



Land Use

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BOULDER COUNTY PLANNING COMMISSION

PUBLIC HEARING

Wednesday, September 20, 2017, at 1:30 p.m.

Commissioners' Hearing Room, Third Floor
Boulder County Courthouse, 1325 Pearl Street, Boulder, CO

BCCP-16-0001: Boulder County Comprehensive Plan Sustainable Materials Management Element Update

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AGENDA

- 1) Staff presentation
- 2) Planning Commission questions to staff
- 3) Public comment (3-min allowance per individual speaker)
- 4) Planning Commission discussion and decision

MEETING OBJECTIVE AND ACTION REQUESTED

A team of staff from the Resource Conservation Division, the Commissioner's Office of Sustainability and the Land Use Department have prepared an update to the Boulder County Comprehensive Plan (BCCP) Sustainable Materials Management Element (SMME). This report summarizes changes to the updated SMME since an earlier draft was discussed at a joint Resource Conservation Advisory Board (RCAB) and Planning Commission (PC) study session on March 22, 2017. Staff revised the update to reflect feedback from that meeting, and made additional changes based on staff review. Staff recommends that the PC approve the updated SMME included as Attachment B.

Action Requested: Approve current draft of the SMME included as Attachment B.

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I. BACKGROUND

Staff began working on the SMME update in 2016. The last full update of this element was in 1987 and much has changed in the county in the last 30 years. The Land Use Department updates the BCCP on a rolling basis, one element at a time. This enables staff to devote sufficient attention to each element update, and to respond to the changing needs of the county. Staff goals for the SMME update are:

- Update and broaden the goals and policies to reflect changes in the range of programs and services provided by the Resource Conservation Division, their facilities and their partners, and to reflect changes in technology and the state the market
- Eliminate redundancies and references to specific programs
- Streamline and simplify the document narrative
- Provide a forward-looking focus to help navigate future opportunities and challenges

Staff has proposed changes to the previous Solid Waste Element to reflect these goals. In addition, as discussed at the March 22 study session, the updated SMME follows a new structure, organizing the document into goals and associated policies, similar to the structure of the recently adopted BCCP Open Space Element. As indicated by the new name for the element, the updated element incorporates the concept of Sustainable Materials Management (SMM), which is:

“a systemic approach to using and reusing materials more productively over their entire lifecycles. It represents a change in how our society thinks about the use of natural resources and environmental protection. By looking at a product’s entire lifecycle we can find new opportunities to reduce environmental impacts, conserve resources, and reduce costs.”¹

Key steps in the public process for the SMME update are outlined in Table 1. Staff gathered feedback from the RCAB in late 2016, and from the public in early 2017, including an open house in January. On March 22, 2017 a joint RCAB/PC Study Session was held in which members of both bodies gave feedback on the draft SMME document. Some key topics of discussion included adding reference to regeneration and energy recovery, addressing new challenges presented by E-Waste, removing lists

and programmatic language, adding language to address hazardous waste, data collection methods and frequency, and combining policies regarding public participation and collaboration.

A summary of the March 22 RCAB/PC study session is included as Attachment C.

Input from the RCAB/PC study session was incorporated into the document where applicable and appropriate, and staff made some additional changes to reflect resource conservation priorities. The draft element was circulated for referral in May. Comments were submitted by Boulder County Transportation staff in general support of the plan (Attachment D). Staff did not receive any other comments during the referral period. Staff brought a revised document back to RCAB for review in June, and RCAB did not request any further changes. Staff then presented the updated SMME to the Board of County Commissioners (BOCC) for their feedback at a public meeting on July 18. The BOCC expressed support for the update and did not suggest any changes.

Table 1. Public Process to Date

Date	Event	Purpose
8/28/2016	RCAB Kick Off	Introduced and discussed the upcoming SMME update
9/28/2016	RCAB Meeting	Introduced and discussed the upcoming SMME update, this time with Land Use staff present to discuss roles, plans, and goals.
1/23/2017	Open House	Introduced and solicited feedback from members of the public
3/22/2017	RCAB/PC Joint Study Session	RCAB and Planning Commission members discussed the SMME draft and gave feedback to staff to incorporate into the draft.
5/02/2017	Referral Period	Solicited comments on the draft SMME from various external and internal agencies.
6/28/2017	RCAB Meeting	RCAB recommended approved the latest draft SMME for finalization and adoption of changes.
7/18/2017	BOCC	BOCC provided feedback on updated draft

II. SUMMARY OF CHANGES SINCE PREVIOUS PC REVIEW

Substantive changes to the SMME since PC last reviewed the document include the following:

- Added **policy 1.01.04** which addresses the minimization of resource use and waste streams by encouraging growth of markets for local products, facilitating local processing, and reuse of discarded waste material within the county. This policy emphasizes a closed loop and encourages efforts to bolster local markets.
- Added hazardous waste to the definitions section. This definition was added in response to comments from some members of RCAB and PC who wanted to address oil and gas waste, specifically hydraulic fracturing fluid.
 - The new content differs from the previous Solid Waste Element because it focuses on taking responsibility for processing waste within the county instead of pushing it out to other jurisdictions for processing. Permanent storage is not included as a responsibility for the county under the updated SMME.
- Removed lists from **policies 2.01 (Facilitation of SMM Activities)** and **2.04 (Financing and Planning Mechanism)**.

