

## **BCTT Subcommittee - C.1. Sustainable Materials Management Plan (SMMP)**

### **DRAFT Subcommittee Recommendations to BCTT Work Group**

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## Charge C: Long Term Sustainable Materials Management Plan (SMMP) tasks

- 1) Contracting out;
- 2) Subjects to be covered;
- 3) (Moved from Common Understandings) Benefit-Cost Topics are only Outlined
- 4) (New) Add in Vision 2040 and related County documents with similar from other counties referenced
- 5) Who needs to be at the table beyond those in the County;
- 6) A workplan outline with a timeline for completion;
- 7) Topics covered in recent similar planning efforts across the state; and
- 8) What “lessons learned” should be brought forward in this process.

Includes necessary foundational “common understandings” and protocols needed before beginning the actual planning process.

NOTE: This charge does not include completing the plan. It only includes a discussion of the preliminary scoping to start that planning process.

Possible Amendment for BOC Consideration: If there is sufficient time to complete the original Charge and the following activities, subcommittee to provide recommendations on:

- 1) the most important topics/subjects from the draft of the SWMP Table of Contents;
- 2) the brainstormed options for those topics/subjects; and
- 3) the reasoning, both pro and con, for their selection.

Topics covered in recent similar planning efforts across the state; and Narrative piece describing the comparison framework of multiple counties SWMP in Oregon. Subcommittee members reviewed and discussed pros and cons, differences between frameworks. Committee members identifying key topics to include on Benton County's plan – equity, health impacts, economic opportunities, etc.

#### ADD FINDINGS

- [Materials Management in Oregon 2020 Framework for Action](#)
- [Materials Management in Oregon 2050 Vision and Framework for Action \(2012\)](#)
- [Deschutes County Solid Waste Management Plan \(2019\)](#)
- [Lane County Solid Waste Management Plan \(2019\)](#)
- [Lincoln County Integrated Solid Waste Management Plan \(2004\)](#)
- Marion County
  - [Marion County, Oregon Solid Waste Management Plan Update \(2009\)](#)
  - [Marion County Solid Waste System Assessment Report \(2016\)](#)
  - [Marion County, Oregon Solid Waste and Energy Final Report \(2017\)](#)
- Metro:
  - [Metro 2030 Regional Waste Plan \(2019\)](#)
  - [Waste Prevention & Environmental Services Regional Waste Plan Progress Report \(January 2022\)](#)
- [Tillamook County Comprehensive Materials and Solid Waste Management Plan \(2012\)](#)

As an outcome of the discission reviewing other plans, members organized the topics into an aggregated framework, including the questions below, as well as a “table of contents” in the appendix.

Subjects to be covered;

 Questions to be answered in SMMP

#### **INTRODUCTION**

- What is the context of the plan?
- What are the purpose and goals of the plan?
- What issues are addressed by the plan, and what issues are excluded?
- What is the new approach to managing waste: Sustainable materials management framework vs. Solid Waste management framework?
- How does this plan lead with equity?
- What are the Values, principles, and vision of the plan?
- How do these values translate to measurable criteria for evaluating and analyzing the full life cycle impacts of materials and the management system?

- What are the Goals and actions of the plan across the material lifecycle, including Shared prosperity, Product design and manufacturing, Product consumption and use, Product end-of-life management, and Disaster resilience?
- How do readers navigate the plan?
- How does the county measure progress on the plan?
- How will Implementation, compliance, and amendments to be plan work?
- What are the Roles and responsibilities of the various agencies and stakeholders?
- What are the state and local requirements?
- What is the management planning process?
- How is stakeholder input used in the planning process?

#### **CLIMATE CHANGE**

- What climate change policies impact materials management?
- What materials management practices impact climate change?
- What are the Waste stream impacts from climate change policy/shifts?
- What are the Social, Political, Legislative Dimensions of climate change as they relate to materials management?
- What are the possibilities for transition assistance from state and federal initiatives addressing climate change related to disposal alternatives?

#### **LIFE CYCLE IMPACTS OF MATERIALS**

- What is the Scale of impacts ( Regional, state, national)?
- What are the full lifecycle/Net environmental impact of materials/systems?
- Which materials are most impactful?
- Which Disposal methods are most impactful?
- What are the Impacts of generation sources (industries, large quantity generators)?

