

**Appendix C.1: Subcommittee Reports: Sustainable Materials Management Plan (SMMP)**

**Sustainable Materials Management Plan (SMMP)**

**C.1. Subcommittee**

**DRAFT 3-13-23**

**Table of Contents**

[Table of Findings](#) ..... 3

[Table of Recommendations](#) ..... 4

[Charge C: Long Term Sustainable Materials Management Plan \(SMMP\) tasks](#) ..... 7

[Introduction](#) ..... 8

[Development of Sustainable Materials Management Plan \(SMMP\)](#)..... 14

[Topics covered in recent similar planning efforts across the state](#) ..... 14

[Subjects to be covered](#) ..... 15

[Questions to be answered in SMMP](#) ..... 15

[\(New\) Add in 2040 Thriving Communities Initiative and related County documents with similar from other counties referenced](#) ..... 20

[\(Moved from Common Understandings\) Benefit-Cost Topics are only Outlined](#)..... 20

[What “lessons learned” should be brought forward in this process](#)..... 20

[Who needs to be at the table\\* beyond those in the County\\*\\*](#)..... 22

[RFP Process](#) ..... 24

[A workplan outline with a timeline for completion](#) ..... 24

[Contracting out:](#) ..... 25

[Qualities of a successful applicant should include:](#) ..... 25

[RFP Development](#) ..... 27

[Proposal Format, Content, Review And Selection](#) ..... 28

[Conclusion](#) ..... 29

[Appendix A: Drafted Table of Contents Outlining Elements of Recommendations](#) ..... 30

## Key Findings

**SMMP F-1:** Many Sustainable Materials Management Plans (SMMPs) and related Request For Proposals (RFP)s have been formulated, executed, and are in use in Oregon and beyond.

**SMMP F-2:** The charges of the SMMP Subcommittee are intimately related to and should be embodied when scoping the necessary tasks to start a Long-Term Sustainable Materials Management Plan process.

**SMMP F-3:** Contracting-out processes often include a Technical Advisory Committee (TAC), which vet technical information in the RFP, and a Community Advisory Committee (CAC), which review the RFP from the community perspective. Institutions of higher learning, including Oregon State University has a large population of faculty, faculty emeriti, staff and students that are subject matter experts in many of the technical areas that the SMMP will address.

**SMMP F-4:** The overall length of the project can be heavily impacted and defined by the level of public interaction/engagement included in the project. The consultant may help define the scope of public engagement, including engagement in rural areas of the county and in communities outside the county.

**SMMP F-5:** There are aspects of the work to be performed that are technical in nature or lend themselves toward extensive research, that the consultant may conduct at the same time as public engagement. In order to expedite the process, certain procedural elements can be done concurrently. The timeline can generally be defined throughout the process.

**SMMP F-6** – The SMMP aims to reduce the full lifecycle impacts of materials management practices in Benton County and where other jurisdictions' practices overlap with Benton County. Addressing only materials from Benton County would have limited impacts compared to that of all of the materials from neighboring counties, as Benton County's waste contribution to the landfill is relatively small. SMMPs are not specifically about landfills, but about materials management across the full lifecycle of materials, including addressing impacts from production, transportation, use, reuse, recovery, and disposal.

**SMMP F-7** - Benton County has limited control over the waste management practices of the counties that emplace the vast majority of the annual landfill waste intake, and the volume of waste material they haul to Coffin Butte Landfill, however, the county and its infrastructure is impacted by other counties' waste stream contributions to facilities within Benton County (via Coffin Butte Landfill, Pacific Region Compost, and transportation methods through the county).

**SMMP F-8** – The 2040 Thriving Communities Initiative identified our communities' Core Values and has been adopted by Benton County government which is used as a benchmark or lens for initiatives such as the Benton County SMMP.

**Commented [RD1]:** From Ryan: Regarding the Key findings/Key results – I am struggling to add additional content or comments – I really think we have a very good chunk of work completed and now it is the refining of it/simplification of it (less is more).

