

8.15. Update on the Food Scraps Trial

AUTHOR: Bo Karaula, Waste Management Coordinator

ENDORSED BY: Rob Emerson, Director Open Space and Environmental Services

ATTACHMENTS:

1. 8.20 Residential Food Scraps Collection and Processing Trial (1) [8.15.1 - 8 pages]
2. Report to Environmental Reference Group 3.1 Food Scraps Trial in MU Ds (3) [8.15.2 - 4 pages]

PURPOSE:

This report responds to the Council resolution of 21 February 2022.

1. THAT Council receives a progress report on its commitment and initiatives to introduce a municipality wide food waste pick-up service for all residential dwellings.
2. THAT the report come to Council's March Meeting. provides an update on the upcoming food scraps collection and processing trial.

EXECUTIVE SUMMARY:

Council endorsed previous recommendations that a six- month Food Waste Collection Trial be undertaken involving residential dwellings across small, medium and high-rise developments. The purpose of the trial is to test the demand and to gather data (cost and operational data) of a food scraps recycling collection service for residents in Multi Unit Dwellings (MUDs). The results of the trial will inform long-term strategic decisions on resource recovery options.

The commencement of the Food Scraps trial has been delayed until May 2022. Both NSW Health and the EPA advised against the commencement of the trial during the COVID lockdown and restrictions period. Supply chain challenges and the availability of certified facilities that could process the food scraps were also issues that could not be resolved during this period.

Trial parameters have been agreed and Council has engaged consultants to support and assist Council staff with the recruitment of participants, audits, data collection, surveys and reporting functions.

Council was also successful in securing a grant for \$180,000 from the State Government to assist with the delivery of the trial. The certified facility to receive the food scraps, being Earthpower (owned by Veolia) and located west of Sydney will operate as a transfer station until such time as the facility is upgraded for processing organics. At this stage it is unlikely this site will return to processing for at least another two years. The materials will be bulked up and transported to a specialist composting facility located in Forbes NSW.

FINANCIAL IMPLICATIONS:

The project is funded from the Domestic Waste Management Budget and the NSW EPA Grant of \$180,000.

RECOMMENDATION:

- 1. THAT** the Update on the Food Scraps Trial report be received.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

1. Our Living Environment

1.1 Protected and enhanced natural environment and biodiversity

BACKGROUND

According to the DPIE's NSW Waste and Sustainable Materials Strategy 2041, an average resource recovery target of 80% from all waste streams by 2030 has been established for the waste management industry. To achieve this target, councils are required to undertake waste management practices which minimise waste disposal at landfill and maximise resource recovery.

Council currently undertakes the following resource recovery initiatives:

- All recyclables collected in the yellow lidded bin are transported to Visy at Smithfield for sorting and processing.
- All greenwaste collected at kerbside is transferred to an organics processing facility.
- To reduce food waste from being landfilled, Council provides subsidised compost bins and worm farms through the Compost Revolution program (the bins and worm farms are offered to residents at subsidised prices and residents are encouraged to participate in workshops to enhance their knowledge of composting and the need to reduce material going to landfill).
- The Community Recycling Centre in Artarmon accepts hazardous household waste for recycling and re-use.

Prior to 2019, Council had contracted waste disposal operator, Suez, to transfer the material collected in the red bins to a processing facility at Eastern Creek. At this facility, the material was separated into various streams and valuable resources such as metals, plastics and organics were processed; this resulted in landfill diversion of approximately 65% and coupled with the yellow recycling bin and greenwaste collections, North Sydney achieved a total landfill diversion of 70%, being amongst the top three performing Councils in NSW. The organics waste stream from this process was ultimately converted into a compost like material used in mine rehabilitation and broad acre agriculture applications. However, the NSW EPA rescinded the waste exemption orders that allowed for such applications, resulting in the entire red bin being landfilled.

As a result of increased waste generation and landfilling, governments, both State and Commonwealth, have lobbied that the organics fraction of the red bin, approximately 35% of the bin's contents, should be source separated and processed at recognised Food Organics and Garden Organics facilities. Council resolved to undertake a food waste trial to determine to what extent a separate Food Organics collection and processing program was feasible.

Under the trial, approximately 400 multi-unit dwellings were to be given a separate food waste bin. The food waste thus collected was to be transferred to Veolia's Earthpower facility

at Camellia for processing. The aim of the trial was to determine whether the material collected was suitable for processing, the extent of contamination in the food waste collected and whether such a program could be rolled out throughout the LGA.