- Lists were removed throughout the element in an effort to keep the document streamlined and flexible to accommodate the range of circumstances that may arise in the future.
- Added language about the elimination or reduction of hazardous waste and responsible end-of-life management in Boulder County in policy **3.01 (Criteria for Evaluating SMM Efforts)**.
- Combined **Goal 4 (Gather and Review Public Input) & 5 (Collaborate with Stakeholder and Partners)**, combined **policy 5.01 (Input) and 5.02 (Collaboration with Stakeholders)** and moved **policy 4.06 (Input from Stakeholders)** to **4.02 (Input from Public and Other Stakeholders)**.
 - Goals 4 and 5 of the previous draft were similar, both dealing with public engagement and collaboration. Staff found it appropriate to combine these goals into one given their similarities.

See attached Joint Study Session Meeting Summary (Attachment C) for a complete record of changes requested and incorporated into document.

III. NEXT STEPS

If approved by Planning Commission, staff will share the final SMME with BOCC and RCAB as an informational item, and will incorporate the updated element into the full BCCP document.



Boulder County Comprehensive Plan

SOLID WASTE

Goals, Policies, & Maps Element

It was clearly established that the Solid Waste Element should be simply one of the many urban services provided and planned for in the overall comprehensive planning process, and that the solid waste program should be subordinate to and guided by the overall planning efforts of the county. The original Solid Waste Element of the *Boulder County Comprehensive Plan* was adopted in 1978. The general planning objectives which were adopted at that time following extensive public comment were utilized together with new information to develop the 1982 Solid Waste Plan. The Goals and Policies set forth in the following sections are the result of the 1987 update of the Solid Waste Element.

The development and adoption of objectives to guide the Boulder County Solid Waste Management Plan was a significant undertaking. Program objectives were established so that the planning could proceed in a direction identified by the goals. Special effort was spent in establishing the proper relationship between the “Solid Waste Element” and the overall Boulder County Comprehensive Plan.

● **Boulder County’s Role**

Boulder County’s role in providing for the proper management of solid wastes shall be as set forth in the following sections. The intent is to differentiate between the respective responsibilities of the private sector and other levels of government so as to concentrate limited resources on those areas of involvement where the county is likely to be most effective.

Solid waste management is primarily a function of municipalities.

● **Primary Concentration**

Primary concentration of solid waste occurs at the generation source and is primarily the responsibility of municipalities and private haulers who provide individual collection services or the state and federal government where hazardous or radiological wastes are concerned. Boulder County’s responsibility with such matters as container sizing, container types, container locations, types of wastes allowed and pick up frequency for the primary concentration of solid waste is directed to aid the regulation of land use proposals where these matters become a local land use concern, the requiring or encouraging of source separation to assist reuse activities, and waste generation

AMENDMENT STATUS

Goals & Policies	Associated Maps	Background Element
Amended 12/16/87	N/A	Amended 12/16/87



Goals, Policies, and Maps Element

Solid Waste is a term that applies to materials that are recycled, or materials headed for landfills.

reduction through means that may be effective on a local level.

- **Transportation**

Transportation of solid waste consists of the hauling of wastes from the primary concentration point to a disposal facility or to a transfer facility. This function is primarily the responsibility of those municipalities and private haulers who provide individual collection services or to state and federal government where hazardous or radiological wastes are concerned. Boulder County's responsibility with the transportation of solid waste is directed toward the alleviation of adverse environmental impacts in the unincorporated areas of the county and on public roadways and toward the designation of exclusive disposal or processing sites for the more efficient and effective routing of the solid waste stream and the possible encouragement of reuse opportunities.

- **Secondary Concentration**

Secondary concentration of solid waste occurs at transfer facilities which are utilized to minimize hauling and to improve environmental control. This function is a direct responsibility of Boulder County insofar as it relates to the mountain compactor or green box program and to land use proposals where such facilities are to be owned or operated by others.

- **Processing**

Processing solid waste consists of shredding, grinding, baling, incineration and similar processes that are used to alter the character of the solid waste stream to facilitate handling. These functions are of particular concern to those who own or operate solid waste disposal or reuse facilities. Boulder County's responsibility relating to these processes is directed toward the encouragement of reuse

opportunities, improved site environment and the prolonging of landfill life in order to reduce land requirements for final disposal purposes.

- **Resource Recovery and Recycling**

Resource recovery and recycling consists of diverting potentially reusable materials from the solid waste stream and redirecting them toward a useful purpose. Resource recovery and recycling is considered to be in the best public interest and as such is deemed not only a responsibility of Boulder County but of the private sector, other levels of government and individual citizens as well.

- **Final Disposal**

Final disposal consists of the burial, dispersal, incineration, or other methods that are used to dispose of unwanted wastes and is a primary responsibility of Boulder County for non-hazardous or non-radiological wastes. It is recognized that sanitary landfills will be needed for most wastes until resource conservation and recovery practices are successful. It is also recognized that landfills and rubble fills will still be needed thereafter for the disposal of irreducible residues.