**Commented [RD2]:** Missing "any beyond"

**Commented [RD3]:** Notes from 2/23 WG meeting:  
- Add context - timeline.  
- Consider public engagement outside of the county  
- Consultant would help define  
- Consider making recommendation to include rural areas of the county

**Commented [RD4]:** The purpose of this finding, in part, was to address confusion about what an SMMP scope would be. Specifically, addressing that an SMMP is not specifically about the landfill, but about materials management across the full lifecycle. I recommending including some language like "SMMPs are not specifically about the landfill, but about materials management across the full lifecycle of materials, including addressing impacts from production, transportation, use, reuse, recovery, and disposal."

**Commented [RD5R4]:** Added this idea

**Commented [RD6]:** This is not quite accurate (88% in 2020), and it is not constant. I recommend removing and replacing with sometime more general for accuracy.

**Commented [RD7]:** Sean, is this an accurate description?

## Key Recommendations

**SMMP R-1:** Benton County Sustainable Materials Management Plan should be developed within a Sustainable Materials Management framework, reflecting full lifecycle impacts. The development of a Sustainable Materials Management Plan should consider, 1) the 2040 Thriving Communities Initiative and our communities' Core Values, 2) national, State and local goals, vision documents (DEQ's [Materials Management in Oregon 2020 Framework for Action](#)), 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, and 4) long-term strategies (to 2040) with short-term action items (5 years or less).

SMMP R-2 – Benton County should use the 2040 Thriving Communities Initiative as a high-level lens to frame our communities' Core Values in developing the SMMP.

**SMMP R-3:** The SMMP should not just be about how Benton County can better manage materials, but to also address how to approach inter-county collaboration from a regional perspective. The RFP should indicate the need for researching and exploring opportunities for a regional multi-county approach to achieve the goals of sustainable materials management. RFP firms with experience with Oregon's materials management legislation, policies and other county materials management plans may have the capability to address this need.

**SMMP R-4:** Counties impacting Benton County through their materials management practices (including by contributing materials to Coffin Butte Landfill) should have an SMMP in place. The SMMP should have a perspective on how to strategize this.

**SMMP R-5:** SMMP content should incorporate the sustainability of materials management strategies/tactics. The result of the process should give us a method of measuring costs and benefits to evaluate the impact on economic, social, and environmental indicators. Specific goals should be included of how materials in Benton County can fit within a circular economy, cradle-to-cradle, or similar framework.

**SMMP R-6:** The SMMP should clarify Benefit-Cost perspectives being addressed through an equity analysis, including, 1) financial cost impacts associated with materials management and outcomes, 2) the equity of circular economy, how it engages and impacts consumers, 3) a perspective that goes beyond landfilling, and 4) a "who's at the table" list of stakeholder perspectives.

**SMMP R-7:** Bring "lessons learned" into the process from other sources, including international examples as well as other counties, lessons from past Benton County experiences, and West Coast states. See full report for more sources.

**SMMP R-8:** Beyond those in the County, a wide assortment of stakeholders should be brought to the table. Stakeholders include community members, advocacy groups, businesses and industry, local and state government, and resources for innovation. See report for full stakeholder list. The consultant should provide recommendations based on analysis and extensive outreach and engagement with community stakeholders from the "who should be at the table" list. These stakeholders should represent a broader area than Benton County.

**Commented [RD8]:** Notes from 2/23 WG meeting:  
- highlight 2040 more

**Commented [RD9R8]:** Notes from 2/23 WG meeting:  
- what is implementation planning, what does it take to get from point-to-point?  
- add specific work plan

**Commented [RD10R8]:** Notes from 2/23 WG meeting:  
- highlight unique aspects of Benton County.

**Commented [RD11R8]:** Perhaps this would be added to the demographics section of SMMP, not necessarily a finding.

**Commented [RD12R8]:** Good plans have a breakdown of goals, action items, priorities, and recommendations for those items.

**Commented [RD13]:** Add comments from Planning Commission, SWAC/DSAC discussion.

**Commented [RD14]:** Notes from 2/23 WG meeting:  
- remove aspirational

**Commented [RD15]:** Notes from 2/23 WG meeting:  
- highlight international examples.

**SMMP R-9:** Benton County should use an RFP to find consultant(s) for developing a Sustainable Materials Management Plan.

**SMMP R-10:** The SMMP subcommittee researched other jurisdiction's plans, compared and aggregated a list of subjects, and the SMMP should evaluate and address the subjects listed in the full subcommittee report, answering the 117 questions listed as RFP priorities allow, and include recommended courses of action.