Unfortunately, the trial was stalled due to the following reasons-

- Limited capacity at Earthpower – Veolia has advised that Earthpower has no capacity to accept additional material from any sources. Additionally, the facility runs strict contamination thresholds meaning organic waste which contains materials such as plastic bags are rejected and landfilled. Earthpower has been closed for waste processing for upgrading.
- Earthpower is in negotiations with alternative processing facilities outside of the Sydney Metropolitan Area, including a composting site near Forbes and Wormtech at Yenda, NSW. Essentially, Veolia's Camellia facility would be used as a transfer station for collected food waste before being transferred to a rural location. Again, contamination management is a major concern.
- COVID Lockdowns and restrictions impacting supply and delivery of infrastructure including bins and kitchen caddies.

To achieve the mandated 80% resource recovery target, it is imperative that there are financially viable processing options within the Sydney Metropolitan Area. Councils are required to provide their residents waste management processes which meet community expectations and provide value for money. Currently there are limited food waste processing options available to Sydney councils – Veolia's Earthpower and Suez's Kemp Creek facility (both of which have no excess capacity). Barriers to entry for new participants is high. Examples being:--

- (i) It requires sizeable capital investment to acquire/build/operate an appropriate site.
- (ii) Government regulations surrounding noise and odour management and the use of end-products can be arduous to overcome.
- (iii) Councils are generally bound to long term contracts which inhibit competition for new players.
- (iv) There is a lack of end-market use for the resultant compost products.
- (v) Contamination management is a major drawback for waste feed stock generators.

In August 2021 Council wrote to the then Minister for Energy and Environment, the Hon. Matthew Kean MP, to provide the waste management industry with more assistance, both regulatory and financial, to incentivise the development of new waste processing facilities within the Sydney Metropolitan Area. Councils and industry players require long term certainty over processing contracts (price and feed stock quality) and over the regulatory environment.

A one-stop policy, such as a separate food waste collection and processing option, does not suit all councils. North Sydney Council is unique with a high multi-unit, high-rise apartment demographic combined with a high transitory population. These characteristics will test contamination management levels of the food scraps collected at the trial sites. The feed stock that is not suited for processing at facilities that currently operate under stringent contamination guidelines will be landfilled.

CONSULTATION REQUIREMENTS

Community engagement will be undertaken in accordance with Council's Community Engagement Protocol.

DETAIL

Given that medium and high-density apartments represent almost 90% of the housing stock in the LGA, the multi-unit dwelling (MUD) community is the focus of the trial. The objective is to generate a sample of MUDs large enough in order to generate robust data. Extending the trial to a larger number of MUD's and potentially households (being semi-detached, row/terrace or townhouses), would be beneficial and give more confidence to the results and data obtained, but the additional expenditure and effort is considered not to be warranted for this initial trial.

Residents residing in MUD's that display a diversity of features, such as number of units, demographics including mix of owner occupied and tenanted households, whether waste chutes are present and general access considerations formed part of the selection process. This ensures a good representation of the area is captured and the results are representative. It should be noted that MUDs are inherently more difficult to manage due their high transient population.

Consideration must also be given to potential bias in the data and results obtained from the trial. If the resident sample are only those that are motivated by behavioural change and are willing participants, this sample group is unlikely to reflect a longer term commitment from the wider LGA if the service was to become permanent.

Council engaged a suitably experienced waste consultant, APrince Consulting, to support and assist Council with the planning, design, recruitment of participants, audits, data collection, surveys and reporting functions. A baseline food scraps audit of the selected households was undertaken and the results showed 35% of the contents of the red bins comprised of food scraps.

To make separating food scraps for processing simple, registered participants will be provided with appropriate infrastructure and educational support.

Council will inform and consult with the randomly selected participating households about the Trial. This will involve contact with the strata managers/body corporates and then residents to inform them about the Trial and confirm their participation. The six-month Trial will run from May 2022 to November 2022 in order to generate robust data.

During the Trial it is intended that an online platform (closed forum) be used to engage participants to engage with each other to find out more information, build a community of practice, discuss user experience and feedback/ideas for improvement etc. This approach will

facilitate participant self-service and enable a central point of communication to and by Council.

