

Implementation of a 3 Bin System

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Acknowledgement



Funding provided through ***Better Bins*** and
Community and Industry Engagement
Programs

Existing Two Bin System

Currently operating a two bin kerbside collection system throughout City of Cockburn:

- Recycling - **yellow lid (240L)**
- MSW - **dark green lid (240L)**

Waste processing:

- Recycling – emptied weekly, processed at Suez Materials Recovery Facility
- MSW – emptied weekly, processed at SMRC Regional Resource Recovery Centre



New Three Bin System

Following a successful trial in Hamilton Hill in 2015/16, Council resolved to implement a three bin system for eligible properties:

- Recycling - **yellow lid (240L)**
- MSW – **red lid (140L)**
- Garden Waste – **light green lid (240L)**



Waste processing:

- Recycling – emptied weekly, processed at Suez Materials Recovery Facility
- MSW – emptied weekly, processed at SMRC Regional Resource Recovery Centre
- Garden Waste – emptied fortnightly, mulched at Henderson Waste Recovery Park

New Three Bin System

Eligibility:

- Excludes properties smaller than 400sqm, multi-residential, rural, commercial and industrial
- 29,000 eligible properties (4,500 completed, 24,500 remaining)

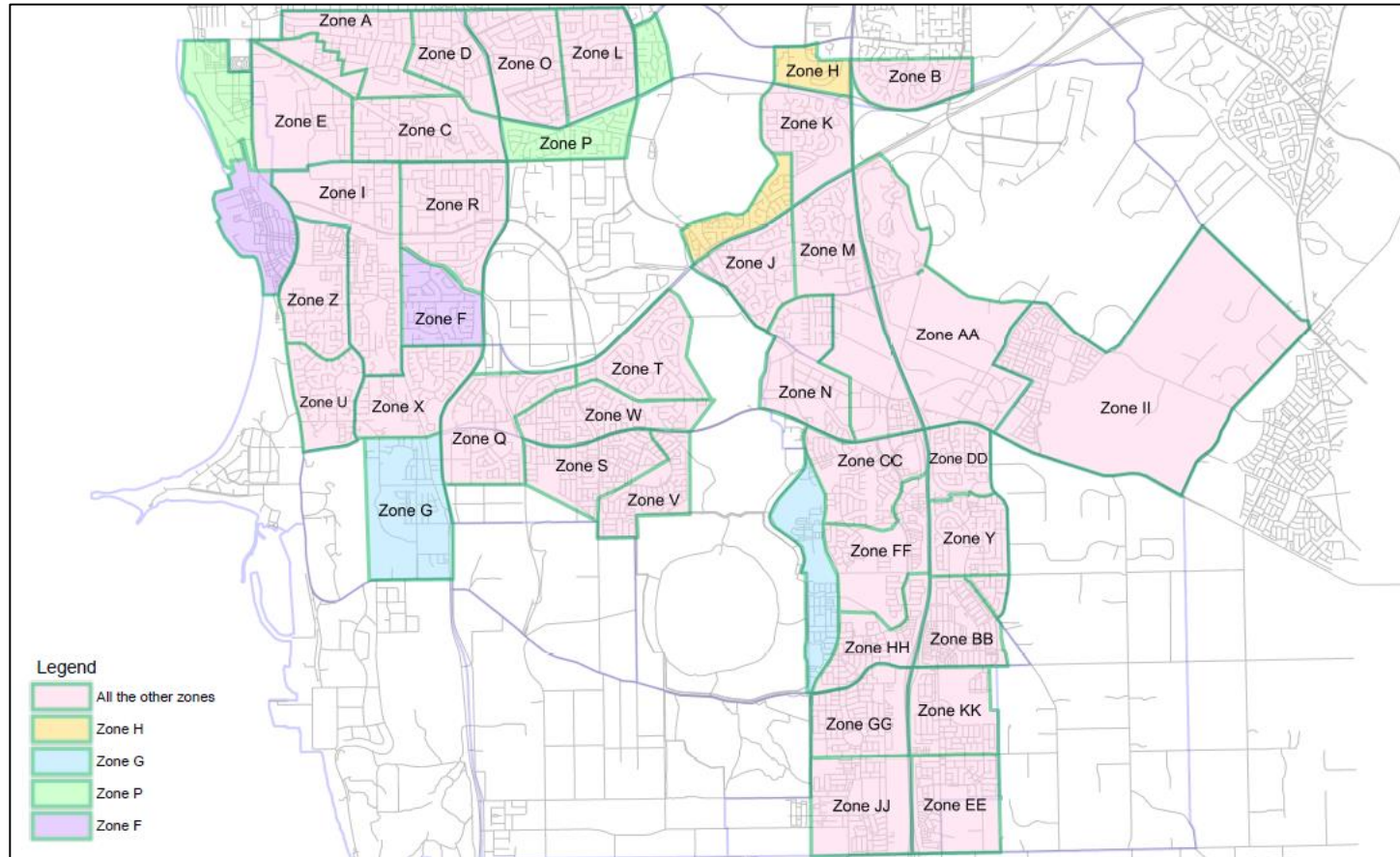
Reduced capacity of MSW bin:

