



**CITY OF BOULDER
CITY COUNCIL AGENDA ITEM**

MEETING DATE: February 18, 2014

AGENDA TITLE: Introduction, first reading and consideration of a motion to order published by title only, an ordinance amending Chapter 6-3, “Trash, Recyclables and Compostables,” B.R.C. 1981, by adding a new Section 6-3-12 requiring bear resistant containers in a designated area of the city; amending Section 6-3-2, by adding new definitions; adding administrative penalties for violations, amending section 6-12-5, “Containers for Recycling or Composting Collection,” and setting forth related details.

PRESENTERS:

Jane S. Brautigam, City Manager
Thomas A. Carr, City Attorney
Paul J. Fetherston, Deputy City Manager
David Driskell, Executive Director of Community Planning & Sustainability
Mark Beckner, Police Chief
Susan Richstone, Deputy Director of Community Planning & Sustainability
Lesli Ellis, Comprehensive Planning Manager
Valerie Matheson, Urban Wildlife Conservation Coordinator
Kara Mertz, Environmental Action Project Manager

EXECUTIVE SUMMARY:

The purpose of this memo is first reading and consideration of an ordinance that would:

- 1) require trash be secured in bear resistant containers;
- 2) apply initially only to certain neighborhoods west of Broadway (see Bear Zone One map at www.boulderswildlifeplan.net);
- 3) increase the minimum penalty to \$250: and
- 4) allow for notification of violations by posting a notice at the offending property, by telephone, email, or by mail to the property owner. The proposed ordinance (Attachment A) reflects council’s direction on options to secure trash and curbside compost from bears provided at its Jan. 21 meeting. This ordinance responds to

community concerns for four bears that had come to depend on trash in urban areas for food and were euthanized in Boulder last year.

STAFF RECOMMENDATION:

Suggested Motion Language:

Staff requests council consideration of this matter and action in the form of the following motion:

Motion to introduce on first reading and order published by title only, an ordinance amending Chapter 6-3, “Trash, Recyclables and Compostables,” B.R.C. 1981, by adding a new Section 6-3-12 requiring bear resistant containers in a designated area of the city; amending Section 6-3-2, by adding new definitions; adding administrative penalties for violations, amending section 6-12-5, “Containers for Recycling or Composting Collection,” and setting forth related details.

BACKGROUND:

Boulder has long faced the challenges presented by wildlife in the urban interface. Addressing these issues has been a long term priority for the city. The city has an Urban Wildlife Management Plan (UWMP). The first phase of the UWMP was the development of guiding principles, vision and goals for urban wildlife management accepted by City Council in January 2006. The guiding principles emphasize the use of humane, non-lethal control methods when wildlife in the city is in conflict with use or development of a site.

Phase II of the UWMP was focused on species-specific components of the plan. The first component, accepted by City Council in 2006, addressed the management of black-tailed prairie dogs in the city. On Oct. 18, 2011, the council adopted the bear and mountain lion component of the city’s UWMP. The bear and mountain lion component includes strategies to minimize human/wildlife conflicts and increase public awareness on how to better coexist with these animals.

In October 2011, council considered whether to require bear resistant containers in Boulder. There was both community support and resistance. Supporters advocated the containers to reduce bears’ dependence on urban trash. Opponents raised concerns about the cost. Based on the most recent estimates by Western Disposal, it appears that the cost of the containers can be reduced from the amounts presented to council in 2011. On Jan. 21, 2014 council directed staff to develop an ordinance to require trash and compost containers to be secure from bears at all times in most of the city west of Broadway.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- Economic - Proper storage of trash and preventing trash from being strewn by animals supports the aesthetic character and economic vitality of Boulder.
- Environmental -Unsecured trash is harmful to native wildlife. Trash that is easily

accessible invites bears to forage in town as opposed to adjacent natural areas. Trash consumption by bears results in cellophane, foil, and other non-digestible materials to be ingested by bears with food waste. Ingesting these materials is harmful to bears. In addition, bears in town that are repeatedly a nuisance, or pose a direct threat to public safety, are destroyed.

- Social - Though there have been no attacks on humans by black bears in the City of Boulder, the presence of these large predators in the urban area poses a safety threat to the community. Bear activity has been reported near areas where children congregate and along streets and alleys where children walk to school. In addition, bears that access trash often drag and spread household waste on streets, lawns and alleys, compromising basic neighborhood sanitation and aesthetics. Euthanizing bears compromises the civic value of living in harmony with the natural surroundings.

OTHER IMPACTS

- Fiscal - Staff's plan includes hiring additional code enforcement officers. The fiscal impact of the additional staffing will be addressed in a budget supplemental ordinance.
- Staff time - Current activities are covered by existing department work plans. Additional enforcement or introduction of bear proof trash containers will require additional staff time.

BOARD AND COMMISSION FEEDBACK

None.

ANALYSIS

In 2012, as part of the Black Bear Urban Wildlife Management Plan, staff undertook three action items. These items were:

- A **community survey** designed to uncover current attitudes, behaviors, and obstacles in living with black bears in western Boulder;
- Bear activity **monitoring** including systematic recording of bear/trash conflicts in select neighborhoods west of Broadway; and
- The **Bear Education & Enforcement Pilot** in partnership with Colorado Parks and Wildlife.