**Commented [RD16]:** Notes from 2/23 WG meeting:  
- explain in more detail, better highlight here

**SMMP R-11:** Recruitment for the RFP needs to be extensive, and selection of successful proposal should be careful and thorough. Qualities of a successful applicant should include those listed in the full subcommittee report.

**SMMP R-12:** The scope of work for this project is expected to be broad and comprehensive, with specific goals recommended for the County to consider as milestones.

**SMMP R-13:** The RFP development process should: 1) provide details about the Workgroup process and its findings to RFP applicants, 2) prioritize topics, adding additional topics that are important to consider, and 3) communicate accurate priorities to applicants.

**SMMP R-14:** Members of this BCTT SMMP subcommittee should be offered to participate in subsequent stakeholder group meetings for RFP development and review. Benton County's Advisory Committees related to SMMP work should have an advisory role during the development of the plan.

**SMMP R-15:** The RFP Release/Announcement should 1) communicate an expectation that this plan can be approached by teams (multiple firms), instead of just single firms, 2) put guidelines on the size/length of proposals and sections of proposals, and 3) be distributed to allow enough time for it to be posted to various trade groups, shared with underrepresented groups, and internationally minded outlets.

**SMMP R-16:** The County should share the various steps of the process with the public, making updates available, and demonstrating transparency (cross-referencing subcommittee E.1. work).

**SMMP R-17:** The RFP should demonstrate flexibility in allowing further work plan development after applications are reviewed and accepted.

**SMMP R-18:** The SMMP Timeline should allow for extensive public interaction and engagement. In order to expedite the process, procedural elements should be done concurrently as possible. The timeline should generally be defined throughout the process.

**Commented [RD17]:** Notes from 2/23 WG meeting:  
- rephrase as Rec? currently matches finding.

**SMMP R-19:** Applicants should include various scope/cost options for one year, two years, and three-year timelines. The report should be released in sections, based on timeline and content priorities.

**SMMP R-20:** It's important that the SMMP process include extensive public outreach and engagement. In addition, a Technical Advisory Committee (TAC) should vet the consultant's technical work (SMMP development) and a Community Advisory Committee (CAC) to provide more general review. SMMP Sub-Committee members should be included in the CAC. The TAC should include subject matter experts from Oregon State University, and other regional

**Commented [RD18]:** Notes from 2/23 WG meeting:  
- like to see more community engagement than CAC

academic institutions. Many of the subject areas of central importance to the SMMP are characterized by fast-moving science, and a SAC could help the SMMP consultant to navigate to the best available data and knowledge.

[SMMP R-21](#): Proposals contain the following information, with parameters around each of these items in terms of document length. Requested information includes project team experience and qualifications, understanding of the project, approach to the scope of work, cost of the proposal, the project schedule, social/environmental responsibility, and references. Each criteria includes a total set of points the proposal can be awarded. See full report for more information.

[SMMP R-22](#): An evaluation team consisting of County staff and members of the stakeholder group should determine the best proposal deemed most qualified based on the above criteria.

[SMMP R-23](#): The SMMP should emphasize impacts of the results of the RFP on social equity, innovation, to understand and emphasize the upstream aspects of material sustainability, and creative solutions that provide pathways for tangible long-term outcomes.

[SMMP R-24](#): The workplan should include ongoing adaptive management and refinement and include a timeline for completion. The sections of the workplan outline include RFP development and release, a webinar for prospective consultants, a pre-proposal Q&A period, a period for application submittal, and the selection committee to identify shortlisted firms who are given time for additional presentation. The committee then evaluates proposals, selects a consultant, and develops a workplan with selected consultant. See full report for more information.

SMMP R-25: The County should evaluate if it would be in their best interest to have an SMMP in place prior to any major materials management decisions.

SMMP R-26: The county should consider using alternative funding mechanisms, including landfill revenue, to support the SMMP recommendations.

SMMP R-27: A complete materials audit is highly recommended as both a benchmark and a way to measure progress. Benton County should initiate a Waste Audit to characterize more precisely what is in the wastestream of Coffin Butte Landfill. The SMMP consultant can use this audit information when formulating this plan, and there is no up-to-date information specific to the landfill currently available. The benchmark audit should be completed as soon as possible, along with recommendations for follow up audits.

