

DATE: August 8, 2006

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**WORK SESSION ITEM
FORT COLLINS CITY COUNCIL**

SUBJECT FOR DISCUSSION

Update on the Strategic Planning Process for Solid Waste Reduction.

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

At the March 28th work session, Council requested more information about several ideas from a strategic planning process for solid waste for further review. The new measures are presented here.

Does Council wish to initiate action on any of the following three new measures:

1. curbside yardwaste recycling
2. an electronics recycling program
3. an increased education "push" about waste reduction

In particular:

- For yardwaste recycling, shall the City amend the trash hauler licensing ordinance to require the hauler to provide yardwaste collection as a new service to customers?
- For electronics recycling, shall the City amend the trash hauler licensing ordinance to prohibit trash haulers from accepting computers and televisions in the waste stream?

BACKGROUND

During the past year, new measures for solid waste recycling were studied that could help meet the City's goal to divert half of the community's waste by 2010. The City's ability to surpass its current level of 25% waste diversion was modeled for a variety of possible new programs. Information from the strategic planning process was presented to the City Council in March and staff was asked to provide greater detail about how programs would be developed to address yard waste and electronic waste.

Descriptions of Three New Measures

1. Leverage community support with a one-year education campaign to increase awareness about local recycling and waste reduction opportunities, such as pay-as-you-throw (PAYT) trash rates and new recycling opportunities.

2. Provide customers, upon request to their trash haulers, with optional curbside yard waste collection services (for a fee) on a weekly basis during the six-month growing season.
3. Develop a program to keep electronics, which contain hazardous materials, out of landfills by providing education and resources for how to recycle, and by prohibiting or restricting collection of computers and televisions as residential waste by licensed trash haulers.

Budget Considerations

A “push” to increase awareness about recycling could include new outreach projects (such as household-direct flyers, film productions for TV broadcast, and a community-wide waste reduction contest), that will cost \$30,000 or more to implement. Because the Natural Resources Department’s budget for education and outreach was scaled back in 2006 and may be further limited in 2007, staff has held off on outlining a more detailed proposal to carry out a new campaign. If funding for the project is identified in the process of setting the City’s 2007 budget, staff will develop a complete campaign proposal appropriate to the allocation.

ATTACHMENTS

1. Implementation Plan for Curbside Yardwaste Recycling
2. Implementation Plan for Electronics Recycling Program

Curbside Yardwaste Recycling An Element of a Strategic Plan for 50% Solid Waste Diversion

Introduction

This implementation plan outlines a program that allows residents to subscribe to curbside yardwaste recycling, a service that would enable Fort Collins to divert a significant amount of organic material from landfill disposal.

Trash haulers would be required to offer weekly yardwaste service for a fee during the six-month growing season and take the collected material to a composting facility. The program would become an element of the City's pay-as-you-throw trash (PAYT) system, whereby customers could voluntarily subscribe for yardwaste service and haulers would charge rates commensurate with the costs of trash collection.

Purpose

Fort Collins' adopted goal is to divert 50% of the community's waste from landfill disposal. Yardwaste, which makes up 15% of the waste stream, is an important material to target. The purpose of a curbside yardwaste recycling program is to make it so convenient that residential customers will voluntarily subscribe to the service as an alternative to having yardwaste collected in the trash.

The program would ultimately divert an estimated 7,500 new tons each year from the community waste stream, about 2% of the total volume of waste. While this amount would only incrementally move Fort Collins closer to its goal of 50% diversion, a curbside yardwaste program will help increase the public's overall consciousness and participation in waste reduction and recycling. It will also help strengthen the local infrastructure for composting biomass, which in turn increases opportunities for diverting more material such as food waste from restaurants and groceries.

Who will be Affected

A requirement to offer yardwaste collection would apply to residential trash customers, not commercial accounts. Within Fort Collins city limits, an estimated 30,000 single-family households would be eligible for the new trash service option of curbside yardwaste recycling from their private subscription haulers.