Major findings¹ of 2012 UWMP implementation included:

- The majority of residents in western Boulder currently take action to secure their trash from bears;
- Door-to-door education efforts did not significantly reduce trash storage violations;
- Warnings and citations issued for putting out unsecured trash to the street prior to the morning of trash pick-up seemed to positively impact the behavior;

¹ Staff included a more thorough presentation of the findings of the 2012 UWMP in an Information Packet Memorandum dated May 21, 2013. A copy of this memorandum is attachment B.

- Despite high levels of awareness and compliance by a majority of residents, unsecured trash by a minority of residents in western Boulder still creates a significant attractant to bears, and the city has limited ability to address impacts through law enforcement;
- Trash is more likely to be disturbed at rental properties; and
- Almost all waste containers disturbed by bears were trash containers as opposed to recycling or compost containers.

These findings support an enforcement based approach requiring secured trash in areas of the city where the most bear activity has been observed.

Responses to Council Questions

At the Jan. 21, 2014 council meeting, there were several questions posed. The following is intended to respond to those questions:

- 1. Can we use this opportunity to remove the exemption presented in the Boulder Revised Code that allows for residents with alley collection to store their unsecured trash and compost containers in the alley?***

Staff does not recommend that council address this exemption at this time. The proposed ordinance requires that trash be secured in all of the alleys in the designated area, which will address alleys where bears in trash have been an issue. There have been no reported bear sightings between 2009 and 2013 in the primary neighborhoods outside of the designated area with alley collection, which are downtown, Whittier and Goss Grove. Addressing alleys citywide presents several additional difficulties. 1) There is not consistent delineation between rights of way and private property in alleys throughout the city. 2) Residents with alley collection store trash in a myriad of different ways making a single solution difficult, if not impossible. If in the future, bear activity expands into other areas of the city outside of the designated area necessitating an expansion of the impact area for this ordinance, the requirement for bear resistant containers will equally apply to alley and curbside collections, effectively eliminating this issue.

- 2. Is there a way to contract with a single hauler for trash collection in order to spread these bear-resistant container costs across the larger community?***

If the City chooses to issue a citywide contract for trash, recycling and composting collection services, it would preclude the need for an ordinance; the requirement for the successful franchisee would simply be to provide bear-resistant trash and compost bins to all customers west of Broadway. Enacting this ordinance at this time represents a substantial investment by the current waste haulers in new bear-resistant carts. This investment should be taken into consideration if council intends, in the near future, to award a contract to a single hauler, thereby curtailing the companies' ability to recoup this investment over time. If Council desired to create a franchise for trash, recycling and compost collection, according to Article VIII of the City Charter, it would be subject to a vote of the electorate. Another option would be to create a municipal trash utility and

have that utility contract for trash services. Either approach would require substantial staff time.

3. *Is there a way to accommodate pre-paid bag customers in this ordinance?*

Currently, an affirmative defense against a ticket for violation of the existing Trash, Recyclables, and Compostables chapters of BRC is that "the trash was stored in hauler-provided pre-paid bags between the hours of 5:00 a.m. and 9:00 p.m. on the day of a regularly scheduled collection from the premises." The proposed ordinance would not be subject to this defense. Staff recommends that pre-paid bags be secured in bear-resistant containers or indoors until the time of collection. Currently there are 195 pre-paid bag customers in Zone One and 73 in the alley pick-up area west of Broadway (Bear Zone Three).

One way to reduce the impact on these customers would be to require that all haulers provide less-than-weekly trash service and charge a pro-rated fee according to the frequency of collection - including the additional charge for bear-resistant containers. Staff recommends addressing this as part of the update to the Zero Waste Master Plan, scheduled for council consideration in May (see Feb. 18 Information Packet memo). At that time, staff will ask for council's direction regarding the frequency of standard trash collection service (potentially moving toward a standard of every-other-week trash collection) and any desired changes to the Hauler Requirements contained in chapter 6-12 of the BRC.

4. *Will bears change their behavior and access unsecured trash containers that are put out for curbside pick up the morning of collection?*

Because bears are intelligent animals that can learn new behaviors, successfully securing trash from them can be challenging. The question is whether bears will change their behavior and become more active during the day if unsecured trash is put out the morning of pick up? The answer is yes, based on experiences and observations in Missoula, Montana and Vail, Colorado.

Some scientific evidence shows that bears will change their behavior to access trash when it is made more available. Jerod Merkle's 2011 study, titled: Human Black Bear interactions in Missoula Montana (http://greatbear.org/wp-content/docs/merkle_2011_thesis.pdf), found that the probability of a bear coming near a house during garbage night was 1.45 greater than other nights. This implies that bears change their behavior to come close to houses when trash has been put out. Similarly, Erin Edge, Defenders of Wildlife, and Jamie Jonkel, Bear Management Specialist for Montana Fish, Wildlife and Parks, have both observed bears taking advantage of unsecured trash the morning of pick-up in the Missoula area. Their experience has been that some bears learn trash is available the morning of pick up and access trash containers at that time.

