City of Palo Alto
City Council Staff Report

(ID # 5558)

Report Type: Action Items **Meeting Date: 3/23/2015**

Council Priority: Environmental Sustainability

Summary Title: Approval of a Residential Curbside Compostable Collection Program

Title: Approval of a Residential Curbside Compost Collection Program and Adopting a Budget Amendment Ordinance for $387,000 for the Purchase of Kitchen Buckets and New Outreach Materials

From: City Manager

Lead Department: Public Works

Recommendation
Staff recommends that Council:

1. Approve a new residential curbside collection and composting program of food scraps commingled with yard trimmings in the green carts, effective July 1, 2015; and
2. Adopt the attached Budget Amendment Ordinance in the amount of $387,000 to fund the purchase of kitchen buckets and outreach materials that are needed as part of the implementation of the new residential curbside compost collection program.

Executive Summary
The implementation of the GreenWaste Contract in 2009 added several zero waste programs that boosted the City's diversion rate (from landfills) from 62% in 2008 to approximately 78% in 2013. While this diversion rate is one of the highest in the state, it has not increased as desired over the past few years to help the City meet its Zero Waste Goal by 2021. The next big step in the City's efforts to attain its zero waste goals is getting food scraps out of the landfill, as they make up 50% of residential garbage – over 5,000 tons landfilled annually.

Staff proposes to start residential curbside compost (e.g., food scraps and food soiled paper) collection in July 2015. The new program will allow residents to place loose food scraps and food soiled paper directly into the 'green', yard trimmings cart. Residents will also be given a kitchen bucket to store a few days' worth of food scraps in the house before depositing it in the green cart. This program will reduce community greenhouse gas emissions by over 1,140 metric tons of CO_2 equivalent each year. The program will incur annual (net) cost increases of approximately $532,000 to compost and/or anaerobically digest food scraps commingled with yard trimmings. The resulting increase in costs to residents would be approximately 6.1% (about a $2.63 per month increase for a 32 gallon-sized garbage service). Staff is also requesting a one-time Budget Amendment Ordinance (BAO) for $387,000 to fund the purchase of the kitchen buckets and print new program outreach materials.

Finance Committee Discussion

On March 3, 2015, this new residential curbside compost collection program was presented to the Finance Committee for discussion. The Finance Committee did not take formal action on this new program (nor were they asked to); however, the Finance Committee members were quite supportive of it. A related preliminary new residential rate structure was also presented to the Finance Committee on March 3. The Committee requested that when the FY 2016 rates return to Finance (expected to be on April 7, 2015), several options be presented, not just one set of rates.

Background

In 2005, the disposal of recyclable and compostable materials in landfills represented 10% of the greenhouse gas emissions for the entire Palo Alto community. That year, Council adopted a policy to achieve Zero Waste by 2021. In 2007, a Zero Waste Operational Plan (ZWOP) was developed that identified specific actions necessary to achieve zero waste. One of the key actions called for the collection of compostable materials (food scraps and food soiled paper). With the inception of the GreenWaste contract in 2009, the City began the collection of commercial compostables (e.g., food scraps, food soiled paper, and compostable plastics). Over 11,000 tons of commercial waste annually has been diverted from landfills and composted.

Unfortunately, due to operational and cost constraints, residential curbside compost collection was not implemented at that time. Most residents dispose of their food scraps and food spoiled paper, about 5,000 tons per year, in the garbage to be landfilled. Some food is sent down the drain through kitchen sink grinders to be removed and incinerated at the Palo Alto Regional Water Quality Control Plant – a process that consumes energy and wastes water. About 10% of Palo Alto resident's compost at home, which is the best environmental option?

Curbside collection of food scraps and food soiled paper is a widespread and successful practice throughout the Bay Area. Staff has worked to identify the best curbside collection method for these compostable materials. In April 2013, the City implemented a year-long Two Cart Collection Pilot Program in the Greenmeadow neighborhood that eliminated the black (garbage) carts. Residents were asked to change two behaviors: first, place food scraps into compostable bags and then into the green carts combined with yard trimmings; second, residents were to bag any remaining garbage and place it in the blue recycling carts. Both of the carts (blue and green) were collected weekly and sorted at a materials recovery facility (MRF).

