### PROPOSAL FOR A THREE BIN SYSTEM IN COTTESLOE TO SEPARATE GREEN WASTE

File Ref:

SUB/375

Responsible Officer:

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**Proposed Meeting Date:** 

21 May 2013

**Author Disclosure of Interest** 

Nil

### SUMMARY

Council is being asked to consider the introduction of a third bin for "green waste" and the recommendation is to consult with the community in relation to this matter prior to finalising its decision and determining an implementation plan.

### **BACKGROUND**

Residents of the Town of Cottesloe currently receive the following services:

- 1x 120L bin with a green lid for general rubbish collected weekly and
- 1 x 240L bin with a yellow lid for recyclables collected every fortnight.
- 2 x annual verge-side green waste collections in March and September.
- 2 x annual verge-side combined green and bulk waste collections in May and November.

General waste including green waste collected in the general waste bin is currently delivered to the Western Metropolitan Regional Council (WMRC) transfer station and presently this waste is transported to landfill. Green waste collected from the Town's verge-side collections and tree pruning works is also delivered to the same transfer station and is recycled.

There is evidence to suggest that with the provision of a residential green waste bin, the Town would be able to divert at least 25% of the total residential general waste amounting to approximately 575 tonnes per annum. By providing all single-residential properties with a 240L bin for separation of green waste, the Town should be able to achieve three main objectives –

- 1. Provide the community with an improved service.
- 2. Increase the Town's waste diversion rate in line with the Town's sustainability focus and the Waste Authority's Strategic Plan.
- 3. Reduce the Town's annual waste disposal costs.

The project will require "start up" expenditure for the purchase of bins and lids and accordingly, this report has been prepared to inform Council and the community of the project and includes a recommendation to consult with the community prior to final determination.

Should Council decide to proceed with the project;-

- 1. A new contract with a green waste recycler would need to be entered into.
- 2. Samples or trials might need to be arranged.
- 3. The new bins and lids will need to be purchased and distributed
- 4. An information and education program and resources will need to be prepared and sourced.

The current waste collection contract with Cleanaway ends in November 2013 and a green waste collection can become part of the specification of a new or renewed contract.

### **Disposal of Residential Waste**

In Cottesloe, residential putrescible waste including a percentage of green waste is collected weekly from the 120L general waste bins. It is possible that some green waste also contaminates the 240L recycle bin, which is emptied fortnightly.

Under the requirements of the Waste Delivery Agreement (WDA) with Western Metropolitan Regional Council (WMRC), Cottesloe must use the transfer station at Shenton Park for disposal of its putrescible waste. In 2013/14 the fee for disposal of general waste at transfer station will increase to \$192.92 per tonne (ex GST), while the disposal fee for green waste collected from the annual verge-side green waste collections will increase to \$65 per tonne (ex GST).

### **Primary Savings**

If green waste from the 120L bin can be separated and processed as green waste, it presents the Town with an opportunity to save a considerable amount annually, with savings increasing every year due to the increasing cost of landfill disposal. The savings will vary depending on:-

- i. The number of tonnes of green waste diverted.
- ii. The cost of disposal of kerb-side green waste.
- iii. The cost of transportation of the kerb-side green waste to a facility other than the transfer station at Shenton Park.
- iv. Whether the number of annual verge side collection can be reduced.

### Sustainability

Diverting green waste represents a Sustainable initiative as the separated green waste can be recycled and reused as compost. The state Waste Authority in its new Waste Strategy has set an ambitious target of achieving 65% waste diversion across metropolitan WA by 2020. Currently only 25-30% of Cottesloe's waste is being diverted from landfill, however this will change when the DiCom project is fully opperational. By implementing a three bin system and separating green waste during kerbside collections it is estimated that Cottesloe's residential waste diversion rate could increase to an average 50%.

### **Supporting Data**

The City of Nedlands introduced a three bin system similar to the one being proposed for Cottesloe in November 2006. A report provided by Bowman and Associates following their audit of the three bin system in Nedlands conducted in 2007 indicated that the properties that received a green waste bin were diverting up to 65.6% of waste from landfill. The report also summarised that the City of Nedlands total waste disposal rate had increased to 46.9% in the introductory year of the program and that the rate of diversion could increase to 51.7% with increased education. The report also made mention of the fact that a 2004 audit found that their putrescible waste bin contained up to 41% green waste.