- **Regulation**

Regulation consists of the promulgation of standards and requirements for the collection, transportation, disposal, processing and resource conservation activities for the general public health and welfare. This function is a responsibility of all levels of government and a primary responsibility of Boulder County in those areas defined herein as a Boulder County role. It is assumed that the State of Colorado views the management of normal solid wastes as distinguished from radiological or hazardous wastes as a local government responsibility with the state providing direct management responsibility for radiological

and hazardous wastes. It is also assumed that the main impetus of federal requirements is aimed at the state level of government in that states are required to develop and implement solid waste management programs particularly in the area of hazardous wastes and local government agencies are responsible for securing compliance with state and federal regulations relating to solid waste facilities owned, operated or permitted by the local government. In that states are required to develop and implement solid waste management programs, particularly in the area of hazardous wastes, and local government agencies are responsible for securing compliance with state and federal regulations relating to solid waste facilities owned, operated, or permitted by the local government.

● **Services Fees and Charges**

This function consists of the recovery of economic, social, and environmental costs incurred in providing either private or public solid waste services and it is a responsibility of Boulder County insofar as it relates to the effective and fair implementation of Boulder County’s solid waste management plan.

The following policies will be Boulder County’s official position on the management of solid waste and shall guide staff, appointed committees and commissions as well as the Board of County Commissioners in reaching decisions on solid waste management for at least the next three to five years.

Solid Waste Policies

● **Environmental**

SW 1.01 Solid waste facilities in Boulder County shall be planned, located, designed and operated to prevent unacceptable air, water, noise and visual pollution, and in consideration of the inventory,

goals and policies of the Environmental Resources Element of the *Boulder County Comprehensive Plan*.

SW 1.02 Solid waste facilities that are to be operated in Boulder County shall be designed and operated in conformance with all applicable federal, state, and local regulations.

SW 1.03 The county’s criteria for the planning, design, location, operation and enforcement for new or expanded solid waste sanitary landfill facilities shall be updated by the Transportation Department in cooperation with the Land Use Department and county Health Department and shall include provisions for assigning long term responsibility for abandoned facilities.

SW 1.04 The county shall monitor the remedial actions undertaken by responsible parties at the Marshall Landfill under the direction of EPA and the State Health Department.

SW 1.05 The county’s municipalities and sanitation districts shall be encouraged to seek and develop means of utilizing sludge for possible public benefits including land application of digested sludge for crop production or methane production.

SW 1.06 The Land Use Department, in cooperation with the county Health Department, shall continue to secure agreements from the large municipalities and sanitation districts to provide adequate drop-off facilities for septic wastes so that they can be properly treated.

The Solid Waste Division is housed within the Land Use Department.

Goals, Policies, and Maps Element

The Household Hazardous Waste program is an important aspect of environmentally sound disposal of common-place hazardous substances.

- SW 1.07 The county shall utilize regulations developed by the Water Quality Control Division of the State Health Department for the management of sludge, septic wastes, and the unlawful disposal of hazardous and radioactive wastes received at facilities designed for normal wastes.
- SW 1.08 Hazardous waste disposal facilities shall not be located in Boulder County because of the populous nature of the county and the potential for damage to life, health and the environment from a permanent disposal site. Transfer facilities for the handling of small quantities of hazardous waste may be allowed if such facilities can meet all federal, state, and local requirements for the handling of hazardous wastes.
- SW 1.09 The county shall cooperate with the state and federal agencies to assure that hazardous and special wastes generated within the county are properly recycled, neutralized or disposed of at authorized facilities as prescribed by the 1976 Resource Conservation and Recovery Act and any amendments.
- SW 1.10 The county Health Department, in cooperation with the Land Use Department, shall encourage the proper management of household hazardous waste through public education and environmentally sound disposal methods.

● **Public Involvement**

- SW 2.01 Public participation in the decision making process shall be encouraged through ample

notice of meetings where major solid waste management and planning issues are being considered.

● **Governmental Relations**

- SW 3.01 The county Land Use Department shall provide a sufficient level of communication between all known public agencies and special interest groups that are actively engaged in solid waste activities and issues involving Boulder County.
- SW 3.02 The county shall cooperate actively with existing intergovernmental agencies on efforts to develop regional approaches and necessary legislation to meet current and anticipated solid and hazardous waste problems.
- SW 3.03 The county shall encourage a cooperative effort in the implementation and continuation of a local hazardous materials response plan and action.

● **Solid Waste Management**

- SW 4.01 The county shall continue the mountain transfer station program in the Nederland and Allenspark/Ward areas as a county-owned, operated and partially user-fee financed program.
- SW 4.02 The private sector shall be encouraged to provide trash collection services in the plains and in the mountain areas not served by the mountain transfer station program, and the county shall regulate private haulers for safety and health reasons through the issuance of trash haulers' licenses.

SW 4.03 Since the Landfill Siting Study did not identify suitable land disposal sites in Boulder County, the county should assure that sites are available for land disposal in adjacent counties, as needed, through intergovernmental agreements or governmental acquisition of a site, if needed. Further, the county shall continue to explore a region-wide approach to solid waste management.

SW 4.04 The county shall monitor performance goals and requirements for any proposed new or expanded disposal facilities leaving the actual design to competent engineers and geologists and the operations and management of the facilities to appropriately qualified contractors or similarly qualified public personnel.

SW 4.05 The planning and design of solid waste facilities shall be based on normal waste generation in Boulder County using the latest and most reliable population, land use and waste generation types and projections consistent with the *Boulder County Comprehensive Plan*.

SW 4.06 The private sector may be allowed opportunities to participate in any publicly owned solid waste facility. Quality control shall be maintained through contractual arrangements containing appropriate operations, inspections and enforcement provisions.

SW 4.07 The county shall continue to utilize a combination of general property tax revenues (Solid Waste Mill Levy) and user fees

to support the planning, construction, and operation of solid waste facilities and funding of public education on the ways of proper disposal of waste.