The following engagement methods will be used, not listed in priority order:

Method	Target Stakeholders	Engagement Level	Purpose
Introduction letter	Strata and participating residents	Inform	Inform strata and participants of the trial, what is involved, what they are asked to do and how they can provide feedback
Council website (and Your Say North Sydney web page)	All		Inform the community and participants about the Trial and why Council is undertaking it. Include FAQs.
Postcards (advising of Trial prior to commencement and delivery of caddies and liners)	Participants		Inform the participants about the Trial and encourage involvement in it
Survey (hard copy and online)	Participating	Consult	Obtain feedback on the Trial as a potential solution to diverting waste from landfill and desired user experience, via a two-stage survey (onset and completion)
Online Forum	Participants	Consult/Involve	Closed forum open only for registered Trial participants to find out more information, build a community of practice, discuss user experience and feedback/ideas for improvement etc.

The trial is set to commence in May and end in November 2022. A final report of the results of the trial will include:

- resident's feedback
- contractors and processors feedback on feedstock quality and quantity and
- a cost benefit analysis on budget implications of avoided waste disposal fees vs additional infrastructure and service costs

8.20. Residential Food Scraps Collection and Processing Trial

AUTHOR: Bo Karaula, Waste Management Coordinator

ENDORSED BY: Rob Emerson, Director Open Space and Environmental Services

ATTACHMENTS: Nil

PURPOSE:

This report was prepared in response to Mayoral Minute MM03 Diverting Food Waste from Landfill considered by Council at its meeting on 24 February 2020.

EXECUTIVE SUMMARY:

At its meeting on 24 February 2020, resolved:

- 1. THAT staff prepare a report on the options for conducting a food waste diversion trial that:*
 - a. includes information on costs and likely community interest to participate in a trial; and*
 - b. includes details on any smart phone applications that could be used to allow residents to express an interest in food waste collection in their street.*

The report outlines an estimation of costs and options (including use of an online / smart phone booking system) for implementing a food waste collection trial involving the separate collection and recycling of food scraps from residential Multi-Unit Dwellings (MUDs) in the Local Government Area (LGA) of North Sydney.

FINANCIAL IMPLICATIONS:

The project will be funded from the Domestic Waste Management Budget.

RECOMMENDATION:

- 1. THAT** the Residential Food Scraps Collection and Processing Trial report be received.
- 2. THAT** the Food Waste Collection Trial is progressed in accordance with the budget and methodologies and timeframes proposed in the details outlined in this report.
- 3. THAT** Council seeks three quotations from waste consultancies listed in the Local Government Approved Panel to assist Council in the planning, management and implementation of the trial.
- 4 THAT** a final report is provided to Council on the results of the Food Waste Collection Trial.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

1. Our Living Environment
- 1.2 North Sydney is sustainable and resilient

BACKGROUND

Food waste collected with household waste makes up to 35% of the red lid rubbish bin content in the North Sydney LGA.

In order to capture this material and divert it from landfill, Council entered into a contract in 2006 to have all waste processed at SUEZ's resource recovery facility at Eastern Creek. From there, food waste was separated to produce compost for mine remediation and a variety of other applications. This facility was designed to maximise the recovery of resources and divert waste from landfill. Council, under contract with SUEZ, utilized this technology from 2006 to 2018, achieving a 60% recovery rate from the contents of the red bin with food waste and recyclables (plastics, paper and glass) being recovered.

In October 2018, the EPA revoked the general and specific Resource Recovery Orders (RRO) and Resource Recovery Exemptions (RRE) for the application of Mixed Waste Organics Outputs (MWO) to land due to risks associated with chemical and physical contaminants. Councillors may recall that this occurred when Council was seeking tenders for waste processing and disposal including the recovery of resources in the general waste stream.

Council, following the EPA's direction, entered into a contract with SUEZ on 1 July 2019 to dispose of Council's general waste to landfill (Lucas Heights) via the Artarmon transfer station, with an option to process waste through Eastern Creek only should the restrictions be lifted. Council would be required to make a decision to either (i) remain on a landfill contract or (ii) exercise the option and transition to a waste processing contract should the restrictions be lifted. The term of this contract is five years with Council having the option to extend the contract for a further five-year term.

In the lead up to both waste collection and disposal tenders being called in 2018, Council sought feedback from the community on ways to enhance the waste services offered. The theme of organics collection and composting was part of the consultation process. Submissions from the community indicating a preference for a food waste collection for composting purposes made up only 5% of all submissions received.