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

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

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.

## Common Terms and Definitions

### What is circular economy?

A circular economy is an economic system where the waste and pollution generated by society is minimized, and resources are conserved and regenerated by reusing and recycling materials and products. It aims to reduce dependency on finite resources, eliminate waste, and create a more sustainable economy. The circular economy model is in contrast to the traditional linear economy, which operates on a "take, make, use, dispose" model.

### What is a sustainable economy?

A sustainable economy is an economic system that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is characterized by the efficient use of natural resources, reduced waste and pollution, and equitable distribution of wealth and opportunities. A sustainable economy prioritizes long-term economic, social, and environmental well-being and aims to balance economic growth with environmental protection, social equality, and preservation of natural resources for future generations.

### What is net zero emissions?

Net zero refers to the balance between the amount of greenhouse gas emissions produced and the amount removed from the atmosphere. It means that the total amount of emissions produced is equal to the amount removed, resulting in no net increase in atmospheric greenhouse gas concentrations.

### What is carbon neutral?

Carbon neutral refers to a state where the amount of carbon dioxide (CO<sub>2</sub>) emissions produced is balanced by an equivalent amount removed from the atmosphere. This can be achieved through reducing emissions as much as possible and balancing any remaining emissions through offsetting activities, such as planting trees or investing in carbon capture and storage technology.

### What is a solid waste management plan?

A solid waste management plan is a comprehensive plan for the collection, transport, processing, and disposal of solid waste, such as household trash, industrial waste, and construction and demolition debris. The purpose of a solid waste management plan is to ensure that waste is managed in an environmentally responsible and sustainable manner, while also considering economic and social factors.

**Commented [RD19]:** John and Sean to review, streamline, etc.

**Commented [RD20R19]:** Medium/High, Important section - DEQ comments that each "Sustainability" category and framework is different. Possibility for abbreviation



The goal of a solid waste management plan is to minimize the environmental impact of waste, reduce the dependence on landfills, conserve resources through recycling and composting, and promote public health and safety.

### **What is a Sustainable Materials Management Plan (SMMP)?**

Sustainable Materials Management (SMMP) plan is a comprehensive approach to managing the entire lifecycle of materials, from extraction of raw materials, through production, use, and disposal, with the goal of reducing their environmental impact. It seeks to conserve resources, reduce waste, and minimize the environmental impacts of materials use, including greenhouse gas emissions, water and air pollution, and habitat destruction.

A SMM plan typically includes the following elements:

1. **Materials Inventory:** A comprehensive inventory of the types and quantities of materials used in a community, including data on generation, use, and disposal.
2. **Materials Reduction:** Strategies to reduce the amount of materials used, such as reducing packaging, promoting reuse, and designing products for recyclability.
3. **Materials Recycling:** Programs and policies to promote recycling and composting, including collection systems, processing facilities, and market development.
4. **Materials Disposal:** Strategies to minimize the environmental impacts of waste disposal, including reducing the use of landfills, promoting the use of incineration, and new technologies for waste conversion.
5. **Monitoring and Evaluation:** A plan for monitoring and evaluating the effectiveness of the SMM plan and making changes as necessary to ensure sustainability.

The goal of an SMM plan is to create a more sustainable and environmentally responsible materials management system, reducing waste, conserving resources, and minimizing environmental impacts.

### **What is an engineered sanitary landfill?**

An engineered sanitary landfill is a type of landfill specifically designed and constructed to meet technical and regulatory standards for the safe and efficient disposal of solid waste. The design and construction of an engineered sanitary landfill typically involves several key components, including:

1. **Base and bottom liner systems** to prevent the release of waste into the environment
2. **Collection and removal systems** for leachate (liquid that has filtered through waste)

3. Gas collection and control systems to minimize the release of landfill gas (primarily methane) into the atmosphere
4. Final cover systems to prevent the escape of waste and landfill gas, and to promote drainage and evaporation of leachate.

The goal of an engineered sanitary landfill is to manage waste in a way that minimizes the risk to human health and the environment and provides a long-term solution for waste disposal.