SW 4.08 In order to provide appropriate administration for the successful implementation of the solid waste management plan, the county shall provide adequate technical staff and the Boulder County Solid Waste Advisory Committee shall continue to serve as the county's citizen advisory body.

● **Resource Recovery and Recycling**

SW 5.01 Efforts shall be made to reduce the amount of solid waste disposed of in landfills by 20 percent by 2000 through the diversion of rubble and sludge to more useful purposes and through the implementation of effective resource recovery and recycling activities.

Efforts shall be made to reduce the amount of solid waste disposed of in landfills.

SW 5.02 Efforts shall be made to recover 30 percent of the reusable components of solid waste by 2000 through the provision of economic incentives for recycling operations and by the promulgation of new local regulations. New state and federal legislation shall be sought as required.

SW 5.03 Solid waste collection, transportation, disposal, and processing facilities shall be planned, operated and encouraged to promote the development of resource recovery and recycling opportunities.

SW 5.04 Funds from the approved Resource Recovery and Recy-

Goals, Policies, and Maps Element

The county maintains transfer stations for disposal of solid waste in the mountains.

cling Fee levied at the Marshall Landfill or other regulated solid waste facilities shall be used by the county or by other public or private organizations for resource recovery and recycling activities. The Board of County Commissioners upon recommendation of the Solid Waste Advisory Committee shall distribute these funds based upon the amount of waste diverted; ability to perform; integration with existing solid waste management activities; environmental and ecological soundness; public education/support value; potential for long-term viability and the targeted audience.

an ordinance which would give regulatory authority to the appropriate departments to oversee operations of all transfer stations in Boulder County.

- SW 5.05 Household separation, collection centers, and similar small scale resource recovery and recycling activities shall be encouraged and may be financially aided, until such time as they are replaced with more effective, self-supporting programs. The integration and coordination of resource recovery and recycling activities, collection services and disposal facilities shall be encouraged and required, if possible, to minimize overall recovery costs. The county shall cooperate with the staff of involved municipalities to encourage the most cost-efficient means of collection.

- SW 5.06 The county shall set performance goals and requirements for any proposed privately-owned transfer stations in order to assure that comprehensive recycling is implemented and to preserve the option of converting transfer stations to waste-to-energy facilities in the long-term. The county shall pursue adopting

- SW 5.07 The county shall encourage activities which educate the citizenry in the values, methods and techniques of recycling, resource recovery and waste reduction.

- SW 5.08 The county shall actively encourage and pursue the reduction of waste generation.

- SW 5.09 The county shall pursue long-term financing solutions to solid waste management.

**Boulder County Comprehensive Plan
DRAFT -- Sustainable Materials Management Element**

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I. Purpose and Background

The Sustainable Materials Management Element (SMME) sets forth the goals and policies that will guide related regulations and management plans adopted by the county. The county’s zero waste, environmental sustainability, and related plans support the goals and policies of this element by providing detailed objectives, metrics for success, and related tools to support the county’s actions. The goals of the SMME include:

- The management and use of discarded materials with emphasis on sustainable practices and resource conservation, including full life-cycle management of materials;
- Influence on material design to reduce burdens in recycling and disposal facilities; and
- Waste reduction and reuse.

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The SMME shall help inform county policies and decisions related to growth and development that pertain to waste, including recycling, composting, discards, disposal, reuse, and waste reduction/repair facilities, programs, and operations.

a) History

Boulder County has had a commitment to responsible and sustainable management of its waste streams since the mid-1970s, with several important milestones occurring since that time:

- The original Solid Waste Element¹ of the *Boulder County Comprehensive Plan* was adopted in 1978.
- The general planning objectives which were adopted in 1978 and extensive public comment, were the basis of the county's 1982 Solid Waste Plan.
- The 1987 update of the Solid Waste Element included new goals and policies.
- The 2010 *Boulder County Zero Waste Action Plan* which set forth "a vision for attaining Zero Waste 'or darn near' throughout Boulder County, including unincorporated area as well as municipalities, by 2025."
- The 2012 Environmental Sustainability Plan which outlines many specific zero waste goals.

b) Definitions

Energy Recovery - Energy recovery from waste is the conversion of non-recyclable waste materials into usable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolyzation, anaerobic digestion and landfill gas recovery. This process is often called waste to energy.² Any energy recovery projects should be focused on those discards still remaining after other source separation efforts have been maximized.

EPA's Waste Management Hierarchy - The county's commitment to Sustainable Materials Management follows the U.S. Environmental Protection Agency's (EPA's) waste management hierarchy (see Figure 1). This hierarchy maps the most preferred strategies as, in order: source reduction and reuse, recycling and composting, energy recovery, and waste treatment and disposal.³

Hazardous Waste - Hazardous waste is a waste with properties that make it capable of having a harmful effect on human health or the environment. Hazardous wastes can be liquids, solids, or contained gases. They include, but are not limited to, by-products of industrial, manufacturing and extraction processes (e.g., waste fluids from hydraulic fracturing), discarded used materials, or discarded unused commercial products (such as many household cleaning products, pesticides, and paints)

Sustainable Materials Management - The EPA describes Sustainable Materials Management (SMM) as "a systemic approach to using and reusing materials more productively over their entire life cycles. It represents a change in how our society thinks about the use of natural resources and

¹ Re-named as the Sustainable Materials Management Element (SMME) in 2017 to reflect the broader scope and intent of the county's approach to waste and materials management.