Multi-family residences, attached dwellings such as patio and condominium homes, and businesses would not be included in the program, based on the assumption that much of their landscape maintenance work is done by professional contractors.

Costs to Businesses

The main businesses that would be affected by a new curbside recycling program are the trash hauling companies that provide residential service (currently there are four in Fort Collins). It is assumed that haulers would pass along the costs of providing yardwaste services to participating customers.

Commercial composting companies would also be affected by an increase in the volumes of material collected. New business opportunities could be anticipated to occur that could possibly attract more composting ventures to the local market.

Many cities around the country offer curbside yardwaste recycling and a local example already exists in Fort Collins. Gallegos Sanitation, Inc. (GSI) began offering the service to customers in 2000 and currently, about 10-14% of the company's residential accounts are signed up for yardwaste recycling. GSI started with select homeowner associations and expands each year to include more customers. Originally, the program was scheduled for collection every other week, but the company switched to weekly collection to reduce odor problems, keep the wheeled carts cleaner, and free up storage space for customers. GSI maintains a disposal contract to deliver the yardwaste to a local commercial composter, Hageman's Earthcycle. The amount of material collected in GSI's program has been as high as 215 tons per year.

Loveland's municipal trash utility has collected yardwaste from its citizens on a weekly basis since 1993. The City of Boulder began testing a curbside yardwaste option provided by its private-sector hauler in 2005 and because it has been so successful, will extend the service option to all households in 2007.

Costs to Households

According to market assessments, subscribing to weekly yardwaste collection would be calculated to cost \$60 per year (not a new net cost if customers are currently placing yardwaste in the trash, where it is being charged for it in accordance with the PAYT system). The \$60 estimate is consistent with what local market conditions reflect for GSI's service. The company charges \$9.00 or \$10.00 per month to collect yardwaste, depending on location, with a limit of 100 gallons per week, which translates to as little as 2.25 cents per gallon. (Haulers in Fort Collins charge \$13.80 - \$18 per month for 95-gallons-per-week of trash service, which translates to a minimum 3.63 cents per gallon.)

GSI suggests customers sign up if they routinely set out two or more bags of grass/lawn debris per week during the warm weather season. As a company policy, customers are not charged for the special yardwaste collection cart, which is designed with vents for air circulation. Other private haulers in Fort Collins, however, might elect to charge customers a deposit on a new cart designated for yardwaste.

Citizens who currently take their organic debris to a yardwaste drop-off site may not elect to use the option of subscribing to curbside collection. Their decision will depend on whether they find it worth saving gas and time to avoid making the drop-off trip.

City's Role

Although some states ban organic materials from landfill disposal, Colorado does not have any prohibitions. Currently the only Colorado law directly involved with residential yardwaste recycling programs is a state requirement for commercial composters to have a Certificate of Designation if they accept more than threshold amounts. The City would not have an operational role in curbside yardwaste collection but would be involved in regulatory oversight of compliance with an amendment to the trash ordinance.

A new amendment to City Code calling for trash haulers to provide organics collection service to residential customers upon request would further specify that:

- haulers would be required to deliver materials to a certifiable composting facility,
- haulers would only be required to provide collection service (weekly) during the growing season (May – October), and
- haulers would be required to take reasonable efforts to prevent nuisances such as odor from occurring.

In addition, the Code would be amended to require that haulers and persons arranging for service to group accounts notify all residential customers of the availability of the organics collection service.

Staff would track haulers' implementation programs and monitor the results. The City would also help inform residents of the new program, and provide education about the importance of subscribing to curbside yardwaste collection to increase landfill diversion.

Summary

Fort Collins' pay-as-you-throw program creates an incentive for residents to minimize their trash, and being able to divert yard waste will provide a significant opportunity for many residents to reduce their volumes and potentially save money. The community has continuously demonstrated active support for recycling, so it can be anticipated that residents will subscribe to curbside yardwaste recycling as they learn about the option. According to a survey conducted in November 2005, half of the respondents said they would be "very likely" or "somewhat likely" to use curb-side yard waste pickup services.