#### **BACKGROUND AND WASTE STREAM ANALYSIS**

- what are the Characteristics of the Planning Area?
- What is the Description of the Materials Management System?
- What are the community impacts from the materials management system?
- What is the Summary of Annual Solid Waste Generation across Benton county watershed (disposal and recovery)?
- What are the Current and Projected Waste Stream Composition and Quantities?
- What is the waste stream generation by economic sector/industry?
- What unique waste streams exist in Benton County?
- Where compared to waste management hierarchy is Benton County?
- What is the Waste Stream Generation Forecast, including Economic, environmental, and material trend factors?

### **WASTE PREVENTION/REDUCTION/ REUSE AND RECYCLING ANALYSIS**

- What are the Existing Waste Reduction and Reuse Programs, their effectiveness, and needs and opportunities?
- Equity and livability costs/impacts? How equitable are the current waste/recycling/prevention services provided in Benton County to traditionally underserved populations and all communities, and what are the standards to strive for?
- Can we foster legislation to encourage building codes that support recycling capabilities and other sustainable materials use in construction? Can we require a level of waste reduction and re-purposing of building materials and demolition debris?
- What is the most impactful approach to Construction and Demolition materials and Deconstruction?
- What are the Alternatives for Increased Waste Reduction, Reuse, and Recycling?
- What are the Potential impacts/benefits of utilizing alternative options, and What is needed to accomplish effectiveness?
- How do Recommendations from Advisory Groups and Public impact options?
- What is the Analysis and recommendations for policy as related to Increased Waste Reduction, Reuse, and Recycling?
- What are Options for supporting circular economy?
- What are Options for integrating extended producer responsibility?

### **RECYCLING AND MATERIALS PROCESSING**

- What are the Existing Collection and Processing services and facilities?
- How is Food Waste – Organics treated?
- What are the Needs and Opportunities?
- What are the Alternatives for Processing Recyclable Materials, Sorting Technologies and MRF options?
- What are the Proven vs. Unproven alternatives?
- What are the Recommendations for Collection and Recycling/Processing?
- How can we encourage local construction companies to provide recycling facilities for tenants with the use of building codes, subsidies or penalties to encourage responsible construction that will continue to be viable in the future?

### **WASTE COLLECTION AND TRANSFER**

- What is the Regulatory Framework?
- What is the Local Authority?
- What are the Existing Collection Services?
- What is the Commercial Waste Collection approach?
- What is the current Transfer Station Operation Approach?
- What are the Waste and Vehicle Volumes to Each recycling depot and collection event?
- How are Unique wastes collected
- What are the transfer station Facility benefits and costs related to disposal options?
- What are Other Operation Related Requirements?
- What are Collection Considerations for Specific Wastes?

- What are the Needs and Opportunities for collection and transfer services?
- How to Increase Commercial Waste Collection of Recyclable Materials?
- What are the options, benefits, and costs of Regional Intermodal transfer station(s)?
- What are the Comparative costs of landfilling vs. waste to energy vs. recycling?
- What is the Comparison of different waste disposal and material management governance models?
- What European/Global Strategies to Consider?
- What options are there for Multiple franchised collection service providers?
- Can the issues of a franchise permit for an intermodal transfer station be compliant with BC 23.220 by a qualified third party compliant with BC 23.210 (1) (2), or
- b. Can the intermodal transfer station be enjoined with the current Holder (hauler) franchise agreement (discretionary), or
- c. Can the intermodal transfer station be enjoined with the current disposal site agreement party (discretionary)?

#### **ALTERNATIVE TECHNOLOGIES AND SOLID WASTE DISPOSAL**

- What are the alternative waste technologies available to lessen or replace landfilling?
- What options are there for material Flow Control?
- What are the Waste Disposal Projections?
- What are the Needs and Opportunities?
- What are the Alternatives and Evaluation?
- What are the Alternatives for Municipal Solid Waste (MSW) Disposal?
- What are the options for Mixed Waste Processing?
- What is the Technology Summary?
- What is the Evaluation of Options?
- What are the Findings and Recommendations?
- What are Disposal methods are utilized in Benton County and elsewhere – slash burning, open burning, etc. and what are their impacts?
- What means (funding, regional collaborations, etc.) are necessary to bring these technologies into Benton County or the region?