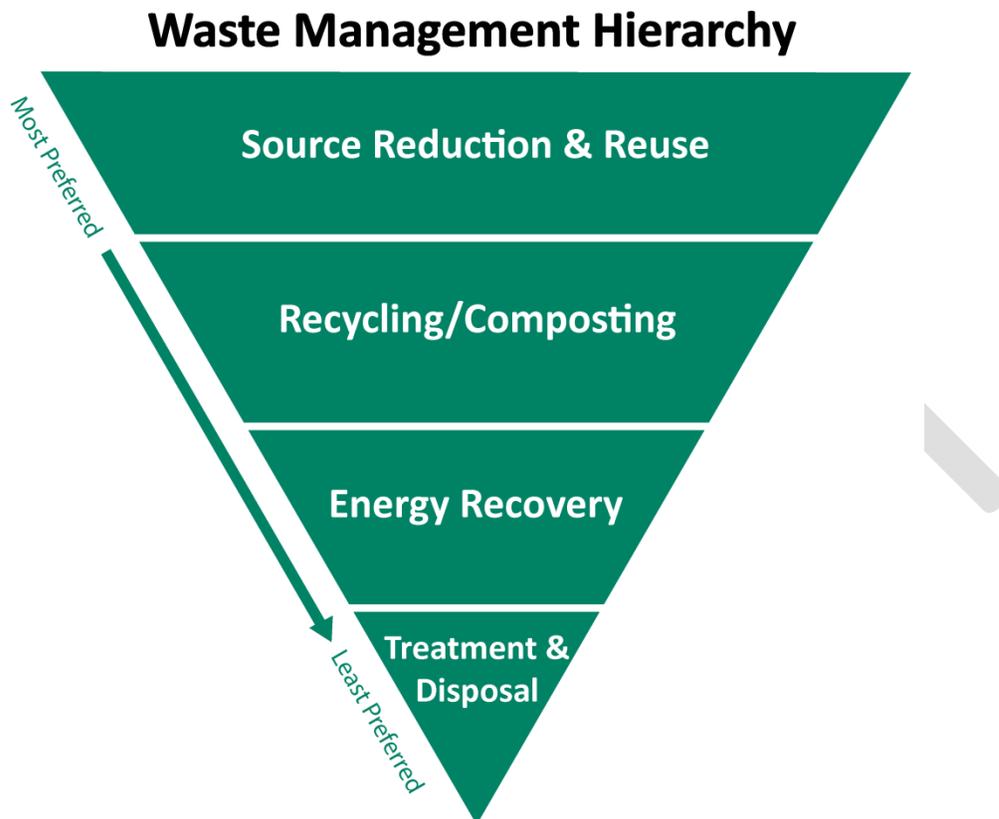
² US EPA, Energy Recovery from the Combustion of Municipal Solid Waste (MSW), www.epa.gov/smm/energy-recovery-combustion-municipal-solid-waste-msw accessed March 13, 2017.

³ US EPA, Sustainable Materials Management, www.epa.gov/smm/sustainable-materials-management-non-hazardous-materials-and-waste-management-hierarchy, accessed October 10, 2016.

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environmental protection... By looking at a product's entire life cycle— from materials extraction to end-of-life management —we can find new opportunities to reduce environmental impacts, conserve resources, and reduce costs.”⁴

Figure 1: U.S. EPA’s Waste Management Hierarchy



II. Goals and Policies

Goal 1. Promote and Uphold the County’s SMM Values. Boulder County promotes SMM in its actions, policies, and decision making county-wide. The county values SMM for its environmental protection, including greenhouse gas emission mitigation, its economic soundness, and its contribution to community vitality and quality of life. SMM prioritizes diversion practices that best preserve the inherent value of the resources used.

Policies

SMM 1.01 **Support for SMM Efforts.** Boulder County supports efforts that promote SMM (consistent with adopted plans and agreements) in the following areas: environmental stewardship, product stewardship, resource conservation, pollution prevention, mitigation of adverse climate impacts, and protection of public health. The county will strive to support initiatives that align with SMM including those related to facilities, programs,

⁴ US EPA, Sustainable Materials Management, www.epa.gov/smm/sustainable-materials-management-basics, accessed October 7, 2016.

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granting mechanisms, policy mechanisms, local markets, education and outreach.

SMM 1.01.01 To the extent possible, the county shall support land use decisions that align with SMM while balancing other regulatory and policy priorities, e.g., zoning amendments, and/or property acquisitions for facilities in suitable locations. SMM values, functions, and impacts to county lands shall be considered in the review of development proposals submitted through the Land Use department.

SMM 1.01.02 To the extent possible, the county shall support SMM from public, private, and non-profit sector organizations, including development of local end-markets designed to reuse or repurpose materials.

SMM 1.01.03 Boulder County may acquire real estate interests in land for SMM functions, if periodic feasibility research and planning studies indicate the need for county-owned land for viable SMM facilities or operations.

SMM 1.01.04 Boulder County shall minimize resource use and waste streams by encouraging growth of markets for local products, and facilitating the local processing and reuse of discarded waste materials within the county.

SMM 1.02 **SMM in County Operations.** Boulder County shall implement SMM practices in its own operations of its facilities, purchasing, and generation of waste and discards. Furthermore, the activities of county departments shall promote and reflect the values of SMM.