The private sector has most of the infrastructure in place to collect recyclable and waste materials from individual households, including trucks, drivers, collection routes, and customer service and billing capacity. Haulers and recyclers will be able to recover the costs of providing a new service option through customer fees.

*August 8, 2006 Council Study Session
Implementation Plan for Curbside Yardwaste Recycling*

Waste diversion rates for many communities in Colorado hover at 8-10% because they have not adopted policies such as PAYT trash rates. Fort Collins currently ranks among the most successful, with a 25% diversion rate and a highly motivated citizenry. A curbside yardwaste recycling program could be an appropriate next step for the City to work on, and will assist the community at increasing its level of waste diversion.

Computers & Television Recycling Program An Element of a Strategic Plan for 50% Solid Waste Diversion

Introduction

This proposal outlines a three-part program to reduce the number of computers and televisions in the community that are sent to landfills for disposal. While there are still details to be worked out, the City would:

- Increase education to citizens about recycling options that help keep hazardous elements contained in electronic waste (such as lead, mercury, cadmium) from being buried in landfills,
- Provide references for reputable recycling companies for citizens to use, and
- Create restrictions intended to prevent computers and televisions, as well as cell phones and personal digital assistants (PDA's) such as Palm Pilots and Blackberries from being collected in the waste stream.

It is important to note that the City would be forging new ground if it enacted a local ban on disposal of computers, since we have not found other examples of bans except among municipalities that own their own landfills or operate a municipal trash utility. An alternative (or additional) approach would be to adopt a requirement that would prohibit trash haulers from collecting computers/TVs in the trash, as a condition of their Fort Collins license. These options will be evaluated further as possible City Code changes are drafted for Council review.

Purpose

Electronics are out-dated so rapidly that 50 million computers are now being discarded each year in the U.S., creating greater risks for toxic pollution and filling up landfills. By banning electronic waste ("e-waste"), Fort Collins will help protect the local environment and also address the goal of diverting 50% of the community's waste from landfill disposal.

It is already illegal for commercial generators to put computers in the trash, but no such federal regulation exists for residents. Seven states (Minnesota, Arkansas, Rhode Island, New Hampshire, California, Maine, and Massachusetts) have independently adopted landfill bans that also address residential sources. Colorado prohibits cathode ray tubes (CRT) from commercial generators from being landfilled.

In recent years, numerous recycling companies have sprung up that ship e-waste overseas, where inappropriate techniques used to smelt out the valuable metals leave workers, including child laborers, unprotected. The City will make a concerted effort to

help the public identify which companies are applying ethical labor practices as well as environmental stewardship, in order to help citizens make well-informed decisions about how and where to recycle e-waste. (Fort Collins' website, which currently provides information about computer recycling options, does attempt to avoid promoting unscrupulous recyclers' activities.)

Around the country, many efforts have been made to hold community e-waste collection events. Fort Collins sponsored yearly "round-ups" until 2004, when private enterprises began to offer more computer recycling options. For instance, at the Larimer County Recycling Center, computers are now accepted from the public, and some of the larger computer manufacturers have created "take back" programs.

Recently, Loveland's municipal trash utility banned computers and televisions from its residential trash system. Customers are now required to call for a separate collection appointment, and are charged a \$5 fee to recycle monitors and televisions, to which the City adds a \$5 subsidy to pay for the recycling.

In 2002, the City of Cheyenne amended its municipal code to prohibit disposal of e-waste in the city-owned landfill. Cheyenne does not charge residents to bring computers and televisions to a collection facility, but commercial generators pay 30 cents per pound.

Who will be Affected

A ban on disposing of electronics in the trash would apply to all households in Fort Collins that use the services of a trash hauling company, including single-family and multi-family residents, because they would be required to take special action to rid themselves of computers, televisions, cell phones, and PDA's. It would not apply to residents who self-haul their trash directly to landfills for disposal, since Fort Collins' ordinances do not apply outside of city limits.

Businesses and other commercial generators of e-waste would not be directly affected by a new Fort Collins program, since they are already legally required to recycle computers.