Bears accessing trash the morning of pick up was a factor that lead to Vail's current trash ordinance which now requires bear resistant containers at all times. Prior to the current

ordinance updated in 2007, unsecured trash was permitted to be out at the curb the morning of pick up. According to Ryan Millburn, the Vail Police Officer tasked with enforcing wildlife trash codes: "It took a couple of years for the bears to change their behavior and start coming down on trash days during the day. This actually caused more law enforcement time to be taken up because during the day there is a higher probability of a human/bear conflict. At night people are in their homes when they called is as opposed to walking down the street with their kids or dogs."

Additional Cost Information

Western has provided cost estimates. The maximum container cost would range from \$2.78 to \$4.75 per month (container rental), depending on the size and quality of container (residences would need two containers, one for trash and one for compost). Western is working to bring the cost down. Cost is dependent on a variety of dynamic factors including: exact costs from manufacturers, bulk purchase cost, depreciation, number of customers, standardization of containers, quality, ongoing maintenance pricing, etc. In the Jan. 21, 2014 council memo Options to Secure Trash (<https://documents.bouldercolorado.gov/weblink8/0/doc/124472/Electronic.aspx>), the price range had a lower end, because it included a \$0.19 per month option (or \$53 purchase price) for a 32 gallon Bearicuda container. That model is not being further considered because of concerns about its quality, serviceability, and the style of container that has no wheels and a twist off lid. This information was not evident to Western in the original price proposal.

First Reading Question

The following is a question posed that will be addressed in the materials prepared for the second reading of the ordinance:

Should costs of bear resistant containers be spread throughout the city, or localized to the designated area where they are required? There is a statement in ordinance that allows trash haulers to charge for bear-resistant containers. If haulers were not able to charge for use of bear-resistant containers, would haulers presumably have to increase costs across the city?

Proposed Ordinance

The proposed ordinance is intended to implement council's policy direction. The major features of the proposed ordinance are as follows:

A. Area

The proposed ordinance would apply initially in an area bounded by the city's southern² and western borders, Broadway and a line through Wonderland Lake Park as if Sumac Avenue extended across Broadway to the city border (see Bear Zone One map at

² At the January 24, 2014 update, staff suggested that the southern boundary be Greenbriar Boulevard. Greenbriar Boulevard ends at Lehigh Street. To avoid confusion, staff recommends that the southern boundary extend to the city's southern border.

www.boulderwildlifeplan.net). The ordinance authorizes the city manager to adopt a rule extending the applicable area when necessary.

B. Requirement to Secure Trash.

The proposed ordinance requires that all trash in the area be secured at all times. Trash can be secured by being stored in a bear resistant container or enclosure. In addition, trash may be secured by storage in a garage or shed. If trash is stored securely in a garage or shed, it need not be stored in a bear resistant container. In such cases, the trash may be transported in a non-bear resistant container for pickup, but must at all times be attended by a person within fifteen feet of the container. This provision is intended to fulfill council's direction to allow for trash services that will collect trash directly from a garage or other storage area. The language would also allow for a resident to move the trash from a garage to the curb and wait with the trash for pickup.

C. Definition of Bear Resistant Container, Dumpster or Enclosure.

The proposed ordinance delegates to the city manager the authority to define "bear resistant." Some cities, such as Aspen, have included such language in an ordinance. Aspen's definition of "Wildlife Resistant Container" is as follows:

Wildlife-resistant refuse container means a fully enclosed container that can be constructed of pliable materials, but must be reinforced to deter access by wildlife. The container must employ a sturdy lid that has a latching mechanism preventing access to its contents by wildlife. Wildlife Resistant Containers must meet the standards of testing by the Living With Wildlife Foundation and a "passing" rating by the Interagency Grizzly Bear Committee (IGBC) as bear resistant for 60 minutes or otherwise be approved by a City-designated official.

Aspen Municipal Code § 12.08.010(2). Technology and organizations change. While the city's definition may be similar to that adopted by Aspen, it is better practice to include such definitions in rules that can be adjusted to address such changes.

D. Administrative Remedy.

Staff recommends that the proposed ordinance include an administrative remedy in addition to existing criminal penalties. This is the model employed for both rental licenses and snow removal. The principal reason for this recommendation is to facilitate service by posting rather than personal service. A criminal summons must be served pursuant to state court rules, which require either personal service or service upon a person at the residence of the offending party. An administrative remedy does not have similar requirements.

E. Minimum Fine.

The proposed ordinance includes a minimum fine of \$250. This is similar to a provision in the code section on snow removal. This removes any discretion from the hearing officer to reduce the fine in extenuating circumstances. This could result in some level of dissatisfaction among community members, as there would be no possibility of fine reduction for the facts involved in individual circumstances.

NEXT STEPS

Staff expects to return to council for second reading of the ordinance in March (tentatively scheduled for March 18). In addition, staff is developing a program of city assistance for members of the community who cannot afford the increased cost of bear-resistant containers; and an ordinance implementation timeline which will begin with alleys west of Broadway (see Zone Three map at www.boulderwildlifepan.net) in the spring of 2014.