Goal 2. Facilitate SMM. Boulder County purposefully facilitates SMM activities taking place across the county through county-wide planning, management, and education functions, including its active role in providing zero waste services.

Policies

SMM 2.01 **Facilitation of SMM Activities.** Boulder County supports various types of materials processing, management, and diversion-related technologies, processes, and activities to reach its zero waste and SMM goals in a fiscally responsible manner.

SMM 2.02 **Scope of County Plans and Policies.** Boulder County prepares management plans and policies as appropriate for SMM facilities, programs, education, and activities and uses the plans and policies to manage SMM resources and assets. The scope of planning and policies shall encompass:

- a. The establishment, maintenance, responsible stewardship, and needed improvement of all current and future SMM related facilities county-wide.
- b. Planning for both short- and long-range forecasting of capacity needs for capital, expansion, and operation and maintenance needs, as well as address criteria in Goal 3;
- c. Forecasting ownership and operation scenarios and compensation formulas for all facilities to optimize environmental stewardship, materials recovery, and operational efficiencies, and ensure fiscal stability;

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- d. Providing oversight and regulation of private, public, and non-profit sector collection, processing, management, and end-marketing of discarded, recyclable, compostable, and reusable materials;
- e. Convening appropriate parties to consider and develop intergovernmental agreements (IGA) for SMM initiatives;
- f. Setting performance goals and level-of-service standards for all county-owned SMM facilities, programs, or operations;
- g. Planning for zero waste and SMM using applicable criteria (see Goal 3 for criteria), data on waste generation, population, and waste trends; land use constraints; and in the context of the Comprehensive Plan and the county's goals and values (e.g., addressing the use of landfills in adjacent counties – monitoring lifespan and status of these landfills);
- h. Structuring responsible financing mechanisms for SMM facilities (see SMM Policy 2.04);
- i. Clearly defining the management and operational roles of county staff and the guidance and input roles of the county's Resource Conservation Advisory Board (see Goal 5).

Information to Implement in Sidebar

For reference, the county owns and operates the following facilities:

- **Mountain Transfer Station & Recycling Center**
- **Drop-Off Centers**
- **Boulder County Recycling Center**
- **Construction and Demolition Facility**
- **Debris Management Sites**
- **Hazardous Materials Management Facility**

SMM 2.03 **Monitoring and Evaluating Innovation in Approaches.** Boulder County monitors and evaluates waste, recycling, composting, and related SMM policies and activities both locally and more broadly, to inform management decisions. The county seeks to be innovative in its approaches to SMM, using knowledge of current conditions, latest science, best technologies, and best management practices.

SMM 2.04 **Financing and Planning Mechanisms.** Boulder County shall engage in planning activities to facilitate the development of SMM facilities and policies.

SMM 2.05 **Awareness, Education, and Outreach Related to SMM.** Boulder County shall promote awareness of SMM activities and initiatives taking place across the county through communication methods designed to reach a broad spectrum of the public, including waste generators, residents, stakeholders, organizations, and businesses. Boulder County shall reach out to the public through educational programs, volunteer opportunities, special events, regular interactions at sustainable materials management facilities, and other appropriate educational venues.

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Goal 3. Maintain and Apply Criteria for Implementation. Boulder County maintains and applies criteria for ensuring SMM principles are reflected at all stages of facilities development, planning processes, and policy implementation.

Policies

SMM 3.01 **Criteria for Evaluating SMM Efforts.** Boulder County shall apply the following criteria when evaluating SMM plans, policies, facilities, programs, and other initiatives in Boulder County. The county, together with its partners will strive to ensure consistent monitoring and utilization of best available data. Specifically, any initiatives reviewed shall:

- a. Mitigate or reduce waste (e.g., waste prevention and diversion to reduce mining of virgin resources);
- b. Ensure that facilities or operations are planned, located, designed, and operated to prevent and divert unacceptable air, water, noise and visual pollution, including assessing the positive and negative environmental impacts of the transport of materials, workers, etc. to and from a facility or operation;
- c. Measure and seek to reduce climate change (or carbon) footprint for SMM activities by reducing adverse greenhouse gas emissions;
- d. Prevent and divert waste; reduce local emissions from mining, materials extraction and processing; and reduce transportation-related emissions during the full life cycle of materials used, reused, and processed at end of life;
- e. Use sequestration to reduce carbon impacts where applicable (e.g., using compost to replenish depleted soils);
- f. Demonstrate, based on a life-cycle analysis, that the initiative(s) results in the least adverse environmental and human health impact from ‘cradle to grave’ of the options available;
- g. Eliminate or reduce toxic or otherwise hazardous materials used in products and practices;
- h. In order to ensure the responsible end-of-life management of toxic or hazardous waste, and recognizing the populous nature of the County, all such waste must be neutralized or otherwise treated to remove the toxic and/or hazardous components and discharged according to national, state, and local regulations;;
- i. Demonstrate the economic/fiscal and social impacts (e.g., job creation, costs to county, revenue potential, environmental justice, funding mechanism/debt service, etc.) of SMM initiatives and ensure long-term funding mechanisms are viable;
- j. Ensure accessibility and affordability of all SMM-related facilities and programs to all residents county-wide;
- k. Ensure public education/outreach mechanisms are included in fiscal and operational planning;
- l. Demonstrate availability of fiscal and other needed resources for appropriate enforcement; and

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- m. Seek to manage discarded materials as locally as possible to provide the highest benefit to the local economy.