An e-waste disposal ban would impact trash hauling companies that provide residential service in Fort Collins because they would be prohibited from picking up computers and televisions in household trash. However, they could elect to offer a separate recycling service to customers, although they would not be required to do so. For computer recyclers that selectively offer curbside collection, a city ban would increase business opportunities.

Costs to Businesses

Any curbside e-waste recycler who collects computers and televisions would be required to keep e-waste separate from the waste stream and take it to a legitimate recycling / disassembly facility. The recycler would be allowed to charge fees to cover their collection and delivery costs. Although some computer components contain small

amounts of valuable materials (copper, gold, and other precious metals), it generally costs money to recycle obsolete computer equipment and televisions because they contain toxic metals that require special handling and disposal processes to be used.

Businesses dedicated to recovery, re-use, and/or salvaging electronic scrap material would benefit from a Fort Collins computer and television recycling ban because more material would be available to supply their operations. New prospects for expanded business opportunities could attract greater numbers of reputable computer recycling enterprises to become established in Fort Collins.

Operators of local landfills would benefit from having fewer toxic metals enter their facilities from electronic waste. Reduced risks to ground water could improve landfills' regulatory compliance with environmental legislation.

Costs to Households

The fees charged by most recyclers today to accept computer equipment and televisions at their facilities fall into a range of \$10-15. Some components have more value than others. For instance, some recyclers accept central processing units (CPU's) at no cost because they may contain precious metals, but will charge \$10 for computer monitors, which are full of lead soldering that creates hazardous conditions for recyclers.

Residents could decide whether to transport e-waste to a recycler's facilities themselves, or to pay for a curbside collection service. Most of the trash haulers in Fort Collins currently treat televisions and computers as "bulky items" in the trash stream, which they will only collect by appointment for a fee that typically averages around \$15. However, it is possible that by having to collect e-waste separately and then take it to a recycling facility, haulers could incur more costs that raise the price for curbside e-waste recycling.

City's Role

As resources allow, the City would create a marketing plan and implement a campaign over the first two years to help people learn about the new program through a variety of media.

The City would develop and propose to Council City Code language to limit disposal and collection of computers and televisions, and, if those Code provisions are enacted, would administer and oversee compliance with the Code.

Staff would identify recycling companies that handle computers in an appropriate manner that protects both the environment and worker safety. By assuming this role, the City will provide assistance to citizens currently unavailable from either the state or federal government. The closest thing to a consumers' assistance or advocacy group to help ensure computers are recycled correctly are non-profit organizations such as the Basil Action Network (BAN).

*August 8, 2006 Council Study Session
Implementation Plan for Electronics Recycling Program*

As part of the biannual report that trash haulers are required to make about their trash and recycling volumes, data on the amount of e-waste collected would be required. The information would be included in a yearly solid waste report that staff compiles for the City Council to monitor the community's progress at meeting waste diversion goals.

Summary

It is important to help educate residents about the importance of keeping e-waste out of landfills, and to help make it convenient for people to find the best way to recycle their obsolete computers and televisions. This will only slightly move Fort Collins toward its adopted goal of diverting 50% of the community's waste from landfills, but more importantly, it will protect the community from risks of pollution associated with toxic materials as local landfills age.

August 8, 2006

Potential Elements of a Strategic Plan for 50% Solid Waste Diversion

- Increased Education "Push"
- Curbside Yardwaste
- Electronics Ban



Community Planning and Environmental Services
Natural Resources Department

Presentation Overview

- Background information
 - Project review
 - 2005 survey
 - Benefits of recycling
- Three new program recommendations
- Discussion



Community Planning and Environmental Services
Natural Resources Department



Project Review

- Fort Collins currently diverts 25% of its waste from landfill disposal. In 1999, Council adopted a goal of 50% diversion by 2010.
- Strategic planning has been underway to determine best ways to reach this goal. During 2005-06, staff:
 - Identified "gaps" in current recycling programs
 - Researched and evaluated 40-50 new programs
 - Modeled costs as a guide for comparative purposes
 - Conducted public involvement
 - Recommended new strategies at March 28 study session



