

CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Study Session Worksheet

Presentation Date: 1/27/15 **Approx Start Time:** 11:00 **Approx Length:** 30 minutes

Presentation Title: Food Scrap Collection

Department: DTD-Resource Conservation and Solid Waste

Presenters: Rick Winterhalter, Eben Polk

Other Invitees: Scott Caufield

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Pursuant to the County's Annual Solid Waste Management Plan and the Regional Solid Waste Management Plan, DTD's Resource Conservation and Solid Waste program is prepared to expand the development of commercial food scrap collection (currently in 3 cities) into urban unincorporated Clackamas County. Staff requests Board assent for a program development phase including limited service to businesses requesting collection, and research and development of rate structure options and service requirements, to be presented to the Board for formal consideration in 18 months.

EXECUTIVE SUMMARY:

Food scraps are a major component of our waste stream and represent a significant priority for recovery. Food scraps were first managed through solid waste collection for the protection of public health. Today's modern integrated solid waste management systems attempt to maximize the value from discards while protecting public health and the cleanliness of air and water.

Food scraps are the largest single component of discarded waste from our region, by tons. (Over 200,000 tons annually as of 2009-2010.) 55% of this is generated by the commercial and industrial sectors. Our Regional Solid Waste Management Plan identifies food scraps as a priority for additional recovery, and it is now a focus of local solid waste planning throughout Oregon. Three cities in Clackamas County, plus Beaverton, Gresham, and Portland currently offer commercial food scrap collection. Opportunities exist to recover food scraps for anaerobic digestion or composting, processes that recover energy for electricity or fuel, generate a valuable soil amendment, and reduce the generation of methane in landfills.

County history with food scraps:

- In 2006 the County began addressing food scraps in our Annual Solid Waste Management Plan, assisting businesses with waste reduction and food donation. Plans noted that in the future staff would begin to promote collection opportunities for businesses generating large quantities of food waste.
- 2010-present: As the cities of Canby, West Linn, and Lake Oswego have opted to initiate commercial food scrap collection programs, staff has worked with the cities and their collectors (Republic Services and Kahut Waste Services) to assist businesses who are *opting into food scrap collection* and conduct outreach to others to encourage participation. County staff works with these businesses in our role as the county-wide technical assistance provider.

Businesses are asking for the service:

Fifteen businesses generating significant food waste in urban North Clackamas and Town Center areas have requested food scrap collection in recent months. (see page 3 of attached Program Development Plan) In addition one franchised collector has already opted to provide the service to three business customers in unincorporated county and City of Milwaukie, because these businesses receive the service in other jurisdictions where the collector operates. County staff has worked with these early adopting businesses to provide education and technical assistance.

Program Development Phase Elements

A. Early Adopter Service

As part of the program development phase, commercial food scraps collection is proposed as an optional service for businesses in urban unincorporated Clackamas County. Through our work with franchised collectors and customers in the cities and unincorporated Clackamas County, it has been determined we can create an efficient food scrap collection program beginning with early adopters with no special fee considerations at this time. All of the franchised collectors are prepared to begin offering services and staff is prepared to support businesses requesting the service. Continuing to work with existing customers and adding those requesting the service will promote the development of more efficient collection routes.

The County has developed additional specifics as presented on the attached Program Development Plan. Some key components are: 1) The service will be available to all Urban customers requesting it; 2) Areas selected for outreach will begin where there is the greatest concentration of customer requests and will continue in a fashion to create route density; 3) The expenses associated with the program rollout are allowable and will be reflected in the annual review; and 4) The interim fees for the service will be the same as the fees on the approved Clackamas County Fee Schedule for Urban Commercial Containers and Roll carts (i.e. service at the 'garbage rate').

Several existing concentrations of food scrap producing businesses in the North Clackamas area represent logical points to target outreach efforts. This will provide the best opportunity to develop route efficiencies and will focus the research effort. Funding for the staff time to conduct additional outreach has already been secured through an IGA with Metro approved by the Board earlier this fiscal year.