With respect to greenwaste, a fortnightly collection service takes greenwaste to the Belrose transfer station for subsequent processing into compost. Notably, due to the large proportion of high density dwellings with the North Sydney LGA, the volumes of

greenwaste generated is not sufficient to warrant a trial for a combined Food Waste and Greenwaste Collection (FOGO) service. The FOGO service is another resource recovery option for those councils that produce large volumes of greenwaste.

CONSULTATION REQUIREMENTS

Community engagement will be undertaken in accordance with Council's Community Engagement Protocol.

DETAIL

This report was prepared in response to Mayoral Minute MM03 Diverting Food Waste from Landfill, considered by Council at its meeting on 24 February 2020, where it resolved:

1. THAT staff prepare a report on the options for conducting a food waste diversion trial that:

- a. includes information on costs and likely community interest to participate in a trial; and*
- b. includes details on any smart phone applications that could be used to allow residents to express an interest in food waste collection in their street.*

Purpose of a Food Waste Diversion Trial

The purpose of such a trial is to test the demand and to gather data (cost and operational) of implementing a food scraps recycling collection service for residents in Multi Unit Dwellings (MUDs). Such data is required for Council to make long-term strategic decisions on resource recovery options.

Overview of Proposed Implementation Methodology

Whilst many of the trial design parameters are yet to be determined, residents will be asked to separate their food waste via kitchen caddies in each individual dwelling and place this food waste in a separate food-only Mobile Garbage Bin (MGB) on a shared basis in an allocated waste disposal area on site for collection. This method is consistent with standard practice adopted at other councils that have undertaken similar food waste trials. Any trial will need to be supported by an education campaign. It is proposed that our current waste collection contractor, URM, would undertake the MGB collection service with all collected food waste delivered to an anaerobic digestion processing facility at Camelia (EarthPower Technologies) for conversion to compost / fertiliser with the added benefit of green electricity being generated. This facility is currently closed for refurbishment and is expected to reopen July 2021.

To gain a realistic understanding of how the residents and the wider community will respond to such an initiative, it is recommended that the trial should run for a period of six (6) months.

Given that small, medium and high-density apartments represent almost 90% of the housing stock in the LGA, it is proposed to target the multi-unit dwelling (MUD) community in the trial. It is proposed to exclude single unit houses from the trial (representing 7% of the housing stock) because the results from food waste trials at other councils indicates this group consistently performs significantly better than MUDs in their participation and contamination rates. Individual waste disposal facilities are a contributing factor why houses outperform MUDs in food waste trials.

The trial's intention would be to target residents residing in MUD's that display a diversity of features, such as number of units, demographics including mix of owner occupied and tenanted households, whether waste chutes are present and general access considerations. Consideration must also be given to potential bias in the data and results obtained from the trial, if the resident sample are only those that are motivated by behavioural change and are willing participants as this sample group is unlikely to reflect a longer term commitment from the wider LGA if the service was to become permanent.

Planning and implementation of this trial will require Council to engage a suitably experienced waste consultant listed on the LG Approved panel, to support and assist Council with the planning, design, recruitment of participants, audits, data collection, surveys and reporting functions. Consultants who have performed similar food waste collection trials for other Sydney councils have expressed interest to date in being involved in such a trial.

Further details on the intended approach and considerations required for the trial's implementation are provided below.

Food Organics Garden Organics (FOGO)

A FOGO service is not viable for North Sydney as previously stated, as the North Sydney LGA generates low volumes of household greenwaste. A FOGO service also requires a dedicated weekly greenwaste collection service, such being an increase on Council's current fortnightly service. Anything other than a weekly service will lead to odour issues due to the food scraps decomposing as well as vermin issues.

Food Scraps Collections in Multi Unit Dwellings (MUDs)

The selection of MUDs as stated above is intended to comprise of a range of small, medium and high-rise developments, including those with garbage chutes to ensure a good representation of the area is captured and the results are representative. The objective is to generate a sample of MUDs large enough to generate robust data. It should be noted that MUDs are inherently more difficult to manage due their high

transient population. The 2016 ABS census data revealed that of the entire housing stock in the LGA, 46% are owner occupiers and 51% are tenanted. Other variables to consider include building age, size (number of units), presence/absence of a building manager/caretaker and site conditions i.e. location of garbage bin room, internal/external access and bin bay capacity for additional food scrap wheelie bins.