#### **HAZARDOUS WASTE**

- What is the Existing Collection and Processing system?
- What are the Collection and Processing Services?
- What are the Processing/collection Facilities?
- What are the Needs and Opportunities?
- What are the Alternatives?
- What are the Recommendations for Collection /Processing services and facilities?

#### **LANDFILL DISPOSAL OPTIONS**

- What is the county authority for waste disposal?

- What is the description of the existing landfill disposal system/process, and what are the pros and cons?
- What are the Waste Stream Projections
- What are the Projection Scenarios - climate change, regulatory environment, costs, etc.
- What is the Landfill Lifespan
- What is the Env. Impact Assessment of the landfill?
- What are the Needs and Opportunities?
- What are the landfill Disposal Options, including Long-Haul Waste to Out-of-County Landfills and alternatives?
- What are the waste disposal recommendations?
- What are the true environmental impacts of landfilling for Benton County? Especially: what is the greenhouse gas footprint of the landfill? What do these impacts look like when projected into the future?
- What are the true economic costs and benefits of landfilling for the County? What do these costs and benefits look like when projected into the future?
- What are the various paths that the County can take to transition away from landfilling at Coffin Butte Landfill?
- What means (funding, collaborations, etc.) are necessary to make to embark upon these paths?
- Are there landfills other than Coffin Butte Landfill that should be considered? What are the tradeoffs (economic, environmental)?
- What is the path forward that balances these competing interests: reducing waste generation/increasing recovery vs. economic interests of landfilling?
- What is the risk assessment of the landfill? How can the County best manage these risks?
- What is the long-term outlook for the landfill? What is its best closure plan? What measures should be in place to manage the landfill's impacts after closure?

#### **ADMINISTRATION AND ENFORCEMENT**

- How can we use government grants and programs that are being set up to combat the effects of climate change to create a truly unique and innovative program that makes the best use of the resources available in our county and highlights our most valuable assets to enable our residents to 'be their best selves' in terms of living a sustainable life?

#### **GENERAL**

- Which options for addressing the above issues best reflect the County's (and the State's) stated values?
- How are each of the plan recommendations centered in equity?
- What are the details of the analysis, investigation/evaluation, and recommendations for each topic?
- How do we support and extend the Oregon 2050 Vision for Materials Management?
- How do we support Oregon SB 582, the [Plastic Pollution and Recycling Modernization Act](#), in our county?

- What is a practical, economically feasible, and innovative path for our county to move from where we are today to a responsible and sustainable community?
- How can we use our unique assets and any economic benefits we might glean from our county natural resources? Can we use our rivers and forests to foster more sustainable local practices?

(New) Add in 2040 Thriving Communities Initiative and related County documents with similar from other counties referenced

Highlight 2040 findings, examples and goals from other documents

KR: The Benton County Sustainable Materials Management Plan should be developed within a Sustainable Materials Management framework, reflecting full lifecycle impacts. The following information should be considered during the development of a Sustainable Materials Management Plan:

1. 2040 Thriving Communities Initiative and our communities' Core Values
2. National, State and local goals, vision documents, plans, policies, ordinances, etc. relating to materials management and climate change
3. Examples of values and goals expressed in state and local jurisdiction materials management plans
4. Long-term strategies (to 2040) with short-term action items (5 years or less)

(Moved from Common Understandings) Benefit-Cost Topics are only Outlined

Describe how they may have been covered in SMMP doc. These are more of a list of pros and cons (Common understanding of topics). This aspect is baked into the frameworks discussed – sustainable materials management definition. Incorporating life cycle analysis approach. This satisfies “Benefit-Cost Topics are only Outlined”, which is understood in general terms, not economic analysis.

- SMMP content should include cost-benefit analyses in the evaluation and recommendations of major topics.
- Circular economy costs/benefits should be addressed in the SMMP. Vs. sustainable, vs. cradle to cradle, etc. Description of different approaches. Flagged as key in this document.
- The SMMP should clarify Benefit-Cost perspectives being addressed through an equity analysis, including:
  - Financial cost impacts associated with materials management and outcomes
  - A perspective that goes beyond landfilling
  - Equity of circular economy, how it engages and impacts consumers (product/material oriented)
  - “who’s at the table” list of stakeholder perspectives



What “lessons learned” should be brought forward in this process.