- 31% of contents of MSW bin found to be garden waste.
- MSW bins rarely full
- Size reduced from 240L to 140L.
- Reminder that the City is focused on reducing waste placed in this bin.

Aiming for garden waste bin contamination rate ***lower than 4%***

Three Bin System – Zone Plan

Three bin system will roll out suburb-by-suburb until end 2019/20.



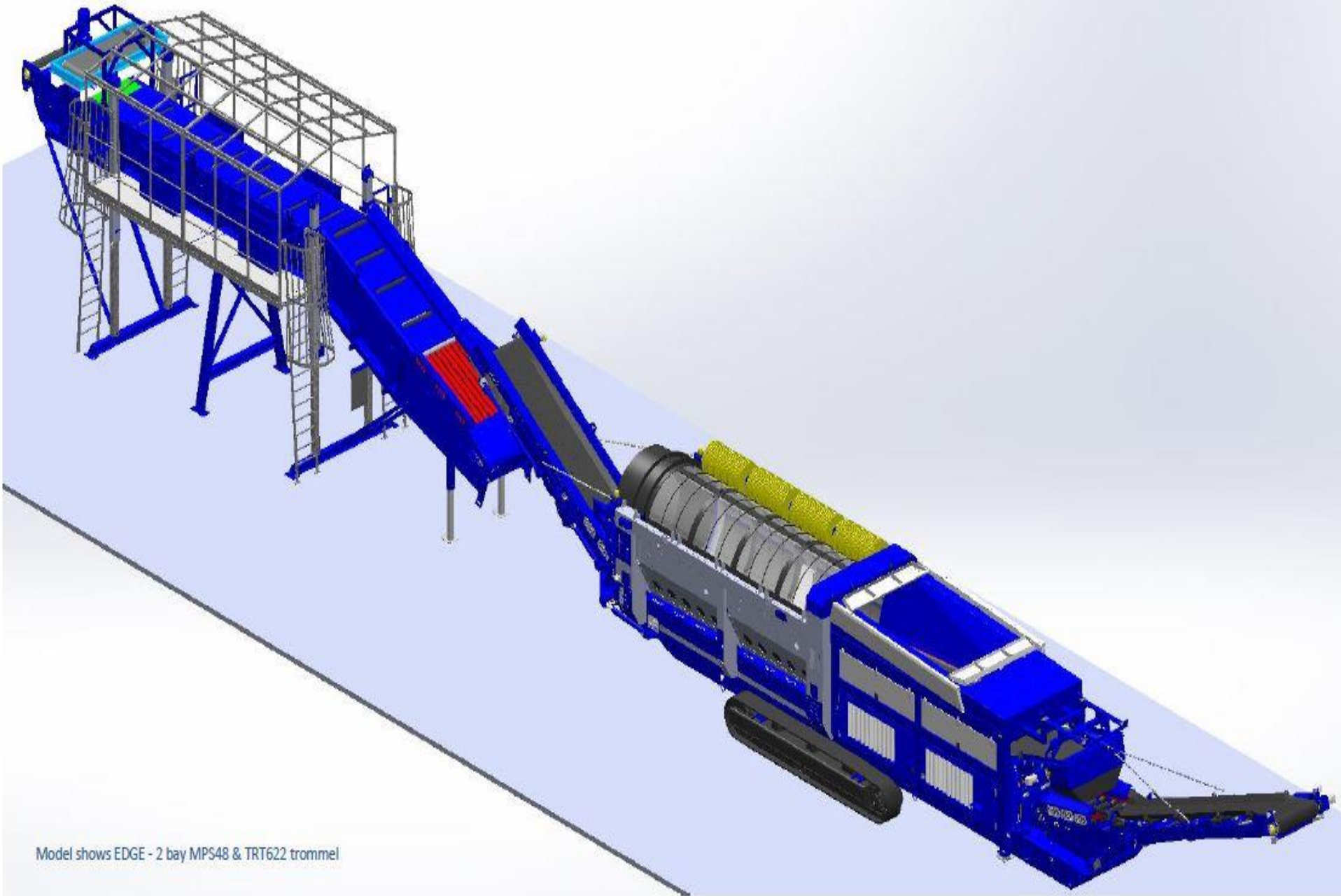
Bin Changeover

- Contractor for bin rollouts - Workpower
- Deliver new 140L red lid MSW bin