SMM 3.02 **SMM and Green Building Practices.** SMM and green building practices for both new and retrofit construction shall be incorporated into policies, regulations, and requirements for both residential and commercial building design and materials selection, and construction and maintenance practices shall:

- a. Ensure building longevity and resilience;
- b. Prioritize and provide for safe deconstruction and materials reuse/recycling at end of life;
- c. Discourage demolition of otherwise safe and functional structures;
- d. Promote other sustainable initiatives such as energy efficiency and water conservation.
- e. Align with circular economy principles and practices (e.g., life-cycle asset management analyses, collaborative consumption, products designed for longevity, performance and service systems and incentivized returns, economic vitality for resiliency, and extended producer responsibility);
- f. Address issues of ‘new’ materials or products entering the waste stream for which reuse and/or diversion end markets have not yet been developed; and
- g. Collect and report data on SMM activities.

Goal 4. Gather Input and Collaborate with Stakeholders and Partners. Boulder County actively engages the public to solicit input on policies and practices related to SMM and resource conservation.

Policies

SMM 4.01 **Resource Conservation Advisory Board.** The county commissioners shall appoint a Resource Conservation Advisory Board (RCAB) to provide a forum for public input and advice to the Board of County Commissioners and the Resource Conservation Division regarding SMM plans, programs, and actions.

SMM 4.02 **Input from Public and Other Stakeholders.** Boulder County shall invite input from a broad spectrum of stakeholders relevant to the policy and management issues under consideration. Boulder County shall periodically solicit input from, and provide updates to municipalities and stakeholders on SMM priorities, and may seek and consider public input about SMM initiatives and management through a variety of informal and formal engagement tools.

SMM 4.02.01 Boulder County will actively seek input from interested community members to ensure policies and initiatives are based on a sound understanding of constituents’ and stakeholders’ short- and long-term needs and operational context.

SMM 4.03 **Public Hearings.** County land acquisitions and capital improvement plans for SMM facilities, along with county zero waste management plans and policies, require approval by the Board of County Commissioners, after a public hearing and after review and input by the RCAB.

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SMM 4.04 **Collaboration with Stakeholders.** Boulder County shall collaborate with businesses, organizations, non-profits, educators, and other partners to promote the county's SMM values and practices.

SMM 4.05 **Collaboration with Authorities.** Boulder County shall work closely with federal, state, and local authorities to promote and achieve SMM goals (e.g., state-level product stewardship legislation).

SMM 4.05.01 Boulder County shall strive for harmonization of goals, policies and initiatives at the local level (e.g., policies regarding discards, waste, diversion, reuse, etc.) to ensure they do not serve as disincentives to one another, but rather complement one another.

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Land Use

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BOULDER COUNTY PLANNING COMMISSION & RESOURCE CONSERVATION ADVISORY BOARD STUDY SESSION

MEETING SUMMARY

March 22, 2017

SPECIAL SESSION – 5:00 PM

**Hearing Room, Third Floor,
County Courthouse, Boulder**

BCCP-16-0001: Boulder County Comprehensive Plan Sustainable Materials Management Element Update

On Wednesday, March 22, 2017, members of Planning Commission (PC) and the Resource Conservation Advisory Board (RCAB) met at a joint study session to discuss the proposed changes in the Sustainable Materials Management Element (SMME). Steven Giang, Boulder County Land Use Planner, presented an overview of the SMME process to date, an overview of the policy & goals structures in the plan, and a review of the draft plan policies by focus area.

Staff provided three study session questions to focus the discussion:

1. Should there be changes to policy language to better reflect the goals of the county and the county's strategies and guiding principles?
2. Are there policies that should be added or removed to better capture the county's sustainable materials management-related activities and objectives?
3. Can policies 2.5 (Promotion of Awareness of SMM) and 2.6 (Education and Outreach) be combined into a single policy?
4. Any other feedback, comments, changes?

PC and RCAB questions, discussion, and feedback addressed the following topics organized by goal and topic. Action items requested by PC and RCAB, and staff responses are noted.

General

- Appreciation for the re-write, and for inclusion of references to climate change. Comments that the rewrite represents a major improvement and evolution of the document.
- Request to include energy regeneration / energy recover in the SMME. [Early in the meeting this topic was flagged as one to come back to, but additional discussion did not take place.]
- Request adding language to try and reduce consumption and sustainably sourced materials before getting to management of the waste stream.
- Request to ensure the document addresses new challenges presented by E-Waste.

Goal 1

- Recommendation to add language pertaining to best practices and a separate question about whether to define best practices within the document.
 - Staff suggested referencing best management practices in the element, but not defining them. Best practices can be articulated in the master plans and not the comprehensive plan. Others supported this approach.

Goal 2

- Request to remove language about use of “viable financing mechanisms” but to keep language noting the importance of financing and planning for future SMM investments.
- Suggestions that the lists in this section were too programmatic for the purposes of a policy document.
 - A large part of the discussion revolved around the lists associated with various policies and what level of detail belongs in this document. There was acknowledgment that the tighter the lists are the more likely they will get used.
- Requests to remove the list under Policy 2.1 Facilitation of SMM Activities and Policy 2.4 Financing and Planning Mechanisms.
 - Request to keep reference to biomass if list under 2.1 is removed, as biomass has significant importance.
 - Guidance to staff to review bullets under 2.1 to part down to the essential policy statements, eliminating programmatic references.
- Requests to combine Policy 2.5 Promotion of Awareness of SMM and Policy 2.6 Education and Outreach.
- Recommendation to combine Policy 2.5 Promotion of Awareness of SMM and Policy 2.6 Education and Outreach.
- Request to ensure non-profit organizations are included in public-private partnerships.
- Question about whether the importance of “local” comes through sufficiently in the document. Request to emphasize the supply-demand loop and the importance of keeping demand local.