Summary of – Staff invited members of various jurisdictions to share their experiences and processes in solid waste/materials management. KEY FINDINGS – summarizing that meeting

In addition, this is what the group recommends.:

- Feedback from other counties who have developed materials management plans
- International examples of landfill alternatives (such as Germany, Finland, Sweden, and South Korea)
- Examples from California and Washington
- Lessons from past Benton County experiences with contracts with Republic, engagement,
- Lessons from individual processes vs. integrated systems
- Workgroup process and its findings

Who needs to be at the table\* beyond those in the County\*\*;

Subcommittee discussed and identified stakeholders that we felt needed to be included in various aspects of the SMMP process. These were presented to the full work group, and their feedback was incorporated into the list.

Local and state agencies, non-profits, advocacy groups, communities, equity and health advocates, key private sector companies and industries.

#### GROUP THESE

- DEQ
- Economic Development Office County/Corvallis
- Small Cities
- Neighboring counties
- Community Members
- Waste generation sources (jurisdictions) – how much weight should non-county members be given? Economy of scale?
- Local Advocacy groups (Willamette valley) – sustainability coalition, river keepers, watershed councils
- National Advocacy groups
- Equity, Diversity, Inclusion coordinator
- Low income populations, multi-family residents
- Larger industry groups
- Large waste generators

- Building industry - USGBC
- Architecture (AIA) American Institute of Architects
- Designers – various materials, products, etc
- OSU – Business/Administration
- OSU – Innovation, science around materials

\*at the table - meaning who to be consulted for feedback through the development of this plan, discuss regional coalitions/partnerships/collaboration

\*\*County government/staff

### A workplan outline with a timeline for completion;

Staff used Deschutes county RFP as an example and starting point for this discussion. Subcommittee brainstormed different components that they concluded should be in the RFP process and hiring of a consultant. The recommendations are as follows:

- RFP Development
  - RFP Development feedback opportunity from Technical Advisory Committees (TAC) and Community Advisory Committee (CAC)
- RFP Release/Announcement
  - Distribution to allow time for it to be posted to various trade groups, equity-minded sharing to underrepresented groups, international-minded
- Webinar – interact *live*, field questions, make presentation
- Pre-proposal/bid/RFP Q&A opportunity for prospective applicants – possible to make this element required/mandatory
  - Early in the RFP release period
- Opportunity for respondents to express interest as primary or sub-contractors
- RFP Response Due Date
  - At least 4 weeks time that the RFP is available prior to application dead line.
- Review committee to shortlist firms
  - 2 weeks
- Shortlisted firms awarded additional time for presentation with optional funding for expected presentation/deliverables
  - Additional month (within 1 week if no work product/report is due, just an interview).
- Evaluation and Selection Timeline
  - Evaluation team review period
    - Including Technical Advisory Committees (TAC) and Community Advisory Committee (CAC) review opportunity
  - Presentations/Interviews
- Develop work plan further with contractor selected
- Length of overall project
- Plan Development
  - Technical Advisory Committees (TAC) - Vet technical information from consultant, get to a place of consensus

- Community Advisory Committee (CAC) - Review in areas of disagreement for technical experts
- SWAC/DSAC advisory role during the development of the plan
- General public meetings – number of meetings

### Contracting out;

KF: There are a lot of topics being recommended, likely beyond the capability of any single party.

The subcommittee recommends:

KR: Benton County should use an RFP to find consultant(s) and/or other stakeholder groups to assist Benton County in developing a Sustainable Materials Management Plan.

KR: Multiple parties could be involved

### *Qualities of a successful applicant should include:*

- Technical Knowledge and Abilities
  - Demonstrated familiarity with international examples of reduced or eliminated reliance on landfilling.
  - Conversant in the design and implementation of these alternative waste technologies, be able to evaluate their suitability for use in Benton County, and be able to map out rough timelines for their deployment
  - Demonstrate their ability to design a well-imagined and resilient Plan that can assess the likelihoods of such climate-impacted events as wildfires, floods, population migrations, unprecedented disruptions to energy and transportation infrastructure, and so on
  - Show their ability to map out the County's changing social, economic, environmental and regulatory landscapes, and ability to develop a Plan to navigate the County through them
  - Ability to show Economic/Env/Social impacts, and comparative analysis
  - Be able to suggest programs and ways in which the community could participate, and measure their participation
  - Be able to answer (most, almost all) questions (below table of contents) – RFP process, applicant
  - Be able to map out the social, ethical and environmental landscape of climate change