Attachments:

Attachment A - Proposed Ordinance No. ____

Attachment B - May 21, 2013 Information Packet Memorandum

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 6-3, "TRASH, RECYCLABLES AND COMPOSTABLES," B.R.C. 1981, BY ADDING A NEW SECTION 6-3-12 REQUIRING BEAR RESISTANT CONTAINERS IN A DESIGNATED AREA OF THE CITY; AMENDING SECTION 6-3-2, BY ADDING NEW DEFINITIONS; ADDING ADMINISTRATIVE PENALTIES FOR VIOLATIONS, AMENDING SECTION 6-12-5, "CONTAINERS FOR RECYCLING OR COMPOSTING COLLECTION," AND SETTING FORTH RELATED DETAILS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER,
COLORADO:

Section 1. Section 6-3-2, B.R.C. 1981, is amended to read:

6-3-2 Definitions.

The definitions in chapter 1-2, "Definitions," B.R.C. 1981, shall apply to this chapter, including, without limitation, the definitions of "Compostables," "Hauler," "Recyclable materials," "Trash," "Trash container," "Visible to the public" and "Wildlife-resistant container."

The following terms used in this chapter have the following meanings unless the context clearly indicates otherwise:

"Refuse Attractant" shall mean any trash or other substance which could reasonably be expected to attract wildlife or does attract wildlife, including, but not limited to, soiled diapers, sanitary pads, food products, pet food, feed, kitchen organic waste, food, food packaging, toothpaste, deodorant, cosmetics, spices, seasonings or grease. Attractants do not include recyclable materials properly enclosed in a recycling container, or materials that do not meet the definition of trash in section 1-2-1, "Definitions," B.R.C. 1981 and is fruit associated with a fruit tree or bush, produce associated with a garden, or a bird feeder.

"Bear Resistant Container" shall mean a container that is resistant to being opened by a bear of a type certified by the city manager in a rule adopted pursuant to section 6-3-11 "City Manager Authorized to Issue Rules," B.R.C. 1981

"Bear Resistant Dumpster" shall mean a dumpster that is resistant to being opened by a bear of a type certified by the city manager in a rule adopted pursuant to section 6-3-11 "City Manager Authorized to Issue Rules," B.R.C. 1981

“Bear Resistant Enclosure” shall mean a fully enclosed structure that is resistant to being opened by a bear of a type certified by the city manager in a rule adopted pursuant to section 6-3-11 “City Manager Authorized to Issue Rules,” B.R.C. 1981

"Person" shall have the meaning set forth in chapter 1-2, "Definitions," B.R.C., and shall also include, without limitation, owner of any property or vacant land; occupant, owner, operator or manager of any single unit dwelling, multi unit dwelling, mobile home, mobile home park, private club or other similar property; or owner, operator, manager or employee of any business or business property.

Section 2. Chapter 6-3, “Trash, Recyclables and Compostables,” B.R.C. 1981 is amended by the addition of a **new section** 6-3-12 to read:

6-3-12 Bear Resistant Containers Required.

- (a) No private owner, agent appointed pursuant to section 10-3-14, "Local Agent Required," B.R.C. 1981, or manager of any property, lessee leasing the entire premises, or adult occupant of a single-family dwelling, a duplex, a triplex, or a fourplex shall fail to keep all refuse attractants in bear resistant enclosures, in bear resistant containers, bear resistant dumpsters or securely stored within a house, garage shed or other structure at least as secure as a bear resistant enclosure at all times, except when being transported from a house, garage or bear resistant enclosure for pickup. Refuse attractants transported for pickup shall be attended, by a person remaining within 15 feet of the container at all times.
- (b) This section shall apply to the area bounded by Broadway Street, the City’s southern boundary, the city’s western boundary and a line extended from Sumac Avenue due west through Wonderland Lake Park. Provided that the city manager may extend the area by rule adopted pursuant to section 6-3-11 “City Manager Authorized to Issue Rules,” B.R.C. 1981.
- (c) If a container or enclosure is damaged, allowing access by wildlife, repairs must be made within 72 hours after written notification by any city official, or such other time designated in the notice by the city official.
- (d) If the city manager finds that a violation of any provision of this section, the manager, after notice and an opportunity for hearing under the procedures prescribed by chapter 1-3, "Quasi-Judicial Hearings," B.R.C. 1981, may impose a civil penalty according to the following schedule:
 - (A) For the first violation of the provision, \$250.00;
 - (B) For the second violation of the same provision, \$500.00; and
 - (C) For the third violation of the same provision, \$1,000.00;
- (d) The city manager's authority under this section is in addition to any other authority the manager has to enforce this chapter, including but not limited to section 5-2-4,

General Penalties, and election of one remedy by the manager shall not preclude resorting to any other remedy as well.

- (e) The city manager may, in addition to taking other collection remedies, certify due and unpaid charges to the Boulder County Treasurer for collection as provided by section 2-2-12, "City Manager May Certify Taxes, Charges and Assessments to County Treasurer for Collection," B.R.C. 1981.
- (f) Notice under this subsection is sufficient if hand delivered, emailed, mailed or telephoned to such person, or by posting on the premises.

Section 3. Section 6-12-5, B.R.C. 1981, is amended to read:

6-12-5 Containers for Recycling or Composting Collection.