In order to ensure additional service is offered as efficiently as possible, franchised collectors may enter into Board-approved Joint Service Franchises or subcontracts as allowed by County Code 10.03.230, 10.03.260A.3. This allows a neighboring franchisee to provide the service when it is more efficient. Once participation is sufficient to allow the franchised collector to operate efficiently the franchisee may choose to begin collecting food scraps with approval from the County.

B. Transfer / Disposal Locations

Metro Central Transfer station in North Portland and Willamette Resources Inc. (WRI) in Wilsonville are the two locations available for franchisees to deliver food scraps. Material is then transferred to Pacific Region Compost north of Corvallis in Benton County, or to JC Biomethane in Junction City for anaerobic digestion.

C. Fees

The existing fee structure is relatively easy to administer and raises the necessary revenue for franchised collectors to provide an affordable service to residents and businesses in the County, with the necessary equipment, while supporting living wage jobs. The current fee structure offers and encourages all commercial customers to sort dry recyclables from their garbage.

In introducing an additional service, it is incumbent on staff to balance the attribution of costs of service with policy goals and simplicity of rate structure, designing a fee that covers costs and provides a reasonable return. This is relevant to the adoption of food scrap collection because the food scraps are relatively heavy, and thus are charged a higher disposal fee at transfer stations. At a given container size, however, there is no differentiation in price among commercial customers. Effectively, the additional cost of disposing of heavy waste such as food scraps is spread across all business customers. Consequently, the current fee structure does not accurately price disposal of customers with heavier containers, i.e. those businesses with food scraps.

During the development phase staff will research and identify options for the amendment of our fee structure in a way that encourages the collection of food scraps and food waste prevention and aligns fees closer with costs incurred for disposal. Staff intends to work on this effort, in collaboration with the franchised collectors, over the next 18 months, with an update to the Board intended around May of 2016.

FINANCIAL IMPLICATIONS (current year and ongoing): See below

LEGAL/POLICY REQUIREMENTS:

Solid Waste regulation through administration of Chapter 10.03 of the County Code.

PUBLIC/GOVERNMENTAL PARTICIPATION:

Continue to work with Metro on disposal options and to secure funding for staffing and/or collateral materials.

OPTIONS:

- Initiate development phase for food scrap collection as outlined.
 - Pros:
 - Provide service to businesses requesting it and consistency for businesses working throughout the region.
 - Meet requirements of the DEQ approved Annual Plan.
 - Increase supply of material recovered for its energy and nutrient value.
 - Create an opportunity to establish a fee structure to encourage participation and recovery.
 - Funding for this work has been received and will directly cover costs of additional limited-term staff needed to complete the work.
 - Cons:
 - We may encounter some commercial garbage enclosures that lack space to hold another container.
 - Staff resources for outreach and technical assistance are limited and we may not be able to support all interested businesses at once.
 - Testing food scraps service at the same cost as garbage service may make it difficult to attract participants.

- Do not proceed with a development phase.
 - Pros:
 - Existing system remains in place.
 - Cons:
 - Fail to meet business customer requests for food collection service, including those working in other jurisdictions where the service is provided.
 - Return funding for staff from Metro IGA.
 - Postpone research into fee structure encouraging participation.
 - Continued landfill disposal of all commercial food scraps.

RECOMMENDATION:

Staff recommends the Board of Commissioners allow staff to continue working with the Solid Waste collection franchisees and the business customers generating food scraps in a food scrap collection program development phase.

ATTACHMENTS: Food Scraps Program Development Plan for Unincorporated Clackamas County.

SUBMITTED BY:

Division Director/Head Approval

Scott D. Campbell

Department Director/Head Approval

M. B. Campbell 1-21-15

County Administrator Approval _____

For information on this issue or copies of attachments, please contact Rick Winterhalter @ 503-742-4466.