- Change dark green lid on existing 240L MSW bin to light green – this becomes the new garden waste bin



Processing of Garden Waste

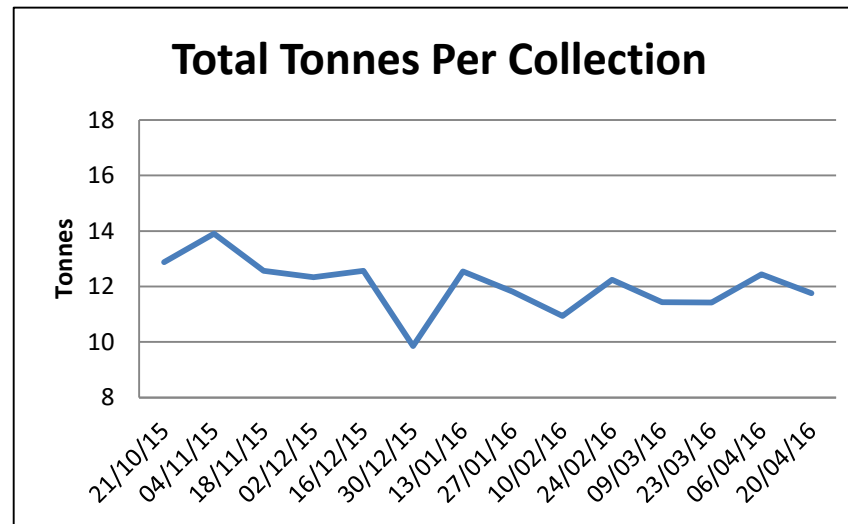
- Expected total tonnage about 8,000 tpa
- Garden Organics (GO) waste has minimal contamination
- Currently manual decontamination at Henderson Waste Recovery Park
- Moving towards an automated process in 2018
- More efficient process with more effective decontamination
- Higher quality mulch product