- (a) Haulers providing trash collection service to multifamily customers through centralized collection areas shall provide containers for recyclable materials at no additional charge. Containers shall be of a sufficient size to accommodate the regular accumulation of recyclables from that customer, but at a minimum, such containers shall be of a volume equal to one-half of the volume of the trash collection service. If the city manager requires the collection of compostables, haulers shall provide containers for that service of a sufficient size to accommodate the regular accumulation of compostables from that customer.
- (b) Haulers providing trash collection service to residential customers are not required to provide recyclables or compostables containers. However, if the hauler requires a specific type of container, then the hauler shall deliver such container at no cost to the residential customer. This provision does not apply to any container required by the city pursuant to section 6-3-12 "Bear Resistant Containers," B.R.C. 1981.

Section 4. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 5. The City Council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED
BY TITLE ONLY this 18th day of February, 2014.

Attest: _____
Mayor

City Clerk

READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED
PUBLISHED BY TITLE ONLY this _____ day of _____, 20__.

Attest: _____
Mayor

City Clerk



**INFORMATION PACKET
MEMORANDUM**

To: Members of City Council

From: Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager
David Driskell, Executive Director of Community Planning & Sustainability
Susan Richstone, Deputy Director of Community Planning & Sustainability
Lesli Ellis, Comprehensive Planning Manager
Valerie Matheson, Urban Wildlife Conservation Coordinator
Kara Mertz Environmental Action Project Manager
Kelle Boumansour, Residential Sustainability Specialist

Date: May 21, 2013

Subject: Information Item: Update on the implementation of the Black Bear Urban Wildlife Management plan and expansion of the curbside compost collection program

EXECUTIVE SUMMARY

The purpose of this memo is to provide council with an update on the Black Bear Urban Wildlife Management Plan (UWMP) implementation efforts for 2012, and to inform council on how 2012 efforts will guide 2013 implementation activities. In addition, as part of ongoing improvements to the city's zero waste programs, staff is working to investigate the impacts of adding meat and dairy to the curbside compost collection service. In 2013, staff will coordinate UWMP implementation and the city's zero waste services.

This memo includes:

- Detailed information on the 2012 UWMP implementation efforts,
- Major finding of the 2012 UWMP implementation efforts, and
- An overview of the 2013 curbside compost collection pilot.

The 2012 UWMP implementation efforts included:

- a **community survey** designed to uncover current attitudes, behaviors, and obstacles in living with black bears in western Boulder;
- bear activity **monitoring** including systematic recording of bear/trash conflicts in select neighborhoods west of Broadway; and
- the **Bear Education & Enforcement Pilot** (BEEP) in partnership with Colorado Parks and Wildlife (CPW, formerly CDOW).

On October 18, 2011, council accepted the Black Bear and Lion Component of the UWMP which identifies an adaptive management approach to reducing the accessibility of trash to bears in Boulder. The approach includes a three-year monitoring and evaluation cycle and involves the following three steps:

Step 1: Monitor the issue and build community education and awareness (2012 & 2013)

Step 2: Evaluate results and success (2014)

Step 3: Make changes to approach based on evaluation results (2014)

Using the UWMP's adaptive management approach, a community survey and trash container monitoring were implemented to better understand the issue of trash accessibility to bears, and the BEEP was developed to explore the strategy of increased education and law enforcement for securing urban trash from bears.

Major findings of 2012 UWMP implementation included:

- the majority of residents in western Boulder currently take action to secure their trash from bears;
- door-to-door education efforts did not significantly reduce trash storage violations;
- warnings and citations issued for putting out unsecured trash to the street prior to the morning of trash pick-up seemed to positively impact the behavior;
- despite high levels of awareness and compliance by a majority of residents, unsecured trash by a minority of residents in western Boulder still creates a significant attractant to bears, and the city has limited ability to address impacts through law enforcement; and
- almost all waste containers disturbed by bears were trash containers as opposed to recycling or compost containers.

This information obtained from the 2012 BEEP, survey, and monitoring helped staff to slightly redesign 2013 program efforts. The changes in 2013 will include discontinuing the BEEP door-to-door education, and increase informational mailings. The UWMP implementation results for 2012-2013 will be evaluated at the end of 2013, and results of the two years will be used to propose options for improved trash storage to council in 2014.

The 2013 curbside compost collection pilot is intended to investigate the following:

- current community practices related to trash, recycling and composting,

- impacts of adding meat and dairy to the allowable materials for curbside composting, including:
 - quantity and quality of compost and trash collected;
 - impact on wildlife; and
 - barriers that need to be addressed.

Staff is working closely with area haulers and Colorado Parks and Wildlife to conduct a pilot, within 2-3 Boulder neighborhoods, that will provide information on the areas of interest noted above. One of the neighborhoods will be the same neighborhood evaluated in the 2012 UWMP implementation program to attempt to identify general trends. The pilot is scheduled to launch in the late spring of 2013 and continue through the end of 2013. Council will be updated about the pilot as part of study sessions and agenda items associated with the update of the Zero Waste Master Plan.