Recruitment of Trial Participants / Smart Phone Interface

To gauge the community's interest in the participation of the trial, a number of community engagement methods can be deployed including a combination of Expression of Interests (EOI's) and direct random sampling to reduce risk of the results being biased or distorted. Council's current community engagement protocols include:

- web page and 'YourSay North Sydney'- accessible via mobile hand held devices with residents having easy access via their smart phones, tablets or equivalent;
- letter box drops or direct letter of invitations to all owner corporations/body corporates, strata agencies;
- survey/questionnaire or Poll/Survey (i.e. Monkey) to also include questions for baseline information about the features of MUDs; and
- use of 3rd party service providers (i.e. trybooking/eventsbrite) – via a registration online process this is also accessible via mobile hand held devices. This would also allow enable enhanced communication with residents and better access to measurements of participation rates,

Recruitment would require Owners Corporation approvals for the entire apartment block to become eligible to participate. Key learning from other Councils having conducted similar trials include consideration of how it is to be determined if residents are participating fully or poorly, as efforts can sometimes only be measured in aggregate for an entire building (given the shared bin and services model that exists in MUDs). In this instance, learnings have shown that it is imperative for the Owners Corporation or Strata Managers to support such an initiative and to ensure data collection is accurate, a commitment from the building to actively take part is required. Other Councils have attempted with varying degrees of success to appoint Point of Contacts (PoC) that include building managers, cleaners and nominated building champions.

Consideration of the location of wheelie bins for resident disposal and contractor collection, access and other associated site assessment activities of pre-selected properties would be also be required.

Similar food waste collection trials conducted by other Councils has shown that the recruitment phase of the project is one of the most labour-intensive part of the exercise, requiring about three months of dedicated effort before the collection trial can commence.

Equipment and Educational Materials

To make separating food scraps for processing simple, registered participating households will be provided with:

- a small seven (7) litre kitchen caddy;
- one off supply of compostable caddy liner bags;
- food scraps recycling wheelie bins, 120 L size with a burgundy lid as per industry standards;
- wall poster for lobby noticeboard, fridge sticker, bin sticker, bin bay signage, FAQs information booklets; and
- ongoing support from Council in managing the likely contamination of the food scrap bins.

URM will carry out delivery of kitchen caddies as well as the delivery, repair and replacement of the food scraps wheelie bins. This would need to be arranged per building. Collection services will be undertaken by URM on a once per week basis preferably on Mondays using a dedicated 6- 8 cubic metre rear loader truck. The existing waste services will continue to be provided as per normal.

Cost Estimate

The following is an estimation of the likely costs associated with the trial.

To offset costs, it is proposed that Council enquire / negotiate with the EPA to partially fund the trial via their current grants program.

		Low End	High End
1	External Costs		
1.1	Collection/MGB Supply/Processing	90,000	120,000
1.2	Consultants	100,000	140,000
1.3	Household Kitchen Caddy (URM)	5,200	15,600
1.4	Caddy Biodegradable Bin Liners	4, 000	10,000
2	Internal Costs (Council)		
2.1	Communication Materials	20,000	30,000
	TOTAL Estimate	219,200	315,600

Notes:

1. All amounts exclusive of GST.
2. Trial based on 6 months duration with collections based on approximately 400 to 1200 individual dwellings.
3. Food Scraps Mobile Bin allocation is based on a suggested 1x 120 mobile garbage bin (MGB) L bin shared amongst 25 occupancies .

4. The generation rate of food scraps for MUDs is expected to be approximately 1.5-2 kg/household/week.
5. URM have provided indicative prices, although they have emphasised that it is difficult to estimate costs until further details are known. There may be further price changes once the collection zones and scope of works is finalized.
6. Consultants tasks would include:
 - trial project design;
 - initial community engagement;
 - selection of households representative of the area and statistically valid, if possible, via the development of a selection matrix to assist in determining parameters including but not limited to approval from owners corporation/body corporate, building features;
 - assist with ongoing community engagement and education (Council to produce all the educational materials);
 - undertake audits of the food scraps bin;
 - preparation of final report with recommendations for council consideration:
 - including results of audits
 - residents feedback
 - contractors and processor feedback on feedstock quality and quantity
 - cost benefit analysis on budget implications of avoided waste disposal fees vs additional infrastructure and service costs.