Community Planning and Environmental Services
Natural Resources Department



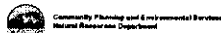
November 2005 Survey

- 73% of respondents participate in curbside recycling
- 98% believe recycling is "good for Fort Collins"
- 89% believe the City should pursue additional means of recycling and diversion
- 79% believe it is feasible to divert 50% of their trash
- > 50% would be "very likely" or "somewhat likely" to use curbside yard waste pickup services, even with a small fee
- Around 80% of households believe their current charges for trash and recycling are reasonable, but would also be willing to pay "a bit more" to achieve the City's recycling goal



Benefits of Recycling

- Economic
 - Extends lifespan of local landfills; postpones costs to site new landfills
 - Creates 3 times as many jobs compared to sending trash to be landfilled
- Environmental Stewardship
 - Conserves natural resources - raw minerals, trees, and water - used to manufacture products
 - Reduces energy needed to manufacture products
 - Prevents pollution such as greenhouse gas emissions and potential groundwater contamination from landfills
- fcgov.com/recycling/why_recycle.php



Three Program Recommendations

- Increased Education "Push"
- Curbside Yardwaste
- Electronics Ban



**New Program Proposal:
Provide more education
about waste reduction**

Description: Create enhanced education "push" for one year (topics could include how to lower trash bills, new recycling options, etc.)

Waste Diversion Increase: ~ 1% (2,172 new tons)



**Increased Education
Implementation**

- A campaign could include new outreach projects such as:
 - household-direct flyers
 - "Info-mercials" for TV broadcast
 - a community-wide waste reduction contest
- New activities will cost \$30,000 or more to implement (money that is not currently in Natural Resources Department's budget)
 - If funding for the project is identified in the City's 2007 budget, staff will develop a complete campaign proposal



**New Program Proposal:
Curbside Yardwaste**

Description: Create a requirement for trash haulers to provide weekly curbside yard waste collection as a new service

Waste Diversion Increase: 7,500 tons (2%)



Curbside Yardwaste Implementation

- The City could amend its ordinance to require trash haulers to offer weekly yardwaste service upon request.
 - Residential customers receive yardwaste recycling during the six-month growing season
 - Haulers take collected material to a composting facility.
- Trash haulers recover costs of providing new service through customer fees.
- One local hauler already offers yardwaste recycling.
- Estimated to cost \$60 per year.



New Program Proposal: Prevent electronic waste from being sent to landfills for disposal

Description: Divert electronics, which contain hazardous materials, from the waste stream through restrictions and public education

Waste Diversion Increase: 1,684 tons (<1%)



Keep Electronics out of Waste Stream Implementation

- The City could amend its ordinance to prohibit trash haulers from accepting computers and televisions, as well as cell phones and personal digital assistants (e.g., Palm Pilots and Blackberries) in the trash
- Residents would be educated about disposal choices:
 - Haulers could accept electronic waste curbside if taken to a legitimate recycling facility
 - "Self-haulers" would be encouraged to use legitimate recyclers' services
- Costs to customers would not increase from current fees (~ \$15 per TV or computer)



Keep Electronics out of Waste Stream Implementation (continued)

- In addition, the City would:
 - Increase education to citizens about the importance of keeping hazardous elements contained in electronic waste (such as lead, mercury, cadmium) out of landfills
 - Provide references for reputable recycling companies for citizens to use



Benefits of Adopting Three New Measures

- Appropriate "next steps" that will contribute to greater diversion
- Help the City tackle emerging e-waste problems
- Strengthen the foundation, improve infrastructure, for organics diversion
- Augment education and awareness, build public participation
- Leverage success of current programs (e.g., PAYT and data collection)



Specific Direction Sought from Council

- Does Council wish to initiate any of the following actions:
 - allocate money for enhanced education "push"
 - amend the trash hauler licensing ordinance with a requirement to provide yardwaste collection as a new service
 - create restrictions intended to prevent computers and televisions from being disposed of in the waste stream