Model shows EDGE - 2 bay MPS48 & TRT622 trommel

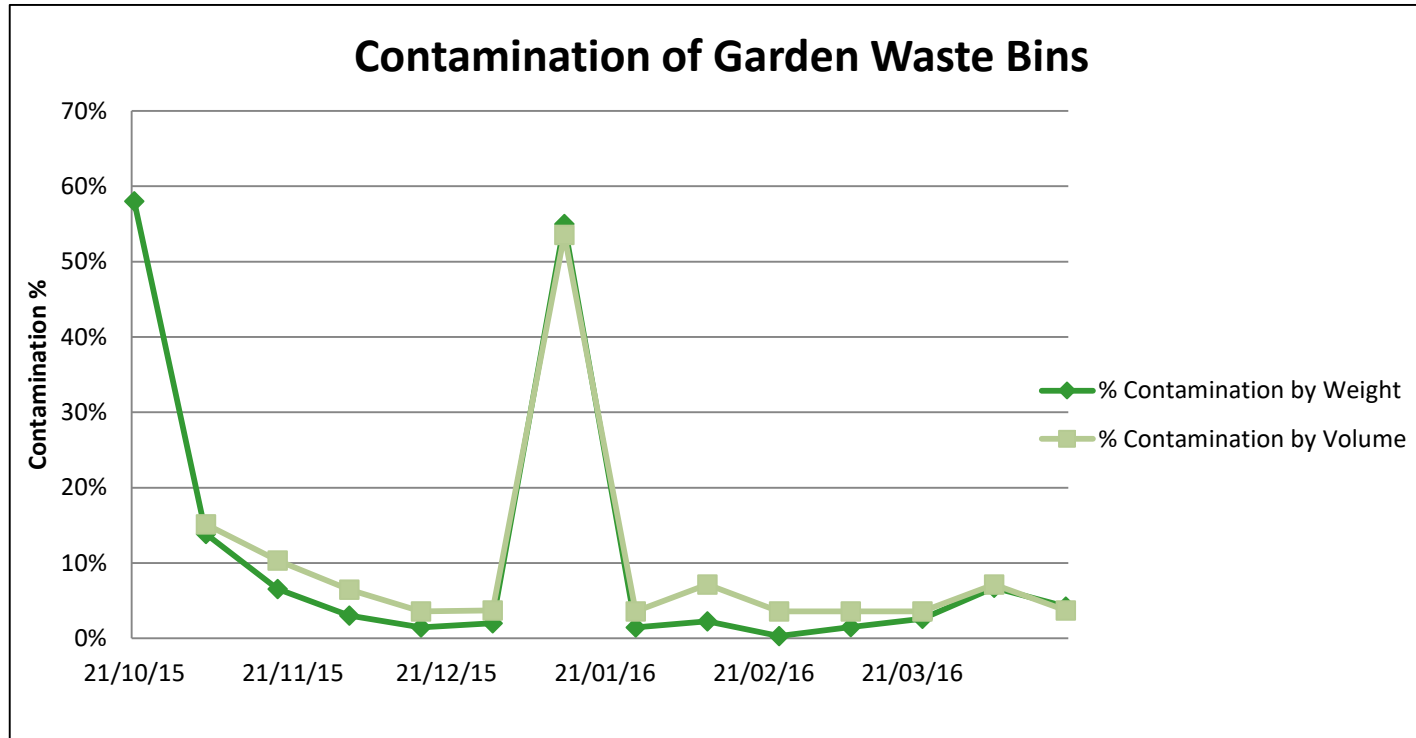
Results of Hamilton Hill Trial

- Average of 12 tonnes garden waste collected per fortnight



- Garden waste bin presentation rate over 50%
- Recycling rates increased

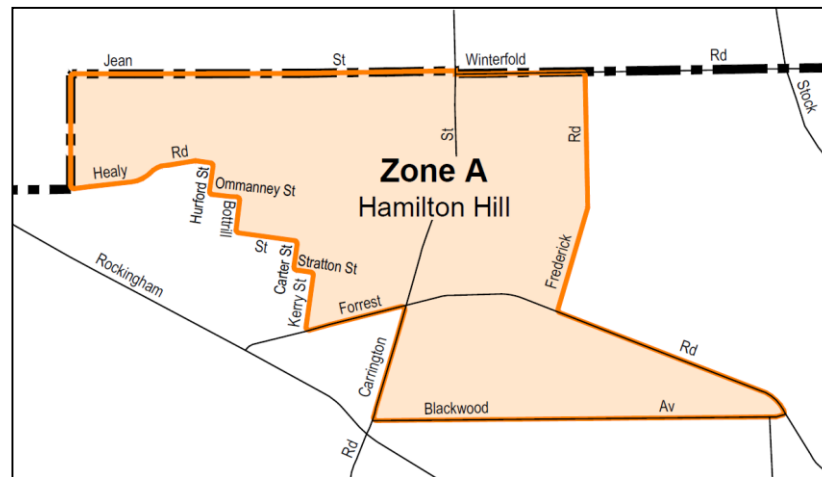
Results of Hamilton Hill Trial



Results of Hamilton Hill Trial

Survey results:

- 89% of residents satisfied (19%) or very satisfied (70%) with new bin service
- More than 80% households utilised the new garden waste bin service
- Over 60% happy with fortnightly collections



Community Education Program

Separation at source is the preferred option for waste management. Proven conclusively that the most successful waste education programs involve direct, personal contact with the household occupants.

For each zone:

- Letters sent out
- Door knocking phase
- Bin delivery
- Bin auditing phase



Door Knocking Phase

Fridge magnets



Recycling Tub



Composting caddy



Calendar



Door Knocking Phase

- Knocking on residents' doors to drop off materials and explain the rollout
- Education Officers work in pairs



Bin Tagging Phase

- Bins inspected on first collection day, before bins emptied. Tags added to each bin, according to level of contamination.
- Bins audited and tagged every two weeks for 2 months to provide feedback on waste behaviours
- Persistently contaminated garden waste bins removed.