Fiscal Impact Form

RESOURCES:

Is this item in your current work plan and budget?

- YES
 NO

START-UP EXPENSES AND STAFFING (if applicable):

The Board approved (9/11/14 B.3) an IGA with Metro to secure \$50,000 to support 1 FTE for 12 months to provide additional outreach and educational efforts for food scraps collection.

ONGOING OPERATING EXPENSES/SAVINGS AND STAFFING (if applicable):

The ongoing work is a function of the existing Recycle at Work program. The current budget includes 2.8 FTE and funds to produce the necessary collateral materials to support this program.

ANTICIPATED RESULTS:

Fulfill the requests of unincorporated County businesses to receive food scraps collection service. Work with franchisees to roll out an efficient collection system for food scraps that will become another service offering in the County's integrated solid waste collection system. Develop a fee structure to encourage the capture of energy and nutrients from food scraps and meet the revenue requirements of franchisees. Maintain compliance with the DEQ's approved Solid Waste Management Plan for the region.

COSTS & BENEFITS:

The staff labor and collateral expenses associated with this program are included in the current Resource Conservation and Solid Waste budget. The primary ongoing cost will be outreach and assistance for participating businesses, costs which we anticipate will be subsumed into existing business technical assistance efforts. If additional supplemental funding is available regionally (such as the current Metro IGA) it would be considered in due course and could be included in future budgets.

The annual costs and benefits of the collection service will be the subject of the program development phase and policy presentations to the Board, including during annual system financial reviews.

Costs:							
Item	Hours	Start-up Capital	Other Start-up	Annual Operations	Annual Capital	TOTAL	
Supplemental outreach and technical assistance	~1700	0	\$50,000*				
Total Start-up Costs	~1700	0	\$50,000*	0	0	\$50,000	
Ongoing Annual Costs							
Benefits/Savings:							
Item	Hours	Start-up Capital	Other Start-up	Annual Operations	Annual Capital	TOTAL	
Total Start-up Benefit/Savings							
Ongoing Annual Benefit/Savings							

*This cost is already funded through a supplemental IGA with Metro—see above.

Food Scraps Program Development Plan Unincorporated Clackamas

January 20, 2015

Introduction

Food scraps are a major component of our waste stream and represent a significant priority for recovery. Food scraps are the largest single component of discarded waste from our region, by tons. (Over 200,000 tons annually as of 2009-2010 according to the most recent DEQ waste composition study.) 55% of this is generated by the commercial and industrial sectors. Our Regional Solid Waste Management Plan identifies food scraps as a priority for additional recovery, and it is now a focus of local solid waste planning throughout Oregon.

Clackamas County has addressed food scraps management in some form in its Annual Waste Reduction Plans since 2006, beginning with assistance to businesses to reduce food waste and promote food donation. Since that time plans have identified the potential to begin promoting food waste collection for businesses generating large quantities. Since 2010, as the cities of Canby, West Linn, and Lake Oswego have opted to initiate commercial food scrap collection, the County has worked with the cities and their collectors (Republic Services and Kahut Waste Services) under a '*We Compost*' brand to assist businesses who are opting into food scrap collection and conduct outreach to others to encourage participation. County staff works with these businesses in our role as the county-wide technical assistance provider. Grants have supported the purchase of containers to provide businesses and personnel to conduct targeted outreach.

Businesses in Clackamas County are asking for this service. Under this program development plan Clackamas County and franchised collectors will extend food scrap collection and *We Compost* outreach and assistance to businesses within the urban fee zone of Unincorporated County. The planned outreach will be conducted strategically. At present fifteen businesses that are significant generators of food waste have requested food scrap collection. Working with these customers and nearby customers will maximize the amount of material collected and create collection density. The food scrap collection service will be offered at an interim fee from the Approved Solid Waste Collection Fee schedule (i.e. at the current garbage rate).