### ● Experience

- Experience with inclusivity, outreach campaigns
- Experience in such community engagement.
- Have some experience with large university communities
- Experience with jurisdictions with non-standard waste streams – like high-tech industries, labs, forestry

- Experience in analyzing policy impacts of materials
- Have experience in SMMP development in the past (traditional and innovative)
- Demonstrated experience with jurisdictions like Benton County (rural areas for example, industries)
- Demonstrated experience showing Economic/Env/Social impacts, and comparative analysis
  
- Values
  - Show their understanding of the importance of the values listed in Benton County's "Core Values" and the State of Oregon's "Materials Management in Oregon 2050 Vision and Framework for Action," and will describe how these values will permeate the process and the product of the SMMP.
  - Be able to keep 2040 Thriving Communities Initiative core values in mind during the entire process of formulating an SMMP plan, and trace each recommendation back to the values expressed in the Initiative
  - Be able to lay out innovative pathways for the County to reduce negative environmental impacts in keeping with county and state values
  
- Work Plan and Process
  - Able to incorporate measures into its Planning process and product that will help the County respond to various trends affecting current and projected waste streams
  - incorporate a map of social, ethical and environmental landscape of climate change into its Planning process and product
  - Able to allow and encourage community involvement in the development process, and demonstrated experience
  - Ability and willingness to communicate with the community
  - Be able to engage with the community throughout this process with any innovative measures on how this can take place, either virtually or with town hall type gatherings
  - Look at the unique qualities of our community, not a once size fits all plan
  - Will be able to incorporate these evolving Social, Political, Legislative Dimensions around climate change into its Planning process and product
  - Consider materials and links to BCTT SMMP Subcommittee work
  - Early stage outreach to community, including students, multi-family residential, single-family residential, rural residential, businesses, local builders, developers
  
- Plan Content
  - Will delineate paths for the County to establish clearer knowledge about and control over these environmental impacts (methane and other GHGs) by its franchisees, and incorporate these responsibilities into its Planning process and product
  - SMMP document to answer (most, almost all) questions (below table of contents)
  - Should be able to articulate a clear narrative or set of scenarios that describe how the Plan will be a resilient guide for the future

### *RFP Development*

- Provide details about Workgroup process and its findings to RFP applicants
- Prioritize topics, adding additional topics that are important to consider
- Communicate accurate priorities to applicants
- Members of this BCTT SMMP subcommittee should be offered to participate in subsequent stakeholder group meetings for RFP development and review
- SWAC/DSAC should have an advisory role during the development of the plan
- RFP Release/Announcement should:
  - communicate an expectation that this plan can be approached by teams (multiple firms), instead of just single firms
  - Put guidelines on the size/length of proposals and sections of proposals
  - Be distributed to allow enough time for it to be posted to various trade groups, equity-minded sharing to underrepresented groups, internationally minded outlets
- The county should share with the public the various steps of the process, making updates available, and demonstrating transparency (Cross-referencing subcommittee E.1. work)
- The RFP should demonstrate flexibility through allowing further work plan development after applications are reviewed and accepted
- Length of overall project:
  - Can be heavily impacted and defined by the level of public interaction/stakeholder engagement included in the project, and by requirements from the county
  - R&D from consultant can occur in the background
  - Applicants should include various scope/cost options for 1 year, 2 years, and 3 year timelines.
  - The report should be released in sections, based on timeline and content priorities.
- This RFP process should include Technical Advisory Committees (TAC), which Vet technical information from consultant, get to a place of consensus, and Community Advisory Committee (CAC), which Review in areas of disagreement for technical experts.
  - SMMP Sub-Committee members should be included in the CAC.

### *Proposal Format, Content, Review And Selection<sup>1</sup>*

Proposal must contain the following information, with parameters around each of these items in terms of document length:

- a) Cover Letter (P/F).
- b) Project Team Experience and Qualifications.
  - a. Experience, Capabilities and Resources of the Proposer. 25 points.