### **What are landfill alternatives?**

There are several alternatives to landfills for waste management, including:

1. Incineration: burning of waste to convert it into ash and gases
2. Recycling: process of collecting, sorting, reusing and reprocessing materials into new products
3. Composting: biological decomposition of organic matter to produce a nutrient-rich soil amendment
4. Anaerobic digestion: breaking down organic matter in the absence of oxygen to produce biogas
5. Mechanical biological treatment: a combination of mechanical processes (e.g. sorting, shredding) and biological processes (e.g. composting, anaerobic digestion) to treat waste
6. Waste-to-energy (WTE) plants: facilities that burn waste to generate electricity or heat
7. Solid waste gasification is a process of converting solid waste into a gas called synthesis gas (or "syngas") through high-temperature heating in the absence of oxygen.
9. Plasma gasification is a thermal waste treatment technology that uses high temperature plasma to convert waste into a syngas (synthesis gas), which is composed mainly of hydrogen and carbon monoxide. This syngas can be used as fuel for electricity generation or further processed into chemicals and fuels.

Each alternative has its own advantages and disadvantages and the best option will depend on factors such as the type of waste, local infrastructure and resources, and government regulations.

### **What is an intermodal transfer station for solid waste and recyclables?**

An intermodal transfer station for solid waste and recyclables is a facility where solid waste and recyclable materials are temporarily stored and transferred from one mode of transportation (such as a truck) to another (such as a train or barge) for disposal or processing. The purpose of this type of transfer station is to provide an efficient and cost-effective way to manage and

dispose of solid waste and recyclables, and to minimize the impact of waste transportation on the environment.

**What is public policy of Benton County to regulate solid waste management?**

BCC 23.010 Purpose. Solid Waste Management Program.

In order to protect the health, safety and welfare of the people of Benton County and to provide a solid waste management program, it is declared to be the public policy of Benton County to regulate solid waste management to:

- (1) Provide for a coordinated solid waste management program and administration with cities within Benton County and with other counties or cities under existing and future regional programs.
- (2) Provide for cooperation and agreements between Benton County and cities and other counties involving joint or regional franchising of solid waste service.
- (3) Provide standards, regulations and franchising to ensure the safe and sanitary accumulation, storage, collection, transportation and disposal or resource recovery of solid wastes and ensure maintenance of solid waste collection, resource recovery and disposal service.

## Introduction

Benton County is seeking a new Sustainable Materials Management Plan (SMMP) that will guide decisions and policies for future generations. The main theme of this subcommittee's findings and recommendations are that the plan should help transition our re-focus from the linear, end-of-life waste management to a more holistic, systemic, circular approach with the materials involved. The many positive impacts of this transition include:

- Efficiencies derived from full life cycle/cradle-to-cradle principles of sustainable material management
- Savings from waste reduction
- Creating opportunities for efficient circular economies both locally and regionally
- Better inclusion of Equity and shared prosperity in waste Considerations
- Recognizing and encouraging innovation

Traditionally, Benton County has managed waste materials with an end-of-life approach – largely by landfilling them locally in Coffin Butte Landfill, but also by recovery, recycling, and composting. This has presented challenges, which include, but are not limited to, the landfill's limitations environmentally and economically. In our work we have sought to chart the expectation and aspirations for a longer-range vision that will guide the County towards more sustainable materials management. Our report advises the County on the parameters for a Request For Proposal (RFP) that will bring in consultants to develop a Plan that enables the County to achieve that longer-range vision.

Based upon the magnitude of ideas and possibilities we have encountered, it is anticipated that the SMMP could usher in a paradigm shift in how we view and interact with materials we use in our everyday lives. In addition to Findings and Recommendations, we have recorded a list of Questions the consultants and the County can use to frame their thinking about this new paradigm, its benefits, and the practical path to get there.

One task of the subcommittee was to develop a “table of contents” outlining the subjects to be covered in an SMMP. The group started by looking at examples of Solid Waste Management Plan (SWMP) documents from various Oregon counties, listing, reviewing, and comparing the topics covered in each. The group was able to add to and edit that list, creating a “table of contents” of topics to cover in a future SMMP, as well as an associated list of questions for the SMMP to answer. Benefits and costs were covered throughout the as it related to various topics and discussions, and are largely included in the overall approach of sustainable materials management approach, which evaluates the impacts across the full life cycle of materials, weighing the “costs and benefits” in the decision-making process.