Goal 3

- Recommendation to include stronger language to address Hazardous Materials.
- Request for greater clarity regarding whether permanent hazardous waste disposal facilities will be located within the county.
- Request to keep language in existing SW1.08,¹ and a counter-request for the county to allow for processing of wastes within the county, but not permanent storage.
- The main concern regarding hazardous waste pertained to fracking fluids.
 - Dale Case, Land Use Director, clarified that disposal of fracking fluids is carried forward through oil and gas regulations. The regulations prohibit injection wells in the county, and injection wells are the main form of fracking fluid disposal.
- Request to keep specific reference to “fracking fluids”; recognition that this is a rare exception when greater specificity is warranted.

¹ SW 1.08 currently reads: Hazardous waste disposal facilities shall not be located in Boulder County because of the populous nature of the county and the potential for damage to life, health and the environment from a permanent disposal site. Transfer facilities for the handling of small quantities of hazardous waste may be allowed if such facilities can meet all federal, state, and local requirements for the handling of hazardous wastes.

- Recognition of the need to address potential hazardous waste issues that will be relevant for the 20+ year time horizon the element may be in place.
- Request for clarity in 3.1 regarding whether the reference to taking SMM into consideration in review of plans should apply to all planning in the county (e.g., open space master plans, etc.).
- Request adding language that pertains to baseline data and monitoring information with regards to Policy 3.1 Criteria for Evaluating SMM Efforts (e.g., as it pertains to reduction of greenhouse gases, toxic materials and any other references to “reducing”).
- Request to add language to 3.1 along the lines of “prioritize diversion practices that best preserve the inherent value of the resources used.” Another suggestion that the reference to that concept could either be in the definitions or within goal 1
- Request for consistency in use of “must” vs. “shall.”

Goal 4 & Goal 5

- Request combining goals 4 and 5.
- Request to shift to “gather and consider” or “gather and integrate” stakeholder input rather than “gather and review.”
- Request to keep emphasis on collaboration with stakeholders as that is different from collecting public input.
- Request to consider referencing both “upstream and downstream stakeholders.”
- Request to include the term “stakeholders” during the input process of SMM facilities and plans.
- Recommend combining Policy 5.1 Input and 5.4 Input from Stakeholders.
- Request to ensure the agricultural community is represented among stakeholders.



Transportation Department

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May 18, 2017

TO: Steven Giang, Land Use Department

FROM: Anita Riley, Transportation Planner

RE: Docket #BCCP-16-0001: Boulder County Comprehensive Plan Sustainable Materials Management Element

The Transportation Department has reviewed the above-referenced docket and is in support of the update to the Sustainable Materials Management (SMM) Element. Transportation Department staff finds no conflict between the goals and policies of the proposed update and those found in the Transportation Element. Further, staff finds general agreement between the SMM Element and certain policies of the Transportation Element noted below.

Policy TR 5.05 “[e]ncourage[s] the public use of renewable energy and energy-efficient vehicle technologies and plan[s] for related infrastructure needs” while policy TR 5.03 encourages the use of “resource efficient materials and equipment.” These policies and the purpose of the SMM Element have similar intent and provide support for initiatives that reuse certain resources and materials in infrastructure development in order to avoid landfill placement, or the promotion of alternative fuel vehicles with kinetic to chemical or electric energy conversion. They also support the research and use of other alternative energy sources that may be useful in transportation applications.

Transportation Department staff also recommends that, where possible, SMM programs apply the policies found in the Transportation Element, particularly as they relate to minimizing the reliance on fossil fuels.

This concludes our comments at this time.

From: [Wufoo](#)
To: [#LandUsePlanner](#)
Subject: Public Comment - Docket BCCP-16-0001 [#1]
Date: Thursday, February 16, 2017 10:19:08 AM

Name *	Lisa Knoblauch
Email *	lisa.knoblauch@longmontcolorado.gov
Comment: *	Just a quick request to include environmental justice issues/analysis when siting any new facilities and in the overall impacts of SMM efforts.
Please check box below *	<input type="checkbox"/> I acknowledge receipt of the Open Records Notification

From: [Wufoo](#)
To: [#LandUsePlanner](#)
Subject: Public Comment - Docket BCCP-16-0001 [#2]
Date: Thursday, February 16, 2017 12:29:37 PM

Name *	Kate Bailey
Email *	kate@ecocycle.org
Phone Number (optional)	(303) 444-6634
Address (optional)	 PO Box 19006 Boulder, CO 80308 United States
Comment: *	This is a great revision and Eco-Cycle looks forward to continuing our partnership with Boulder County in advancing sustainable materials management. Attached are a few minor suggestions on the SMM section. Thanks for your leadership!
Attach a File (optional)	 boco_comp_plan_smm_section_ec_suggestions.pdf 310.34 KB • PDF
Please check box below *	<input type="checkbox"/> I acknowledge receipt of the Open Records Notification