The Two Cart Collection Pilot Program confirmed that the two-cart collection system is a good method to increase diversion of food scraps and additional recyclables from landfills. However, the method of separation in the pilot was complicated, as residents were required to: 1) Separate food scraps from yard trimmings using compostable bags; and 2) Separate garbage from recyclable materials using plastic bags. Because of these complexities that led to confusion by residents in the pilot area, Staff is not recommending a citywide roll-out of the two-cart collection system at this time. Staff is recommending a simpler option where residents can place their food scraps bagged or loose in the green carts, as is described below.

Discussion

New Residential Curbside Compost Collection Program

Staff is recommending the city-wide collection of residential compostable materials, which include food scraps (bagged or loose) and food soiled paper, commingled in the green carts with yard trimmings. Commingling the food scraps with yard trimmings is the simplest way to recover this material, divert it from the landfill, and produce valuable compost. Many cities throughout the Bay Area

have been collecting and composting commingled residential food scraps with yard trimmings for several years. There are several regional composting facilities that are permitted to compost commingled food scraps and yard trimmings. The food scraps collection program will likely divert and recover over half (or approximately 3,000 tons per year) of the food scraps in the residential garbage.

In addition, a curbside food scraps collection program that allows for the loose placement of food scraps in the green yard trimmings cart is consistent with the City's commercial compostable materials collection program. No longer will school children sort one way at school (part of the commercial program) and then another at home (part of the residential program for single family residents). The improved consistency between the residential and commercial programs will improve outreach opportunities and effectiveness. The proposed program also will be consistent with the other Bay Area communities, including Menlo Park, San Francisco, San Mateo, Redwood City, Atherton, Berkeley, and Oakland.

If this program is approved, Staff will purchase kitchen buckets and distribute them to all single-family residences within the City. Residents can use the buckets to temporarily keep food scraps indoors (the two-gallon buckets typically hold around two to three days' worth of food scraps) until the material is emptied into the green yard trimmings carts. The program allows for all food scraps to be composted and placed directly into the green cart in a variety of options: loose, in a compostable bag (paper or plastic), in a paper carton (e.g., milk, juice, ice cream), or any other compostable container. The acceptable compostable items include but are not limited to: spoiled food, inedible food scraps (e.g., banana peels, apple cores), meat, bones, egg shells, compostable plastics and food soiled paper (e.g., paper towels, used tissues, paper plates, paper cups, and paper cartons). Larger compostable food scraps like pizza boxes or paper cartons also can be placed directly into the green carts. Diapers, pet waste and feminine hygiene products would not be allowed in the green carts and should continue to be placed in the black garbage carts. Multifamily dwellings with five or more units that subscribe to commercial refuse service have had the opportunity to have food scrap collection since 2009.

The combined materials in the green carts will be collected by GreenWaste of Palo Alto and transported to the Sunnyvale Material and Recovery Transfer (SMaRT) Station for consolidation or directly hauled to a regional processing

facility for processing and composting. The regional composting facility could either be: 1) Z-Best Composting Facility near Gilroy (a sister company of GreenWaste of Palo Alto); 2) Zero Waste Energy Development Company (ZWED) (also a sister company of GreenWaste) in San Jose; 3) Newby Island Composting Facility operated by Republic Services in Milpitas; or 4) Harvest-Lathrop Composting Facility (a sister company to Harvest Power) located outside Lathrop.