Bin Tagging Phase

THANK YOU!



Your efforts help make great mulch.

What **DOES GO IN** your garden waste bin:

-  Leaves and twigs
-  Lawn clippings
-  Garden prunings and small branches

PLACING THIS MATERIAL IN THE GARDEN WASTE BIN HELPS TO:

-  Save water, energy and resources
-  Produces a high quality mulch
-  Is more cost effective

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WE ASK ONE SMALL FAVOUR



Please do not place these contaminants in your garden waste bin.

-  NO plastic bags
-  NO dirt, rocks or soil
-  NO nappies
-  NO gardening tools
-  NO food scraps
-  NO irrigation pipes, hoses or plant pots

Other

THANK YOU FOR YOUR EFFORTS

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WE WERE NOT ABLE TO COLLECT YOUR BIN TODAY.



Please remove the following contaminants from your garden waste bin. Your bin will then be collected on the next collection day.

-  NO plastic bags
-  NO nappies
-  NO gardening tools
-  NO irrigation pipes, hoses or plant pots
-  NO dirt, rocks or soil

Other

THANK YOU FOR YOUR EFFORTS


  

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USING YOUR GARDEN WASTE BIN RIGHT:

-  Please place your bins out the night before your bin collection day with a 300mm gap between them and bring them in within 24 hours.
-  Ensure your bin lid is able to close.

What **DOES NOT** go in your garden waste

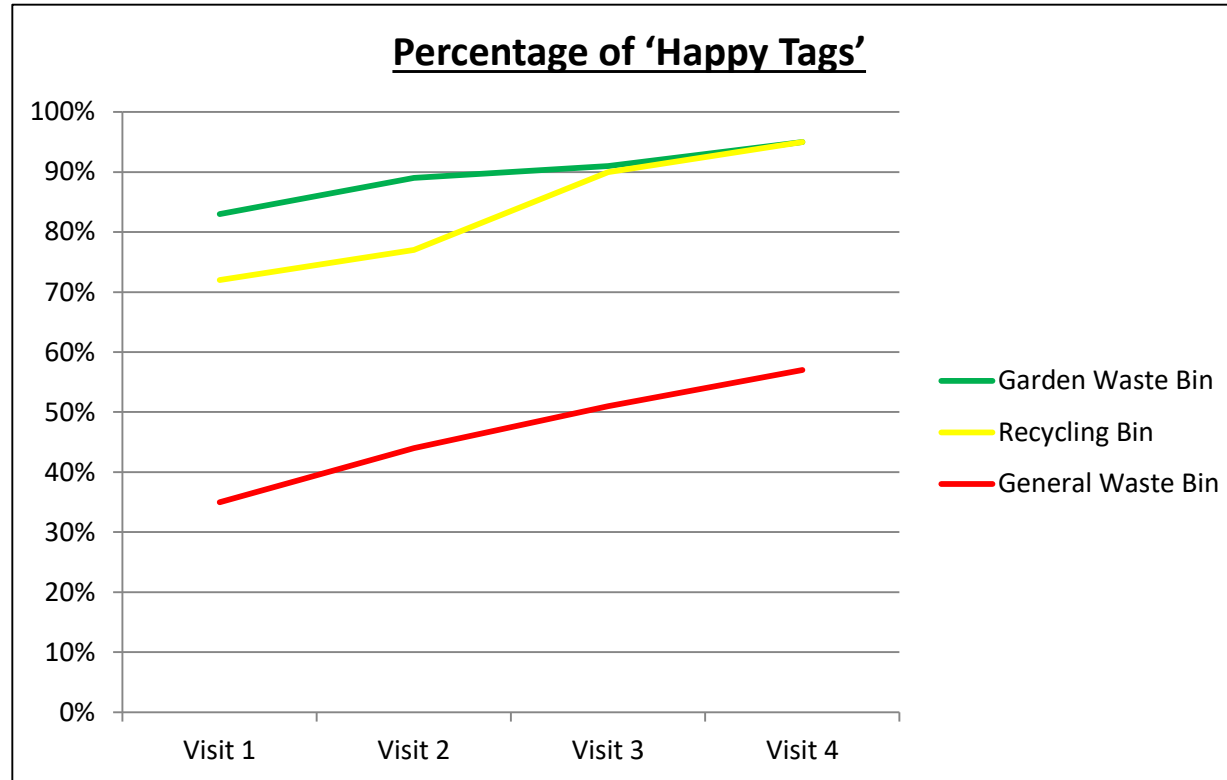
-  NO plastic bags
-  NO nappies
-  NO food scraps
-  NO dirt, rocks or soil
-  NO gardening tools
-  NO irrigation pipes, hoses or plant pots