Based on the City of Nedlands' findings and also on discussions with the current waste collection contractor, Cleanaway; it is estimated (conservatively) that

Cottesloe could divert 575 tonnes of green waste per year. This represents 25% of the total weight of residential putrescible waste that is currently delivered to the WMRC transfer station.

### **PROPOSAL**

### The New Three Bin System

Each single-residential property will have a minimum of:

- 1 x 120L bin with a red lid for general rubbish emptied weekly.
- 1 x 240L bin with a yellow lid for recyclables emptied fortnightly.
- 1 x 240L bin with a green lid for green waste emptied every fortnight alternating with the recycling week.
- 2 x annual verge-side green waste collections in March and September.
- 2 x annual verge-side bulk waste collections in May and November.

Note - To avoid confusion, comply with the Australian Standard and reduce contamination, it is proposed that the current green lid on the 120L putrescible waste bin be replaced with a red lid.

### **Information and Education Program**

For the new system to work well and with minimal contamination of the bins, it is proposed that the Town devote sufficient resources to create and implement an information and education campaign.

### **Verge-side Collections and Tip Passes**

With the introduction of the green waste bin; lawn clippings, tree prunings and small branches will be collected every fortnight. This would reduce the need to continue with the current four annual green waste verge-side collections. It is proposed that the number of green waste verge-side collections be reduced to two annually in March and September. The two remaining verge-side collections would allow for residents to dispose of larger branches and tree stumps which ideally should not be placed in the green waste bins.

No change to the two annual verge-side bulk/junk waste collections is proposed. Residential bulk waste will continue to be collected in May and November annually. Further, WMRC issues tip passes (as currently available) will also be available for purchase by residents for disposal of green and bulk waste above and beyond these provisions.

### **Residential Verge Green Waste Removal**

Currently, the Town's staff clean up green waste such as pine needles and leaves gathered by residents as required, in order to keep the Town looking tidy. With the provision of the green waste bin for disposal of green waste, this represents a potential further saving for the Town.

### **Exclusions**

It is important to note that it is proposed that large multi-residential developments will not be provided with a green waste bin. This is because it has been found that with several people using the same bin, the level of contamination is potentially much higher and there is less accountability.

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Higher levels of contamination equate to increased costs of disposal. If the percentage of contamination exceeds 5%, it represents a significant task and expense for composters to remove contamination and dispose of it and the final compost product inadvertently containing contamination in the form of plastics is of a very low grade.

### Stakeholder consultation with WMRC

Following the budget review meeting, the Town has written to the WMRC seeking advice on the following:

- 1. Is the WMRC supportive in principle of source separation of green waste?
- 2. Does the separation of green waste adversely impact on the DiCOM operations?
- 3. Is the transfer station able to process green waste from fortnightly kerb-side collections? If so, would the green waste processing fee be in line with the standard green waste processing fee (i.e. \$65/T for 2013/14)?
- 4. If the WMRC is unable or prefers not to process green waste at the transfer station, could the green waste be processed by a third party directly?
- 5. Would this have any bearing on the Waste Supply Agreement or Waste Delivery Agreement?

WMRC's report to its Strategic Review Committee, indicates that:

- 1. WMRC is supportive of source separation of green waste.
- 2. The diversion of green waste would not impact on the DiCOM operations.
- 3. The transfer station is unable to process kerb-side green waste currently.
- 4/5. The Town of Cottesloe would receive an exemption from WMRC to deliver the green waste to a third party for processing.

### **Green Waste Processing**

Having to source an external receiver for green waste adds an additional complication to the process. Further, the final savings will vary depending on the cost of disposal and the distance to transport the green waste.

Preliminary discussions with composting companies have commenced and the WMRC are investigating the possibility of receiving and processing green waste.

### **Possible State Government Funding**

The WMRC stated in its report that, "It is understood that the Waste Authority is preparing 'Best Practice Guidelines for Kerbside Collections' which are anticipated for release in mid-2013. Whilst the guidelines have not been released, WMRC understands the best practice guidelines will mirror the service proposed by WMRC in 2011 – which supports the implementation of a three bin system. Industry speculation suggests the Waste Authority has allocated \$7.5m over two years to assist Councils achieve the best practice."

Any funding available that will reduce the set-up costs would be beneficial to the project and an application will be made to the Waste Authority accordingly.

