in the worm farm like ants." "How long it would take to get the worms established, and how little they ate.."

"I'm not sure why my worms left. Was it because they didn't like the food waste I put in? Another problem I had was the guidance to not the let the worms get too hot or too cold without telling me what those parameters were and how I could really control that."

"There was lots of info about setup, but not as much on ongoing maintenance. I had to google and do my own research. A section on tips/tricks/common problems and how to solve would have been useful."

"Troubleshooting might've been good, we ended up with a bunch of other wildlife in the bin that probably wasn't healthy for the worms... I'd say it's hard to know what to do when they're full too..."

"I feel like I either over fed or under fed my worms. It would have been good to understand what a thriving worm farm looks like and the process of changing the trays around. I didn't get any liquid in the bottom for months until a friend suggested they need water."

## **Additional information Needed – Compost Bin**

Below are a selection of comments made by respondents who signed up for a compost bin about additional information that would have been useful.

"More info about the mites spiders and other insects that live in the bin. More about beneficial worms. Compost booster to speed things up."

"We were unable to fully secure the bin to the ground in a windy back yard. Any tips?" "I was curious to know what would happen after the trial, ie would the bin be collected? Didn't know anything about that."

"I didn't know how I could put lawn clippings in which would have been good buy otherwise it was really good."

"If there had been some information on what to expect with the compost bin. Bugs were expected but the amount of fruit flies was not." "How often to turn over the compost. What sources of carbon you can find around the home." "Video tutorials about how to maintain and use the compost."

"More info on the best bin for you. I first thought that a compost bin was more appropriate for our everyday life use and for the compost that it would create for our garden so we decided to choose this for a trial. But after talking with friends we realised that a worm bin would have been more appropriate for us as it offer a better outcome to use around the garden."





#### Understanding the trial



## **Overall, the Trial is Easy to Understand**

While levels of agreement are high across both trial groups, those in the Food Waste Collection Trial are significantly more likely to strongly agree that the trial is easy to understand.



# Ease of Understanding Trial by Trial & Bin Type

Agreement is high across both trial types and all three bin types within the home composting trial. However it should be noted that positive ratings among those opting for a worm farm are significantly lower (and have declined since Survey 1)





Green arrow indicates a significantly higher result when compared with the total across both trials, red arrow indicates a significantly lower result. Green star indicates a significantly higher result when compared with the total for the Home Composting Trial, red star indicates a significantly lower result. Orange arrow indicates a significantly higher/lower result in Survey 1 when compared with Survey 2.

# **Understanding the Details of the Trial – Total Agree**

Agreement was lowest around savings (and had declined slightly since the start of the trial).

Information around household savings may help increase uptake and use in the future.



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Note: A further n=16 respondents did not answer this question saying they "Don't know"

Orange arrow indicates a significantly higher/lower result in Survey 1 when compared with Survey 2.

### **Understanding Details of the Trial**

Neutral



I knew when my food waste bin would be collected



I understood the benefits of the trial



I knew what could and couldn't be put into the trial bin



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The trial saved my household money

Overall the trial was easy to understand

**Total Disagree** 



Agree

**Strongly Agree** 

# **Understanding of Benefits by Trial & Bin Type**

While agreement is high across all sub groups, it is significantly higher among Home Composting Trial participants.





Green arrow indicates a significantly higher result when compared with the total across both trials, red arrow indicates a significantly lower result. Green star indicates a significantly higher result when compared with the total for the Home Composting Trial, red star indicates a significantly lower result.

# Understood what could go in the Bin by Trial & Bin Type

Agreement is slightly (but not significantly) higher among Food Waste Collection Trial participants.

Within the Home Composting Trial, those with a Worm Bin are slightly more likely to agree, while those with a Bokashi System less likely to (note the opposite was the case in Survey 1).



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# **Understanding Trial impact on Household Budget is Low**

#### by Trial & Bin Type

Agreement is low overall and is slightly (but not significantly) lower among Home Composting participants (opposite to Survey 1 results and the decline for this group has been significant). Highlighting potential savings and supporting this with more evidence would help understanding cost savings as a benefit of the system.

Within the Home Composting Trial, those with a Worm Bin are significantly less likely to agree. Positive rantings for all 3 bin types have declined since Survey 1. The trial saved my household money (% Strongly Agree/Agree)





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### Interest in Possible Future Options



### **Interest in Potential Services**

10% 32% 16% 43% 27% 49% 32% 58% 46% 70% 46% 71%

Respondents were also given a brief description of a number of potential future services and asked how interested they were in each.

The highest level of interest is in a food waste collection <u>collected by council</u> and paid for via rates and for a council provided <u>compost bin</u>.

In contrast, there are much lower levels of interest in food waste services run by <u>community groups</u> (lowest levels of interest for a service using a local drop off point, followed by one collected at the gate)

% Very Interested (rating 10)

% giving an interest rating of 6+

A food waste service run by a community organisation, with a local drop off point

A food waste collection, collected at your gate & run by a community organisation (you would pay the provider for this service)

A Bokashi system is provided by council for households to use

A worm bin is provided by council for households to use at home

A food waste collection, collected at your gate by council (paid for by rates)

A compost bin is provided by council for households to use

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## **Interest in Potential Services by Trial**

Interest in Possible Service (% giving an interest rating of 6+)

Total (All Respondents)

A food waste service run by a community organisation, with a local drop off point

A food waste collection, collected at your gate & run by a community organisation (you would pay the provider for this service)

A bokashi system is provided by council for households to use

A worm bin is provided by council for households to use at home

A food waste collection, collected at your gate by council (paid for by rates)

A compost bin is provided by council for households to use



Respondents in the Home Composting Trial are significantly more likely to be interested in each of the potential services, with the exception of the food waste collection run by council (where those trialling this service were slightly more interested).

Home Composting Trial

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Green arrow indicates a significantly higher result when compared with the total across both trials, red arrow indicates a significantly lower result.

**Food Waste Collection Trial** 

# **Maximum Willing to Pay for Potential Services**

Overall, the maximum respondents are willing to pay for any of these services is at the lower end for all services (up to \$100/year).

It should also be noted that there is a reasonable share saying they "don't know" for all three options. This will likely be a combination people wanting more information, to see how the service works first, and people not wanting to pay anything for the service (as that was only an option for the food waste trial participants if their trial was to continue).