FISCAL IMPACT

Both the UWMP implementation strategy and the 2013 curbside compost collection pilot will be completed with existing staff resources and budget, and will not require additional funding.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- **Economic:** Proper storage of trash and preventing trash from being strewn by animals supports the aesthetic character and economic vitality of Boulder.
- **Environmental:** Unsecured trash is harmful to native wildlife. Trash that is easily accessible invites bears to forage in town as opposed to adjacent natural areas. Bears that eat trash also consume cellophane, foil, and other non-digestible materials with food waste. Ingesting these materials is harmful to bears. In addition, bears in town that are repeatedly a nuisance, or pose a direct threat to public safety, are destroyed. Since 2003, there have been seven bears destroyed in the City of Boulder. Securing trash helps protect the overall health and lives of bears. By adding meat and dairy to the materials allowable in the curbside compost program, the intention is to determine the best way to increase waste diversion while minimizing impacts on wildlife.
- **Social:** While there have been no attacks on humans by black bears in the City of Boulder, the presence of these large predators in the urban area poses a safety risk to the community. Bear activity has been reported near areas where children congregate and along streets and alleys where children walk to school. In addition, bears that access trash often drag and spread household waste on streets, lawns and alleys, compromising basic neighborhood sanitation and aesthetics. Education and outreach will lead to a better community understanding and appreciation of the relationship between people and the natural environment and bears in particular.

BACKGROUND

Bears are attracted to human-generated food sources such as trash, pet food and wild bird feed in urban areas adjacent to natural areas. In the City of Boulder, like in many other municipalities, trash has been identified as the leading urban attractant (representing 79 percent of 2012 sightings with identified attractants). Minimizing trash as an attractant has reduced nuisance bear behavior in other communities such as Mammoth Lakes, California; Juneau, Alaska; and Whistler, British Columbia. Public input provided during the development of the Urban Wildlife Management Plan (UWMP) indicated there was not widespread support for requiring bear-resistant containers in the city at this time, due to the associated costs. In the absence of bear-resistant container requirements, bears in trash will be addressed through the implementation of the UWMP. The following UWMP actions were identified for 2012:

- Enhance the city website to provide more information about bear activity and how to reduce attractants and safely live with bears in the city,
- Increase outreach and education to residents about living with bears and the availability and benefit of bear-resistant trash containers,
- Increase staff monitoring of bear activity related to trash,
- Continue to target education and outreach with use of bear volunteers in areas where bear activity is high, and
- Use information gathered in bear activity monitoring to inform Zero Waste Master Plan policy decisions and zero waste program planning.

ANALYSIS

Three projects developed to implement the UWMP 2012 action items include: a *community survey*; trash storage and bear activity *monitoring*; and the *Bear Education and Enforcement Pilot* partnership (BEEP) with Colorado Parks and Wildlife (CPW). All three programs were designed to reveal patterns of behavior that could be used to inform future policy and program development. These programs are intended to provide information that is largely based on observation and self-reporting, and are not intended to be statistically reliable or highly scientific.

Community Survey

A community survey was designed to understand the attitudes, behaviors and barriers associated with securing trash from bears. The purpose of the community survey was to uncover current attitudes, perceptions, behaviors, and obstacles in securing trash to develop more effective informational materials, and effective strategies to co-exist with bears in the City of Boulder.

The community survey questionnaire was available online from April-November 2012, and was mailed to the 518 residences in the BEEP program area (west of Ninth Street, north of Baseline Road and south of Pleasant Road) (see www.BoulderWildlifePlan.net > [Bear and Mountain Lion Component of the Urban Wildlife Plan](#) for Black Bear Monitoring and Community Survey report). The questionnaire was completed by 236 respondents, most of whom (79 percent) resided in the BEEP program area.

Major findings of the survey included:

- Most (58-77 percent) respondents make efforts to prevent bears from getting into waste bins (e.g., putting bins out the day of pick-up, keeping food waste indoors until the day of pick-up),
- Most (64 percent) respondents report no bear activity in their trash in 2012,
- Bear/trash disturbances are more of a problem with a minority of residences. Of respondents reporting disturbances:
 - 36 percent reported having a bear disturb their trash at least once in 2012;
 - 10 percent reported repeat trash disturbances (at least five times); and
 - an estimated 533 bear visits to trash containers occurred at 78 residences in 2012.
- Almost half (46 percent) of respondents support education and law enforcement of current laws as the primary strategy for reducing bears in trash conflicts.

Monitoring

Since 2009, the city has maintained a database of calls and e-mails received from Boulder residents regarding bear sightings and conflicts. Although this system provides useful data about bear sightings in the city, it is based solely on reported information. In order to gather more reliable data about the frequency and nature of bear and trash conflicts, staff initiated a monitoring program in 2012 in three residential neighborhoods (including the BEEP program neighborhood). The purpose of the monitoring program is to provide additional information to better understand urban bear behavior, identify patterns, and help develop solutions for bear-trash conflicts. The information gathered through the monitoring program will help determine if the BEEP had an impact in reducing the number of trash violations in relative to other neighborhoods on the west side of Broadway Avenue.

Staff monitored trash, compost, and recycling containers of 896 residences along a contiguous route in three areas west of Broadway for violations (i.e., overflowing trash) including evidence of bear activity. Monitoring was conducted 51 times from June through October, during the hours of 6:30 to 8:30 a.m. (see www.BoulderWildlifePlan.net > [Bear and Mountain Lion Component of the Urban Wildlife Plan](#) for Black Bear Monitoring and Community Survey report).