Connection to Home/Backyard Composting

The residential curbside collection of food scraps does not reduce the need or importance of home/backyard composting. Home composting is a great option for many residents to recover most food scraps. Home composting helps to reduce collection costs and lower greenhouse gas emissions and also provides a "closed-loop" for the food scraps. It is estimated that 10% of Palo Alto household's compost at home. In 2014 Staff implemented an expanded home composting campaign to increase participation citywide. The expanded campaign has been a focused outreach and incentive-based campaign that has augmented and added emphasis to the City's traditional, ongoing, multi-partner program for home composting, water conservation, and pollution prevention. The expanded campaign's goal has been to raise awareness about the benefits of home composting while increasing the number of people composting at home and using compost in the yard/garden. Also, the expanded campaign has aligned with California's drought as it encourages home composting by highlighting compost's water-saving properties, and through incentives such as the City providing free home composting bins to Palo Alto residents. In 2014, 159 residents attended 15 composting workshops where Staff gave away 82 backyard compost bins.

Home composting will continue to be an important City waste diversion program complementing residential curbside food scrap collection, but it will not work for everyone and will not be able to accept all of types of compostables, as described below. Surveys conducted in 2014 indicated that two-thirds of residents actively chose not to have backyard compost. Residents cited time constraints and not gardening as the main reasons. Many do not have space available for home composting, or perceive home composting as smelly and an activity that can attract rodents, flies or other bugs to their home. In addition, some types of food scraps and yard trimmings should not be placed into a home compost feedstock including various vegetation seeds, meat, bones, dairy products and fats. With the proposed curbside Residential Food Scraps Collection Program, this type of

food waste can be placed in the green cart and commercially composted. Home composting and curbside food scrap collection complement each other by providing a complete solution to maximize the environmental benefit for all household organics.

Timeline

Residential Food Scraps Collection Implementation Schedule

Task	Schedule
Finance Committee discussion	March 2015
Council approval	March 2015
Develop outreach and training materials	April – June 2015
Hold community training sessions	June – July 2015
Run advertising	Late June 2015 – June 2016
Distribute kitchen pails	Late June 2015
Begin collection	July 1, 2015

Resources

Implemening a new residential food scraps collection program will generate ongoing costs of approximately $532,000 per year, beginning in FY 2016. This is equivalent to an approximate 6.1% rate increase for residential customers with 32-gallon garbage cart service or an average monthly increase of approximately $2.53 per month for all residential customers. These ongoing costs will be incorporated into future residential rates.

An initial investment of $387,000 will be needed in FY 2015 to purchase kitchen buckets and provide the outreach and training materials needed for this new program's implementation. Outreach and training materials will include cart tags, program brochures, stickers for collection carts, stickers for the kitchen buckets, how-to video, and informational postcards with program information. Four community meetings have been scheduled to orient the public at the beginning of the roll-out of this new program.

Community Meetings

- Wednesday, June 24, 2015. 7:00 p.m. Lucie Stern Community Room
- Saturday, June 27, 2015. 10:00 a.m. Cubberley Room H1
- Tuesday, July 7, 2015. 7:00 p.m. Lucie Stern Community Room

- Saturday, July 11, 2015. 10:00 a.m. Cubberley Room H1

Resource Impact

Staff also requests that the Council approve a $387,000 Budget Amendment Ordinance in the Refuse Fund to be offset by a reduction to the ending fund reserves. The funding would be used for the purchase of kitchen buckets, outreach, and advertising, as outlined below in order to prepare Palo Alto residents for the July 2015 implementation of this program.

One-Time FY 2015 Costs – Residential Food Scraps Collection Program

Item	One Time Costs
Purchase kitchen pails for each residence (18,000 at $6.00 per bucket)	$108,000
Outreach and training materials design, development, printing and distribution costs	$239,000
Print and online ads and other advertisement costs	$40,000
Total One Time Costs	**$387,000**

Policy Implications

The collection of food scraps is consistent with the City's Zero Waste Operational Plan and Climate Protection Plan both adopted in 2007 to provide for the collection and diversion of all compostable materials.

The increased discount for commercial compostable service will help the City achieve its zero waste goals by 2021.

Environmental Review

GHG Savings

Diverting and composting the expected recoverable amount of 3,000 tons of residential food scraps per year would save over 1,140 metric tons of CO_2e emissions per year that contribute to global climate change.