Potential Challenges/ Issues and Risks

Contamination of loads, as seen from other Council trials will be the major risk issue.

Contamination at the processing facility may incur additional costs. Councils that have conducted similar trials have reported increases in processing costs as well as declining interest (between 30% to 50%) with a fall-off in participation after the initial period of engagement.

Not all MUD residences will participate in the service, as indicated by the estimated food waste being generated from the households and the actual tonnages collected via food scraps trials conducted by other Councils. The reasons for this vary from the perceived 'yuck factor' due to odour, vermin, insects such as fruit fly or maggots, to not producing enough food waste in smaller households, due to either regularly eating out or purchasing takeaways or simply preparing meals for only one or two occupants.

Apathy, the 'inconvenience', being 'too busy', an additional waste task, is also a prevalent additional barrier evidenced by other councils under such trials. Other issues raised include the requirement for regular updates in the form of newsletters to address the transiency of tenants and MUDs with garbage chutes requiring residents to take food scraps to the basement of buildings for collection.

Regarding the trial, it is important to support households in a manner which would be consistent if the trial was made permanent. If engagement is kept realistic and to the level that Council can provide to the entire area, then the trial results will be more

realistic with what can be achieved. Extensive engagement and support over and above realistic service levels may lead to false community expectation is another key learning from other council trials.

The results of this trial could possibly shape whether future food scraps recycling services would be viable across the North Sydney LGA. However, the true ongoing running method and cost is not clear as it would require a full-scale trial with a significant uptake of participants.

3.1. Food Scraps Trial in MUDs

AUTHOR: Bo Karaula, Waste Management Co-ordinator

ENDORSED BY: Rob Emerson, Director Open Space and Environmental Services

ATTACHMENTS: Nil

Nil.

EXECUTIVE SUMMARY:

This report provides an overview of the upcoming food scraps collection and processing trial. The purpose of the trial is to test the demand and gather data (cost and operational) of implementing a food scraps recycling collection service for residents in Multi Unit Dwellings (MUDs). The results of the trial will inform long-term strategic decisions on resource recovery options.

FINANCIAL IMPLICATIONS:

This project will be funded from the Domestic Waste Management Budget and the NSW EPA Grant.

RECOMMENDATION:

- 1. THAT** the Residential Food Scraps Collection and Processing Trial report be received.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

1. Our Living Environment

1.4 Public open space and recreation facilities and services meet community needs

BACKGROUND

Food waste collected with household waste makes up to 35% of the red lid rubbish bin content in the North Sydney local government area.

In order to capture this material and divert it from landfill, Council entered into a contract in 2006 to have all waste processed at SUEZ's resource recovery facility at Eastern Creek. From there, food waste was separated to produce compost for mine remediation and a variety of other applications. This facility was designed to maximize the recovery of resources and divert waste from landfill. Council, under contract with SUEZ, utilized this technology from 2006 to 2018, achieving a 60% recovery rate from the contents of the red bin with food waste and recyclables (plastics, paper and glass) being recovered. This process coupled with the kerbside collection of recyclables from the yellow lid bin contributed to a total waste diversion from landfill rate of 69%, surpassing the targets set by the NSW EPA at that time.

In 2018, the NSW EPA banned the application of mixed waste organics outputs to land due to risks associated with chemical and physical contaminants. This occurred when Council was seeking tenders for alternative waste processing and disposal services including the recovery of resources in the general waste stream.

As a result, Council entered into a contract with SUEZ on 1 July 2019 to dispose of Council's general waste to landfill with no opportunity to extract the organic fraction, which in landfill breaks down and creates methane, a greenhouse gas. This situation is under review however it appears unlikely the EPA will reverse or modify their previous decision.

The reduced diversion of food waste from landfill triggered a mayoral minute at the Council meeting on 24 February 2020 calling on Council staff to prepare a report on a food scraps trial.

A report was submitted to the 30 November 2020 Council meeting detailing the methodology and an estimation of the costs in running a separate collection and recycling of food scraps in MUDs in the local government area of North Sydney.