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<sup>1</sup> Source of some section content: [Deschutes County 2017 SWMP RFP](#)

- b. Experience of project team members. 25 points.
- c. Experiences with other SMMP in the last 5 years
- c) Understanding of Project.
- d) Approach to the Scope of Work. 25 points
  - a. Fully and completely address all of the questions listed
- e) Cost Proposal (based on cost matrix)
  - a. Reasonableness of the Cost Proposal. 15 points
  - b. Various options based on timeline and scope
  - c. Review committee is not given the cost information until initial review is complete
  - d. Important consideration, but not the most important consideration
- f) Project Schedule. 10 points
- g) Social/environmental responsibility
  - a. Use county values as evaluation criteria
  - b.
- h) References.
- i) Interview/presentation (how important compared to other criteria?)
  - a. Separate scoring criteria/process for the interview

An evaluation team consisting of County staff and members of the stakeholders group should determine the best proposal deemed most qualified based on the above criteria.

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Appendix A: Drafted Table of Contents Outlining Elements of Recommendations

<b>TOPICS</b>
<b>INTRODUCTION</b>
Context of the Plan
Plan Purpose and Goals
Issues Addressed by the Plan (include discussion of exclusions to the Plan)
A new approach to managing waste: Sustainable materials management framework vs. Solid Waste management framework
1) Addressing the full life cycle of materials
2) Moving From Where We've Been to Our New Vision (provide timeline)
3) The life cycle of products and materials
4) The garbage and recycling system
5) Leading with equity
Environmental impacts of products and materials
1) Measuring environmental impacts (Full Life Cycle Analyses)
2) Reducing our impact
Values, principles, and vision
1) Overview
2) Values
3) Principles
4) Vision
Goals and actions
1) Overview
2) Navigating the action tables
3) Shared prosperity
4) Product design and manufacturing
5) Product consumption and use
6) Product end-of-life management
7) Disaster resilience
Measuring progress
1) Plan Indicators

**TOPICS**

Implementation, compliance, and amendments

- 1) Overview
- 2) Roles and responsibilities
- 3) The County's Role in Solid Waste Management Planning and Operations
- 4) Oregon statutory requirements
- 5) Requirements for local governments

Address upcoming legislation, Oregon Recycling Modernization Act

- 6) Plan implementation
- 7) Plan oversight

Legal foundation and policy guidance

- 1) Overview
- 2) Legal foundation
- 3) Policy guidance
- 4) Plan Organization

Management Planning Process And Summary

- 1) Building On Previous Planning Work
- 2) Management Planning Process
- 3) Public And Stakeholder Input
- 4) Common Themes Of Public And Stakeholder Input
- 6) Valuable Partnerships

Local Economic Development

Opportunities for innovation and entrepreneurship

**CLIMATE CHANGE**

Policy Impacts

Waste stream impacts from climate change policy/shifts

Social, Political, Legislative Dimensions

**LIFE CYCLE IMPACTS OF MATERIALS**

**TOPICS**

Introduction

Scale of impacts ( Regional, state, national)

Which materials are most impactful

Which Disposal methods are most impactful

Impacts of generation sources (industries, large quantity generators)

Method and recommendations for ongoing analysis

**BACKGROUND AND WASTE STREAM ANALYSIS**

Introduction

Characteristics of the Planning Area

Description of the Solid Waste Management System

Analysis of community impacts from solid waste management system

Summary of Annual Solid Waste Generation

- 1) Refuse Collection
- 2) Transfer Stations
- 3) Disposal Facilities
- 4) Recycling Facilities

Current and Projected Waste Stream Composition and Quantities

- 1) Definition
- 2) Historical Solid Waste Data
- 3) Waste Stream Composition
- 4) Waste stream generation by economic sector/industry
- 5) Unique waste streams – timber wastes ex.
- 6) Disposal methods – slash burning, open burning, etc. and their impacts
- 7) Waste Stream Generation Forecast, including Economic, environmental, and material trend factors

**WASTE PREVENTION/REDUCTION/ REUSE AND RECYCLING ANALYSIS**

Introduction

Background

Existing Waste Reduction and Reuse Programs

- 1) Waste Reduction Programs, including food

**TOPICS**

- 2) Reuse Programs
  - 3) Recycling Programs
  - 4) Composting
  - 5) Needs and Opportunities
- Construction and Demolition materials and Deconstruction

Alternatives for Increased Waste Reduction, Reuse, and Recycling

- 1) Enhance Current Promotion/Education/Support Services
- 2) Target Certain Types of Generators or Waste Streams to Increase Diversion by Expanding Basic Services
- 3) Targeted high impact materials for Reduction, Reuse, and Recovery