The group also reviewed Benton County's 2040 Thriving Communities Initiative and examples of values and goals expressed in other planning documents to develop overarching framework to be considered for developing an SMMP.

The more recent subcommittee work has focused on future next steps and recommendations around the RFP process, including contracting out, workplan and timeline, and who's at the

**Commented [RD21]:** From Ryan: Intro ideas: Benton county is seeking a new SMMP that will guide decisions and policies for future generations Based upon the magnitude of content and ideas – this SMMP feels like it will be leading (ushering in) a paradigm shift in how we view and interact with materials we use in our everyday lives. Why? Why are we doing this and why do we need a new SMMP – if we can clearly tie the *why* behind the need for a better/newer/new SMMP – this will only strengthen the findings and recommendations.

**Commented [RD22]:** Sean and Daniel's additions,

**Commented [RD23]:** The end-of-life approach (solid waste management) does not specifically mean landfilling. The end-of life approach just means approaching management through a waste-centric lens, which typically means focusing the end-of-life phase options (disposal AND recovery/recycling/composting). I recommend deleting the line "by landfilling them locally in Coffin Butte Landfill"

**Commented [RD24]:** Perhaps we can include "but not limited to" here, to help prevent further misunderstandings about the scope of an SMMP

**Commented [RD25R24]:** Added

**Commented [RD26]:** Sean and Daniel's additions

table. The group has included considerations of lesson's learned from outside of Benton County, including neighboring county jurisdiction presentations provided to the full work group.

**How to read the document:**

The document is split up into the following major sections, each containing various related work group charge element. Each charge lists key findings and/or key recommendations. These key findings and recommendations summarize more complete content found in the rest of the report.

## Development of Sustainable Materials Management Plan (SMMP)

### Topics covered in recent similar planning efforts across the state

One task of the subcommittee was to develop a “table of contents” outlining the subjects to be covered in an SMMP. The group started by looking at examples of Solid Waste Management Plan (SWMP) documents from various Oregon counties, listing, reviewing, and comparing the topics covered in each. Subcommittee members reviewed and discussed pros and cons, and the differences between the various approach’s frameworks. Subcommittee members identified key topics to include on Benton County’s plan, including aspects of climate change, equity, health impacts, economic opportunities, and many others. The group was able to add to and edit that list, creating a “table of contents” of topics to cover in a future SMMP, as well as an associated list of questions for the SMMP to answer.

Among the planning documents referenced in the development of the “topics to be covered”, the subcommittee reviewed topics covered in the following recent similar planning efforts across the state:

- [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 discussion 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.

Commented [RD27]: Daniel's additions

## Subjects to be covered

Our expectation is that the consultant will perform an analysis and provide recommendations based on robust outreach to the stakeholders listed in this document. The RFP should ask “how will the applicant address this, and what is the applicant’s outreach plan?”

### Questions that should be considered in the SMMP development

Commented [RD28]: Combine into major sections

Commented [RD29R28]: Complete

#### 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?
- Climate change is associated with an emerging set of values and imperatives. How do the county's values adapt as these new values and imperatives evolve, when evaluating waste management 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?
- What is the future potential for waste reduction and reuse programs, especially given its synergy with climate change initiatives?
- 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?
- What are the bottlenecks relating to expanding recycling and materials processing?  
What are the ways around those bottlenecks?
- 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)?
- What are the potential transportation and truck traffic impacts of the current disposal system, as well as alternative disposal options and recovery methods, across major impact areas both inside and outside of Benton County?

#### **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?
- How can the county explore potential for conflict between income from the landfill and the approach of reducing waste to the landfill?
- How will the county fund and/or support ongoing sustainable materials management recommendations of this plan, including an evaluation of funding options, for systemic longevity? Is there a possibility to use landfill revenue to support the SMMP recommendations? Currently landfill fees go into the general fund.

#### 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?

**Commented [RD30]:** Suggestion from Brian, how to direct consultant to explore program funding options, comparing to other counties. Other services covering system costs. How to replace landfill funding source with other options? Diversifying revenue sources? Currently landfill fees go into general fund.