The Council resolved as follows:

- 1. *THAT* the Residential Food Scraps Collection and Processing Trial report be received.**
- 2. *THAT* the Food Waste Collection Trial is progressed in accordance with the budget and methodologies and timeframes proposed in the details outlined in this report.**
- 3. *THAT* Council seeks three quotations from waste consultancies listed in the Local Government Approved Panel to assist Council in the planning, management and implementation of the trial.**
- 4 *THAT* a final report is provided to Council on the results of the Food Waste Collection Trial.**

CONSULTATION REQUIREMENTS

Community engagement will be undertaken in accordance with Council's Community Engagement Protocol.

DETAIL

Given that small, medium and high-density apartments represent almost 90% of the housing stock in the local government area, the multi-unit dwelling (MUD) community will be targeted in the trial. Single detached dwellings which represent 7 % of the housing stock, will be excluded from the trial because the results from food waste trials at other councils indicates this group consistently performs significantly better than MUDs in their participation and contamination rates. Individual waste disposal facilities are a contributing factor why houses outperform MUDs in food waste trials.

The objective is to generate a diverse sample of MUDs large enough to generate robust data that is a good representation of the local government area. The target of 400 individual unit dwellings has been set. It should be noted that MUDs are inherently more difficult to manage due their high transient population. The 2016 ABS census data revealed that of the entire housing stock in the North Sydney local government area, 46% are owner occupiers and 51% are tenanted. Other variables that will be considered include building age, size (number of units), presence/absence of a building manage/caretaker and site conditions i.e. location of garbage bin room, presence/absence of waste chutes, internal/external access and bin bay capacity for additional food scrap wheelie bins.

Consideration will be given to potential bias in the data and results obtained from the trial, if the resident sample are only those that are motivated by behavioural change and are willing participants as this sample group is unlikely to reflect a longer term commitment from the wider local government area if the service was to become permanent. To reduce the risk of the results being biased or distorted a direct random sampling method of recruitment will be used.

To gauge the community's interest in the participation of the trial, a number of community engagement methods will be deployed prior to using the direct random sampling method.

Key learning from other Councils having conducted similar trials include consideration of how it is to be determined if residents are participating fully or poorly, as efforts can sometimes only be measured in aggregate for an entire building (given the shared bin and services model that exists in MUDs). In this instance, learnings have shown that it is imperative for the Owners Corporation or Strata Managers to support such an initiative and to ensure data collection is accurate, a commitment from the building to actively take part is required. Other Councils have attempted with varying degrees of success to appoint Point of Contacts (PoC) that include building managers, cleaners and nominated building champions.

APrince consulting will assist Council with the planning, design, recruitment of participants, audits, data collection, surveys and reporting functions.

Overview of Methodology

Residents will be asked to separate their food waste via kitchen caddies in each individual dwelling and place this food waste in a separate food-only Mobile Garbage Bin (MGB) on a shared basis in an allocated waste disposal area on site for collection. This method is consistent with standard practice adopted at other councils that have undertaken similar food waste trials. The trial will be supported by an education campaign. It is proposed that our current waste collection contractor, URM, would undertake the MGB collection service with all collected food waste delivered to an anaerobic digestion processing facility at Camelia (EarthPower Technologies) for conversion to compost / fertiliser with the added benefit of green electricity being generated. This facility is currently closed for refurbishment and is expected to reopen July 2021.

To make separating food scraps for processing simple, registered participating households will be provided with:

- a small seven (7) litre kitchen caddy;
- one off supply of compostable caddy liner bags;
- food scraps recycling wheelie bins, 120 L size with a burgundy lid as per industry standards;
- wall poster for lobby noticeboard, fridge sticker, bin sticker, bin bay signage, FAQs information booklets; and
- ongoing support from Council in managing the likely contamination of the food scrap bins.

URM will carry out delivery of kitchen caddies as well as the delivery, repair and replacement of the food scraps wheelie bins. This will be arranged per building. Collection services will be undertaken by URM on a once per week basis on Wednesdays in a separate truck. The existing waste services will continue to be provided as per normal.

To gain a realistic understanding of how the residents and the wider community will respond to such an initiative, the trial will run for a period of six (6) months.

The trial will be funded from the Domestic Waste Management Budget and the recently acquired grant from the NSW EPA. Funding of \$180,000 has been secured under the Local Council Transition Fund program administered by the NSW EPA. The funding program allowed eligible councils to apply for a grant of up to \$180,000 to undertake projects that will increase the recovery of organics in the red-lid garbage bin.

The results of this trial could possibly shape whether future food scraps recycling services would be viable across the North Sydney local government area.