Sorting at point of generation

- 4) Target Recovery of New Materials
- Potential impacts/benefits of utilizing alternative options. How do these impact Benton County? What is needed to accomplish effectiveness?
- Analysis of Recommendations from Advisory Groups and Public
- Analysis and recommendations for policy as related to Increased Waste Reduction, Reuse, and Recycling
- Options for supporting circular economy
- Options for integrating extended producer responsibility
- 5) Recommendations


**RECYCLING AND MATERIALS PROCESSING**

Background and Existing Conditions

- 1) Existing Collection and Processing
- 2) Collection and Processing Services
- 3) Processing/collection Facilities
- 4) Yard Debris and Wood Waste Process Facilities

Food Waste - Organics

**TOPICS**

 5) Needs and Opportunities  
Alternatives

1) Processing Recyclable Materials

Sorting Technologies and MRF options

Proven vs. Unproven alternatives

2) Recommendations for Collection and Recycling/Processing

**WASTE COLLECTION AND TRANSFER**

Background and Existing Conditions

1) Regulatory Framework

2) Local Authority

3) Existing Collection Services

4) Commercial Waste Collection

5) Transfer Station Operation Approach

6) Waste and Vehicle Volumes to Each Transfer Station

7) Recycling at Transfer Stations

Unique wastes

Transfer Station Descriptions

1) Facility Needs

2) Disposal at a New In-County Landfill

3) Disposal at an Out-of-County Landfill

4) Other Operation Related Requirements

5) Collection Considerations for Specific Wastes

Needs and Opportunities

1) Collection Services

2) Need to Implement Transfer Station Capacity

Alternatives and Evaluation – Analysis and Investigation

1) Increase Commercial Waste Collection of Recyclable Materials

2) Develop Transfer Stations Capacity

Regional Intermodal transfer station

Comparative costs of landfilling vs. waste to energy vs. recycling



<b>TOPICS</b>
Comparison of different waste disposal and material management governance models
3) Recommendations
European/Global Strategies to Consider
Multiple vendor options
<b>ALTERNATIVE TECHNOLOGIES AND SOLID WASTE DISPOSAL</b>
Background and Existing Conditions
1) Introduction
2) Flow Control
3) Existing Landfill Disposal
Waste Stream Projections
1) Waste Disposal Projections
2) Needs and Opportunities
Alternatives and Evaluation
1) Alternatives for Municipal Solid Waste (MSW) Disposal
2) Mixed Waste Processing
3) Technology Summary
possibilities for transition assistance from state and federal initiatives addressing climate change
4) Evaluation of Options
5) Findings and Recommendations
<b>HAZARDOUS WASTE</b>
Background and Existing Conditions
1) Existing Collection and Processing
2) Collection and Processing Services
3) Processing/collection Facilities
5) Needs and Opportunities
Alternatives
1) Collection and Processing services and facilities
2) Recommendations for Collection /Processing services and facilities
<b>LANDFILL DISPOSAL OPTIONS</b>
Background
County Authority for Waste Disposal
Existing Landfill Disposal
And list pros and cons of it

<b>TOPICS</b>
Waste Stream Projections
Projection Scenarios - climate change, regulatory environment, costs, etc.
Landfill Lifespan
Env. Impact Assessment
Needs and Opportunities
Disposal Options
1) Long-Haul Waste to Out-of-County Landfills
2) Alternative Options
3) Evaluation of Disposal Options
4) Recommendations
<b>ADMINISTRATION AND ENFORCEMENT</b>
Introduction
Background and Existing Conditions
1) Solid Waste Administrative Agencies
2) Solid Waste Advisory Council (SWAC) and Disposal Site Advisory Committee (DSAC)
3) Solid Waste Enforcement
4) Financing and Funding Sources
5) Economic footprint
6) Economic impact
7) System revenue
Monitoring plan progress
Ensuring Policies are followed
County community and business engagement
What grant opportunities, and how can county leverage them?
Needs and Opportunities
1) Management Considerations
2) Financing and Funding Considerations
3) Management Issues
Structure of Solid Waste-related governmental and decision-making bodies
Policy Development
Alternatives and Evaluation
Basis for deciding franchise contracts; annual renewals; capital costs
1) Administration/Management

**TOPICS**

2) Finance and Funding

3) Recommendations

**CONCLUSION**

**RESOURCES**

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