**Commented [RD31]:** Add recommendation/include in similar recommendation to use landfill revenue to support the SMMP recommendations

2040 Thriving Communities Initiative and related County documents with similar from other counties referenced

Benton County Sustainable Materials Management Plan should be developed within a Sustainable Materials Management framework, reflecting full lifecycle impacts. The development of a Sustainable Materials Management Plan should consider,

- 1) the 2040 Thriving Communities Initiative and our communities' Core Values,
- 2) national, State and local goals, vision documents (DEQ's [Materials Management in Oregon 2020 Framework for Action](#)), 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, and
- 4) long-term strategies (to 2040) with short-term action items (5 years or less).

#### Benefit-Cost Topics are only Outlined

Benefits and costs were covered throughout the as it related to various topics and discussions, and are largely included in the overall approach of sustainable materials management, which evaluates the impacts across the full life cycle of materials, weighing the "costs and benefits" in the decision-making process. The following list benefit and cost considerations are represented as more of a analysis of pros and cons, and not as an economic analysis in most cases.

- 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.
  - Description of different approaches (sustainable, cradle to cradle, circular economy) should also be outlined.
- 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.

Staff invited members of various jurisdictions to share their experiences and processes in solid waste/materials and materials management during the "Benton County Talks Trash"

Commented [RD32]: Cradle-to-cradle, not just the landfill

Commented [RD33]: Added description

Workgroup meeting #4 on October 27, 2023 ([BCTT Meeting #4 Recording](#), starting at 01:34:45). Here is a brief summary of the feedback received:

- The public engagement process is very important. The Solid Waste Advisory Committee can help with the planning process, including representatives from incorporated cities, franchised haulers, professionals with experience related to solid waste (local trucking companies), and the public. Lone jurisdiction experienced relatively low initial public engagement, which increased towards the end of the process with an Open House event, which was critical. Subcommittees of the committees can help with the process.
- The RFP process for another jurisdiction's plan was competitive, with several qualified firms. Having a well-defined scope of work after embarking on negotiations was helpful.
- The process can take over two years from start to finish, including RFP, scoping and outreach. Creating and distributing an RFP, up to the point of hiring a consultant can take at least three months. Negotiating the contract can take another month. The report can be developed and drafted in sections, with an approximate 18 month timeline before a full draft is reviewed by the Board of Commissioners.
- The solid waste industry is changing and shifting towards full lifecycle approach.
- Oregon's Recycling Modernizations Act should be a focus area for the SMMP.
- The plan can be integral to address key challenges, like landfills reaching capacity.
- Address new housing types for recycling, for example ensuring adequate space for recycling in increasing multi-family housing. A jurisdiction can work with building code requirements to ensure space is available for recycling.
- Planning and codes should have common grounds where roots can cross over between county and city planning and solid waste staff.
- Solid waste is a transportation issue, and changing transportation should be addressed in planning.
- Emerging technologies can be considered during the planning process, particularly established technologies that are already being used in the United States. The planning should pay attention to the experimental process underway at the Georgia Pacific plant in Toledo, OR.
- Policy analyses were not included in the planning process for some Oregon jurisdictions.

In addition to those "lessons learned", the group recommends considering the following:

- 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. This list is not prioritized in any way. These were presented to the full work group, and their feedback was incorporated into the list, including local and state agencies, non-profits, advocacy groups, communities, equity and health advocates, key private sector companies and industries, and more below:

### *Governmental Agencies*

- DEQ
- Economic Development Office County/Corvallis
- Small Cities
- Government advisory groups relating to the subject matter
- Neighboring counties
- Equity, Diversity, Inclusion coordinator
- Waste generation sources (jurisdictions) – how much weight should non-county members be given? Economy of scale?
- Tribal governments

### *Community*

- Community Members
- Low-income populations
- Multi-family residents
- Diverse Language Representation and underserved communities not speaking English as first language
- Residents and businesses from rural areas of the county

### *Advocacy Groups*

- Local Advocacy groups (Willamette valley) – sustainability coalition, river keepers, watershed councils
- National Advocacy groups
- Youth organizations - civics/schools