A goal during the coming year will be to research an appropriate collection fee that will aid in meeting the policy objective of separate collection of food scraps from other solid waste. Collectors will report information such as volumes collected, tons collected, and changes in service as a result of introducing food scraps collection service. This data will include information from the earlier phases of the *We Compost* program begun in the

cities of Lake Oswego, Canby and West Linn. The purpose of the data collection is to better understand the collection costs and the revenue requirements for providing this service.

The project will also allow staff to evaluate the service level and equipment needs for businesses by type and size. This understanding will inform Design Review standards for new developments. Adding food scrap collection service supports the business community's desire to participate in the County's *We Compost* program and meets our objective to capture the energy and nutrient value from food scraps.

The key components of this development phase: 1) The service will be available to all Urban customers requesting it; 2) Areas selected for outreach will begin where there is the greatest concentration of customer requests and will continue in a fashion to create route density; 3) The expenses associated with the program rollout are allowable and will be reflected in the annual review; and 4) The interim fees for the service will be the same as the fees on the approved Clackamas County Fee Schedule for Urban Commercial Containers and Roll carts (i.e. service at the 'garbage rate'); 5) Minimum collection service is a 60 gallon roll carts.

Fee Study

The current fee structure serves the policy needs of the county well, supports the integrated solid waste collection system and provides an opportunity to encourage all commercial customers to sort dry recyclables from their garbage. However, the disposal component of the container fees is calculated using the same pounds per yard across the entire customer base, not differentiating customers with heavier containers from those with light containers. Yet, food generating businesses produce heavier waste that incurs a heavier fee for disposal at transfer stations. A recent study in Washington County and one franchisee's daily weight records show that food producing businesses generate slightly more than 300 pounds per cubic yard. Our container fees are calculated using 125 pounds per cubic yard for disposal. Effectively, the additional cost of disposing of heavy waste such as food scraps is spread across all business customers.

This fee structure is easy to administer and raises the necessary revenue for franchisees to provide affordable integrated collection service to our community, offer living wage jobs, and purchase and maintain equipment. However, this fee structure currently subsidizes disposal for those businesses with food scraps and staff wishes to evaluate and present other options in order to develop a collection program designed to encourage recovery of food scraps.

The development of an appropriate fee structure to eliminate the existing subsidy of food scrap generators and encourage the separation of food scraps from garbage requires some research. Earlier studies conducted within the region were completed when more than just food scraps were collected and therefore a "food only" program, may reveal different

outcomes. Staff and the franchisees intend to work on this research effort over the next 12 months with the goal of presenting fee options to the Board in 2016.

Through our work with franchisees and customers in the cities and unincorporated Clackamas County, it has been determined we can create an efficient food scrap collection program beginning with early adopters with no special fee considerations at this time. The customers currently requesting the service (*see Outreach Strategy below*) are doing so because of a corporate or personal belief in maximizing the value from the discards they manage.

Outreach Strategy

Generator List

County staff has created a map with food generators identified. Franchisees will provide the current service levels for the identified customers. Franchisees will create routes to target phased outreach in North Clackamas area of Unincorporated Clackamas County and the Cities of Milwaukie and Happy Valley.

Targeted Outreach

1. **Phase 1 – February-April**
Clackamas Town Center / 82nd Ave to Kings Ave./Kaiser
(Waste Management)
2. **Phase 2 – April-May**
82nd Ave –Clatsop/ International Way / Downtown
Milwaukie/Retirement Homes *(Waste Management)*
82nd Ave –Clatsop *(Sunset)*
3. **Phase 3 –June-August**
Happy Valley/N. Clackamas
(Hoodview Disposal & Recycling, Sunset, Waste Management)
4. **Phase 4 – August-September**
McLoughlin Blvd. *(Waste Management)*

The following businesses in urban unincorporated Clackamas County have requested food scrap collection service (beyond those already participating in Canby, West Linn, and Lake Oswego):