Major findings of the monitoring program included:

- waste containers were knocked over by bears in 20 percent of homes;
- 32 percent of bear activity in waste containers (177) occurred at rentals, though only 23 percent of units (207) in the monitoring area were rentals; and
- almost all (96 percent) of the 247 waste containers disturbed by bears were trash containers as opposed to compost or recycling.

Black Bear Education and Enforcement Pilot Program

Colorado Parks and Wildlife (CPW) and City of Boulder education efforts have been utilized in Boulder for years to educate residents about how to minimize human-bear conflicts. In 2012, CPW and the City of Boulder partnered to enhance education and law enforcement in an area of the city (535 residences) that experiences high bear activity through an Education and Enforcement program (BEEP). This program adds the additional tool of law enforcement to

reduce bear attractants and help change the human behaviors that invite bears into town. The purpose of this partnership is to explore the effectiveness of education, coupled with law enforcement as a strategy to improve the way trash is stored in western Boulder (see www.BoulderWildlifePlan.net > [Bear and Mountain Lion Component of the Urban Wildlife Plan](#) for the Black Bear Education and Enforcement Pilot program report).

The first part of the program (April- June) consisted of using various methods (i.e., media, email, public meetings) to inform the program area residents of bear behavior and local activity, trash storage requirements, and increased law enforcement for trash storage regulations. Educational efforts also included a team of 22 staff and volunteers from the City of Boulder and Colorado Parks and Wildlife that attempted to provide information to residents through a door-to-door effort. The second part of the program (July-November) consisted of law enforcement officers conducting heightened enforcement of an ordinance (B.R.C 6-3-5) that describes trash storage requirements.

The ordinance requires trash, recyclables, and compostables to be stored in a manner that they are not overflowing, and their contents are not scattered by animals; and prohibits containers being put out prior to 5:00 a.m. the morning of pick up. Residences that have alley trash pickup are exempted from the latter. The ordinance does not provide guidance on how trash must be stored as to not be scattered by animals, and can only be applied after trash has been disturbed. Enforcement of the trash ordinance requires an officer to serve a summons for the observed infraction directly to the resident or land owner. The limitations of this “direct serve” requirement is contact is attempted at the residence, and contact may not be made if residents are not home during contact attempts, or, residents do not come to the door when contact is being attempted.

Major findings of the BEEP program included:

- education alone did not seem to significantly effect behavior change: 15 percent of residents (49) contacted through the BEEP door-to-door education (336) violated the trash ordinance, as opposed to twenty percent of residents (40) that had not been contacted (199).
- Law enforcement staff made contact with roughly 10 percent of homes, issuing 45 warnings and 17 summons;
- the program was time consuming as Boulder Police Department Code Enforcement Unit staff alone spent 240 hours in the program area contacting, or attempting to contact residents for education and law enforcement purposes;
- warnings seem to effect change somewhat (58 percent) in the behavior of putting trash out to the curb the night before pick up. Of 24 warnings issued, ten of those residences were observed repeating the same behavior;
- summonses appeared to be much more effective (100%) as none of the residences that received summonses for putting trash out the night before pick-up were observed repeating the same behavior; and
- there was a significant increase in voluntary use of bear-resistant containers. Bear-resistant trash container use by Western Disposal customers increase from 24 in the

beginning of the program (April 2012), to 40 at the end of the program (October 2012).

Major Findings and Program Implications

Results from the 2012 UWMP implementation projects are being used to inform program modifications for 2013, the 2013 curbside compost collection pilot, and options for policy change in 2014. The major findings from the *community survey*; *monitoring*; and the *Black Bear Education and Enforcement* partnership (BEEP) are summarized in the following five statements, followed by program implications.

1. The majority of residents in western Boulder currently take action to secure their trash from bears.

Program Implications

Many residents comply with trash ordinances designed to protect bears, which indicates that residents are either aware of the concerns related to bears in trash or know about the laws. A consideration of current trash ordinance compliance rates is potential lack of community support for imposing new trash storage requirements. Public input provided during the development of the UWMP indicated there was not widespread support for requiring bear-resistant containers due to associated costs. Limited community support for bear-resistant trash container requirements expressed during the development of the UWMP may include residents who have self initiated successful ways to secure their trash (i.e. store trash in a secure trash enclosure, shed, garage or indoors until the morning of pick-up). A successful community-supported program that improves the way trash is secured from bears must consider current levels of awareness and understanding of residents and the actions and behaviors that have already been established.

2. Door-to-door education efforts did not significantly reduce trash storage violations.

Program Implications

Time invested attempting to contact each resident in the BEEP area for educational purposes (estimated 324 hours of primarily volunteer time) was significant. As there was little difference between the number of violations at residences that had been contacted in comparison to residences that had not been contacted, door-to-door education is not considered an efficient use of resources.

Adjustments to the 2013 program include replacing the door-to-door educational efforts and increasing informational mailings to continue to ensure awareness about issues related to bears and trash, rules, and possible measures.

3. Warnings and citations issued for putting out unsecured trash to the street prior to the morning of trash pick-up, seemed to change the behavior.

Program Implications

Law enforcement seemed to be the major component of improved trash storage practices in the BEEP area. For that reason, UWMP implementation activities for 2013 include continuing the BEEP partnership with CPW for an additional year.