This Program is brought to you by the City of Cockburn

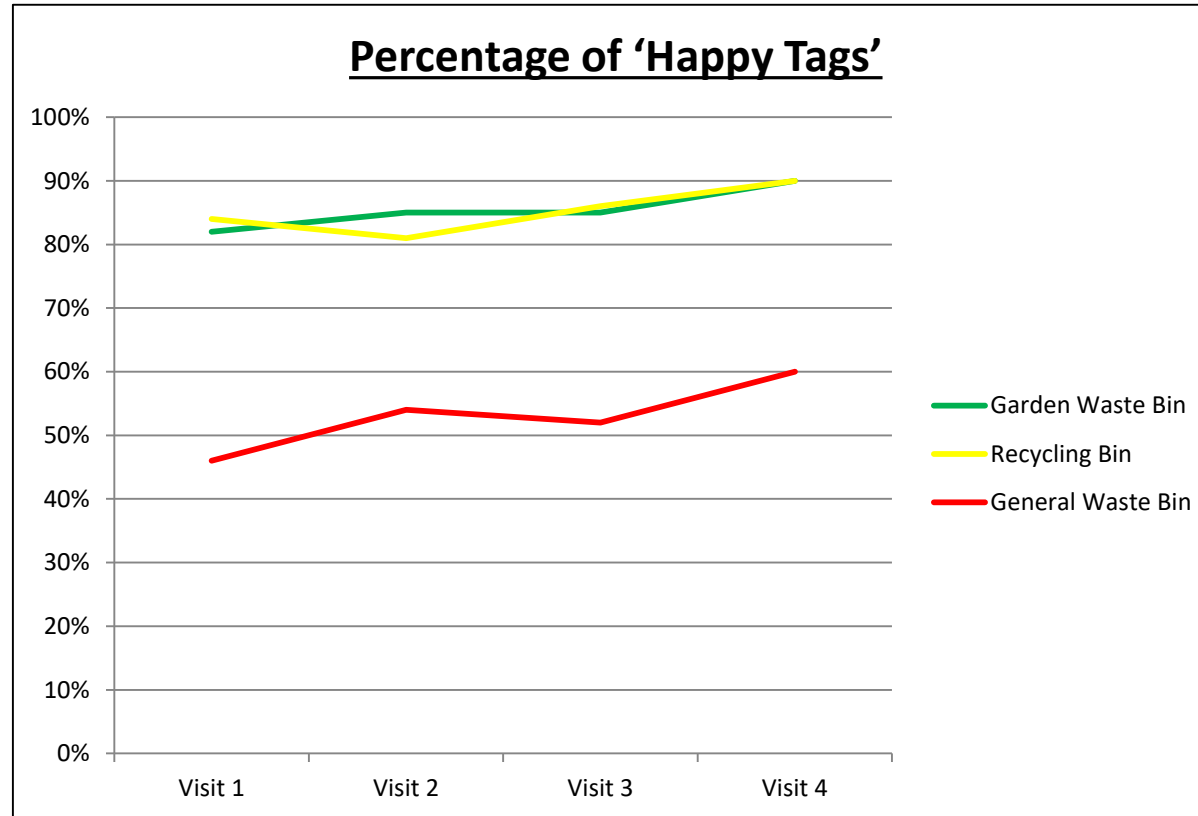
  

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Results So Far - Leeming



Results So Far – Hamilton Hill Zone E



Next Steps

- Install new green waste processing plant
 - Continue third bin rollout
 - For households not eligible for the three bin system, general waste bin lids will be changed to red to ensure consistency across the City
 - Upgrade all public place bins with red to represent general waste
 - Ensure all communications consistent with new colours
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