### *Business and Industry*

- 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
- Hospital/medical,

- Business community
- Restaurants,

*Materials Management and Processing*

- Disposal sites
- Collectors/haulers
- Materials processors - MRF's
- End users of secondary 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

## RFP Process

### 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)
  - Consider DEQ's RFP Process for Modernizing Oregon's Recycling System as an example
- 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

Commented [RD34]: From Ken Eklund: 1. We've been asked to weigh in on many specific procedural elements of the RFP, that we really should not be making. I'm talking about deadlines, time expectations, scoring matrices, and so on – things that really should be decided by someone charged with and experienced with constructing the actual RFP package. We did the best we could, and what we came up with should remain in our report somewhere, but let's leave those specifics out of our recommendations, in favor of what we recommend the county's intentions and priorities should be. We should say that we recommend that the Planmaking process should prioritize *completeness* over *promptness*, i.e., that a complete plan is more important to us than it being ready by any particular future date, for example. That's appropriate and important for us to do.



- The plan-making process should prioritize completeness over promptness, i.e., a complete plan is more important to us than it being ready by any particular future date, for example.

#### Contracting out;

There are many topics being recommended, which are likely beyond the capability of any single party. Multiple parties could be involved in the SMMP development process.

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.

#### 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)

Commented [RD35]: organize into categories

Commented [RD36R35]: Complete

- 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. Consider using the Justice System Improvement Project (JSIP) as a model of best practices when engaging with the community on the SMMP
  - Look at the unique qualities of our community, not a one 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

- Will provide an analysis and recommendation for the “subjects to be covered”, incorporating feedback from extensive public engagement and stakeholder engagement, SWAC/DSAC

#### *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.
  - 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
- h) References.
- i) Interview/presentation (how important compared to other criteria?)
  - a. Separate scoring criteria/process for the interview
  - b. The group preparing the RFP will want to make sure that they set enough points with this process so that it can swing the point selection one way or another. The RFP group will want to prepare a list of questions or items they are wanting the interviewees to answer ahead of time and weigh out each question to ensure that it leads to a discovery of which consultant best fits the needs of the county.

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.

**Commented [RD37]:** Important to consider cost, but not number 1 criteria

**Commented [RD38]:** From Ryan:  
Interview/presentation of firms section (page 6 I think): My sense is that the group preparing the RFP will want to make sure that they set enough points with this process so that it can swing the point selection one way or another. The RFP group will want to prepare a list of questions or items they are wanting the interviewees to answer ahead of time and weigh out each question to ensure that it leads to a discovery of which consultant best fits the needs of the county.

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

**Conclusion**

A good SMMP will serve the county and residents now and in the future – it will be adaptable to new technologies while aligning with clearly stated county/state goals.

The county should not rush the selection process or solicitation process – selecting the correct partner whose core values and vision align with what has been assembled will be a key component to getting the best outcome in this process.

**Commented [RD39]:** From Ryan: Conclusion ideas:  
A good SMMP will serve the county and citizens now and in the future – it will be adaptable to new technologies while aligning with clearly stated county/state goals  
I don't think we can rush the selection process or solicitation process – selecting the correct partner whose core values and vision align with what has been assembled will be a key component to getting the best outcome in this process

**Commented [RD40]:** Suggested content from Ryan for conclusion

Appendix A: Drafted Table of Contents Outlining Elements of Recommendations

TOPICS
<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

Commented [RD41]: Clarify what this means

Commented [RD42]: Rephrase to a shared vision, not limiting to a current idea of this "new vision"

<b>TOPICS</b>
5) Product consumption and use
6) Product end-of-life management
7) Disaster resilience
Measuring progress
1) Plan Indicators
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

**TOPICS**

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**

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



**TOPICS**

- 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
- 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

**TOPICS**

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

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

<b>TOPICS</b>
---------------

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
--

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
-----------------

**TOPICS**

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

**HAZARDOUS WASTE**

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

**LANDFILL DISPOSAL OPTIONS**

Background

County Authority for Waste Disposal

Existing Landfill Disposal

And list pros and cons of it

Waste Stream Projections

**TOPICS**

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

**ADMINISTRATION AND ENFORCEMENT**

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

**TOPICS**

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

2) Finance and Funding

3) Recommendations

**CONCLUSION****RESOURCES**