1. California Pizza Kitchen
2. Chevy's Restaurant
3. Claim Jumper
4. Costco (from line staff)
5. Great Harvest
6. Kaiser
7. McMenamins
8. Monarch Hotel and Restaurant
9. Nordstrom Café (Already serviced – 6 roll carts)

10. Old Spaghetti Factory
11. Ram Restaurant and Brewery
12. Sweet Tomatoes
13. Willamette View
14. Rose Villa
15. Homewoods on the Willamette

Data Collection

Existing service levels, volume and costs. (February, March)

Collectors will provide current service levels of food producing businesses to be used as a baseline. The County will send the current information on file to each collector requesting the tables be updated.

Additional time will be spent in the field to observe actual volumes being generated in targeted outreach areas. In those scenarios where the driver must maneuver the container/cart for collection a volume observation (<50%, 50% or >50%) will be recorded. County staff will record the volumes from customers where the driver is not required to leave the truck to maneuver the container for collection.

New service levels, volume and costs.

County staff will track new service levels once a business is participating to compare with the baseline service. Additional time will be spent in the field to gage the actual volume (garbage and compost) being generated after food scrap collection service is established. Service level cost scenarios will be created to better understand the actual costs of delivering the service to the customer and the impact to the system.

Percent of participation

County staff will track the number of participants compared to the overall number of food generating businesses in the targeted service areas. This will be compared with neighboring jurisdictions and reviewed in light of those jurisdictions

Tons or volume recovered

It is important to track weights collected to determine a density measure for food scraps only. *In addition to the food scrap density, it will be necessary to develop a system to measure the density for the material remaining after food scraps are removed.* The County believes route level data, including cross jurisdictional routes, will provide the necessary information to examine impacts to fees. There may also be a need to gather customer specific weights. The methodologies developed will strive to ensure data integrity and minimize the impacts to daily routine.

Examples:

Method 1: Tons weighed at disposal divided by the gross yards/gallons collected on the respective route. Identify businesses on route to compare routes for any

measurable differences in results. Apply weight to routes/jurisdictions using these formulas.

Drop Boxes: Identify volume in ¼ increments attach to weight ticket, submit and record.

Method 2: If all are collected in carts weigh individual carts from variety of participating businesses. Ascertain if differences by type i.e. grocery, etc.

Barriers to Participation

Staff will collect information relating to barriers businesses perceive around composting. Cost, lack of enclosure space, or additional effort on the part of the businesses staff are examples of barriers. For example a recent Washington County study identifies cost as the primary reported barrier to participation. Understanding the reasons why businesses do not participate will help County staff in identifying policy options for the Board's consideration at the close of this program development phase.

Transfer/Disposal Capacity

Metro Central Transfer station and Willamette Resources Inc. (WRI) are the two locations available for franchisees to deliver food scraps. The material delivered to WRI will be transferred to Pacific Regional Compost (PRC) a DEQ approved composting facility located north of Corvallis. The commercial food scraps disposed at Metro Central are transferred to JC BioMethane (JCBio) an anaerobic digester located south of Junction City.

PRC creates compost that is sold to landscapers, homeowners and the farming community to enrich the soil. JCBio creates gas, used to fuel an engine for generating electricity that is delivered to the grid.

The City of St. Helens recently granted a conditional use permit to a proposed anaerobic digester with an estimated build out capacity of 50,000 tons. The proposal contemplates receiving material from the Metro region. If built it is anticipated as a welcomed addition to the food scraps collection infrastructure.

Metro has developed a Food Scraps Capacity Development document to provide context and background information for the Food Scraps Capacity project, which is part of Metro's Solid Waste Roadmap. Commercial food scraps transfer is ranked as the second priority needed at Metro South. County staff intends to continue participating in the regional disposal roadmap efforts to include Metro South as a transfer option for commercial food scrap collection.