### STRATEGIC IMPLICATIONS

The new three bin system will improve source separation of green waste.
 This is in line with the Waste Authority's Waste Strategy targets for increased waste diversion.

### **FINANCIAL IMPLICATIONS**

There are no current resources allocated, and this will need to be considered as part of Council's budgetary process. However initial estimates suggest that there will potentially be significant savings to Council from year 2 onwards.

Areas where expenditure is anticipated during the introduction of the program:-

- Purchase of 240L bins for green waste collection.
- Purchase or trade of red lids for the current green lids on 120L bins.
- Consultancy fees for an information / education program to introduce the new system and ensure contamination is kept to a minimum.

### The Town will save on:

- The difference in costs of disposal of putrescible and green waste for every tonne of waste diverted.
- The cost of the two reduced verge-side green waste collections.

### STAFFING IMPLICATIONS

The introduction of fortnightly kerb-side green waste collections would eliminate the need for the Town's staff to spend time and resources for any additional residential verge clean-ups.

Staff time and resources would be used for the roll-out of the new bins and replacement of 120L bin lids.

Depending on the complexity of the project and the education program, there may be a need for some additional administrative or environmental health support.

### SUSTAINABILITY IMPLICATIONS

### Waste Management and Recycling

- Commitment on reducing waste (e.g. reduced packaging, reduced material usage)
- Commitment on resource efficiency (reducing, reusing, recovering, recycling)

### CONSULTATION

This report recommends that residents be consulted as to whether they would support a change to the new three bin system for green waste separation.

### STAFF COMMENT

The proposed three bin system for source separation of green waste ensures:

### An improved service

Each single residential property will receive an extra bin for green waste which will be collected every fortnight at no extra cost to the resident.

### Enhanced green credentials

The Town will be diverting approximately 50% of its total waste from landfill.

### Savings

The Town will save substantially on costs due to the difference between the disposal fees for general waste and green waste. It is anticipated that from the years following the initial costs of purchasing the bins and creating an education program, the savings in disposal costs, two reduced verge-side collections and staff resources will outweigh the added collection and transportation costs.

### **VOTING**

Simple Majority

### OFFICER RECOMMENDATION

### **THAT Council;**

- 1. Support in principal, the introduction of a third bin for residential green waste.
- 2. Seek feedback from the community on the proposed new Three Bin System.
- 3. Be presented with a report after July 2013 with the findings of the community feedback.



# IMPORTANT INFORMATION FOR THE RESIDENT



Website – www.cottesloe.wa.gov.au and click on Quicklinks/Three Bin Survey

Facebook page – Sustainability in Cottesloe – Three Bin Survey

**E-mail** – council@cottesloe.wa.gov.au Subject – Three Bin Survey

Post – Three Bin Survey, Town of Cottesloe, PO Box 606, COTTESLOE WA

Thank you for taking the time to consider this new initiative and I look forward to receiving your comments.

The Town of Cottesloe is seeking Feedback on a proposed Three Bin System for source separation of Green Waste

Source separation of green waste is a sustainable practice and will ensure the Town diverts as much of its total waste generated away from landfill.

The separated green waste will be reused and recycled into compost and mulch. Currently green waste placed in the general bin is taken to a landfill facility.

## Proposed Three Bin System:

- Every single residential property will receive a 240L green waste bin at no cost to residents.
- The bin will be used for small and medium size lawn and garden clippings and trimmings. No plastic or green waste bags.
- The bin will be emptied fortnightly on the non-recycling collection week.

The four verge-side green waste collections will be reduced to twice annually in March and September. Bulk waste only will continue to be collected in May and November every year.

**Proposed Start Date** - Anticipated commencement date is December 2013.

Cost Benefit - Disposing of general waste to landfill is more expensive than the cost to reuse and recycle green waste. After the initial purchase of the bins, significant annual savings for the Town and residents will be realised.

The Town is also exploring opportunities for State Government grants to assist with the introduction of this initiative.

**Exclusions** – Green waste bins will not be provided for units, multi-residential properties and commercial properties in Cottesloe.

Feedback – Council is supportive of the idea as it is considered to be sustainable for the environment and will assist in reducing waste costs.

The Town invites your feedback on whether you support the proposal to introduce a 3 bin system for source separation of green waste?

**Submissions** - Please send your name, address, phone and email details, preference and comments using one of the options overleaf by 4.30pm Friday, 28 June 2013.

### Carl Askew

Chief Executive Officer