CEQA

Collecting residential food scraps within the existing green carts and composting this material is consistent with the baseline three cart collection services that was studied in the Initial Study-Mitigated Negative Declaration adopted by Council with the GreenWaste Contract award in 2008 (CMR 416:08). In addition, this new food scraps program is designed to reduce the impacts to the environment by reducing the amount of greenhouse gas generated and by maximizing the recovery of compostable materials generated within the City.

There will be negligible transportation related impacts from modifications to existing compostable collection routes.

Attachments:

- A - Residential Food Scraps BAO (DOCX)

Ordinance No. XXXX
ORDINANCE OF THE COUNCIL OF THE CITY OF PALO ALTO AMENDING THE BUDGET FOR FISCAL YEAR 2015 TO PROVIDE ADDITIONAL APPROPRIATION OF $387,000 IN THE REFUSE FUND FOR THE RESIDENTIAL FOOD SCRAPS PROGRAM.

The Council of the City of Palo Alto does ordain as follows:

SECTION 1.

A. Pursuant to the provisions of Section 12 of Article III of the Charter of the City of Palo Alto, the Council on June 16, 2014 did adopt a budget for Fiscal Year 2015; and

B. Staff is recommending a new residential food scraps collection and composting program that would be implemented July 1, 2015 as part of the City's efforts to meet its goal of zero waste to landfills by 2021; and

C. Food scraps comprise nearly fifty percent of the material found in single-family residential garbage in Palo Alto. Currently, these food scraps can only be disposed in garbage cans. Other residents send food scraps down the drain, which is not recommended due to additional water usage and the potential for sewer blockages. Neither of these methods is appropriate for meat, cheeses, eggs, or other foods high in protein or oil; and

D. In April 2013, the City implemented a year-long Two Cart Pilot Program in the Green Meadow neighborhood that eliminated garbage carts completely and redirected food scraps to compostable bags and into the yard trimming cart. Residents in the pilot were asked to bag any remaining garbage and place it in the recycling carts; and

E. While the Two Cart Pilot Program did increase diversion of food scraps and additional recyclables from the landfills, staff is not recommending a citywide roll-out of the two-cart collection system at this time, as many participants felt that the program was too complicated. City intends to continue the pilot for calendar year 2015; and

F. Under the new program, the city-wide collection of residential food scraps would be commingled with yard trimmings. There are several regional composting facilities that are permitting compost being commingled with food scraps and yard trimmings. The food scraps collection program will likely divert and recover over half of the food scraps in the residential garbage, which is equivalent to a four percent increase in the City's overall diversion rate; and

G. An initial investment of $387,000 will be needed to purchase kitchen pails and provide the outreach and training materials needed for implementation. Outreach and training materials will include cart tags, program brochures, stickers for collection carts, stickers for the kitchen pails, how-to-video, and informational postcards with program

information. The annual net costs associated with the new residential food scraps collection and composting program are currently anticipated to be $532,000, and are expected to be recovered through an increase in the single-family residential refuse rate pending City Council approval as part of the Fiscal Year 2016 budget process.

SECTION 2. Therefore, the sum of Three Hundred Eighty Seven Thousand Dollars ($387,000) is hereby appropriated in the Refuse Fund for the residential food scraps program, offset by a corresponding reduction to the ending fund balance ($387,000).

SECTION 3. As provided in Section 2.04.330 of the Palo Alto Municipal Code, this ordinance shall become effective upon adoption.

SECTION 4. The Council of the City of Palo Alto hereby finds that this is not a project under the California Environmental Quality Act and, therefore, no environmental impact assessment is necessary.

INTRODUCED AND PASSED: Enter Date Here

AYES:

NOES:

ABSENT:

ABSTENTIONS:

NOT PARTICIPATING:

ATTEST:

_____
City Clerk

_____
Mayor

APPROVED AS TO FORM:

_____
Senior Assistant City Attorney

APPROVED:

_____
City Manager

_____
Director of Administrative Services

_____
Director of Public Works