- 4. Despite high levels of awareness and compliance by a majority of residents, unsecured trash of a minority of residents in western Boulder still creates a large attractant to bears, and the city has limited ability to address impacts through law enforcement.**

Program Implications

Approximately 20 percent of homes were not in compliance with current trash laws that specify trash must be secured from bears. Though that percentage is relatively low, the number of residents that need to be contacted by law enforcement is significant: there are an estimated 9,572 residences in the area of Boulder that is frequented by bears (west of Broadway Street, south of Wonderland Lake, and north of Table Mesa Avenue). Extrapolating the percentage of residences that experienced bear/trash conflicts in the monitored area to the area of the city frequented by bears, 1,914 residences would need to be contacted. That effort would be taxing at current staffing levels. For that reason the BEEP area is not recommended for expansion in 2013. Enforcement efficiency is being explored in 2013 by changing the required “direct serve” of summonses to an administrative citation, which does not require making personal contact to serve the citation. A long-term policy adjustment to consider in the future includes changing ordinance from reactive (a violation has occurred after the trash has been strewn by a bear), to proactive (specified requirement of how trash must be stored that prevents a bear from getting into it).

- 5. Almost all waste containers disturbed by bears were trash containers as opposed to recycling or compost containers (Current compost containers do not contain meat and dairy).**

Program Implications

Currently meat and dairy are not included in the single family curbside compost collection program due to concerns about attracting wildlife (compost is only collected every two weeks). Prior to 2012 monitoring, there was limited information on which specific waste cart was being disturbed by bears. *In 2013, wildlife and zero waste staff will work together to investigate various compost collection arrangements and educational initiatives to inform council, wildlife, and zero waste policy decisions in 2014 (see Attachment A).*

NEXT STEPS

The UWMP implementation work plan for 2013 includes:

Work Plan Item	Details	Time Line
Continuation of BEEP partnership with Colorado Parks & Wildlife	Adjust program to discontinue door-to-door education; increase informational mailings	Apr. – Nov. 2013
Implement pilot curbside compost program	Investigate the wildlife and waste diversion impacts of adding meat and dairy to the single-family curbside compost collection program	Apr. – Dec. 2013
Repeat trash storage monitoring	Based on staff availability	Jun. – Nov. 2013
Explore administrative changes to trash violation enforcement	Investigate the feasibility of changing the required “direct serve” of summonses to an administrative citation	Jul. – Nov. 2013

The UWMP implementation results for 2012-2013, as well as the 2013 curbside compost collection pilot will be evaluated at the end of 2013 and results of the two years will be used to propose options for improved trash storage and collection frequency to council in 2014.

ATTACHMENTS

- A:** 2013 Curbside Compost Pilot – Adding Meat and Dairy

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**2013 Curbside Compost Pilot – Adding Meat and Dairy
Draft Work Plan**

Background:

In 2007, City Council updated the trash tax ordinance to require residential waste haulers to provide curbside compost pick up to their customers as a part of the bundled trash and recycling collection system. When council adopted the ordinance, it exempted meat and dairy from the compost collection system due to concerns about attracting wildlife (compost is only collected every two weeks). Since 2007, businesses in Boulder have subscribed to food waste collection that includes meat and dairy. Since 2009, haulers operating in unincorporated Boulder County have also been required to provide food waste collection service (including meat and dairy) to residents in areas east of the City limits and in county enclaves adjacent to the City.

As Boulder continues to strive towards zero waste, staff is interested in evaluating if adding meat and dairy into the compost will further the community’s waste diversion efforts. The pilot will be designed to assess the following:

- What are the current practices around separation of food and yard wastes from the trash?
- Does adding meat and dairy to the compost collection program increase the quantities collected?
- Does adding meat and dairy to the compost increase the attractant for wildlife interactions?
- Are there other factors or barriers that need to be addressed to increase food waste collection or address any wildlife attractants?

May	June - October	November	Dec-Jan
<ul style="list-style-type: none"> - Work with city’s Urban Wildlife staff and Colorado Parks and Wildlife staff to develop pilot program. - Develop and send out survey to residents asking about existing composting behavior (to establish baseline). 	<p>Launch pilot program:</p> <ul style="list-style-type: none"> - Focus on 2-3 key neighborhoods - Conduct outreach and education; varying tactics to test effectiveness - Work with area haulers to track changes in food waste collected - Spot check compost and trash bins (once curbside) to assess effectiveness of education and diversion efforts - Work with urban wildlife staff to track/monitor behavior re: securing trash and compost containers; and wildlife activity - Update Council as appropriate along with ZWMP study session 	<p>Pilot review and analysis:</p> <ul style="list-style-type: none"> - Conduct post-pilot survey - Review and analyze data gathered from spot checks and haulers - Follow up with urban wildlife staff on residents’ behavior re: securing trash + compost containers; and wildlife activity 	<p>Report pilot finding to City Council.</p> <p>As part of the council meetings regarding the update to the ZWMP, make recommendation as to whether meat and dairy should be added to compost; whether every week compost collection should be investigated; and whether any modifications should be recommended to the adaptive management plan for wildlife.</p>

