



STAFF REPORT

To: Summit County Council
From: Solid Waste Planning Committee
Date of Meeting: April 11, 2018
Type of Item: Final Consideration and Possible Approval of the Updated Solid Waste Master Plan
Process: Regular Session

At the April 11, 2018 Council meeting, staff will present the final draft of the updated Solid Waste Master Plan and request approval of the Plan by the County Council.

Requested Council Action

1. Approve the 2018 update to the Summit County Solid Waste Master Plan, providing staff direction on what to pursue to advance the goals and objectives of the County's overall solid waste management program.
2. Commit to providing solid waste service partners like Recycle Utah and Habitat for Humanity ReStore a location for their recycling facility, education center, and warehouse, respectively, on property in the US 40 corridor where we can also locate County specific solid waste or "back of house" services.

What is a Master Plan?

A master plan is a dynamic, long-term planning document that provides a conceptual layout to guide current and future decision-making. It includes analysis, recommendations, and proposals based on public input, surveys, planning initiatives, existing conditions and social and economic factors.

As the County Council considers the 2018 update to the County's Solid Waste Master Plan, it is important to keep in mind this document is a strategic framework – a roadmap directing staff resources and setting the direction for how the County should manage solid waste into the future.

The vote being requested today, does not commit the Council or the County to any particular recommendation, program, or funding scenario. As County staff makes progress on the proposals outlined in the plan, there will be decision-points that will come before the Council for consideration.

This document is dynamic, meaning it will change as County staff further researches, develops and plans out the proposed initiatives. For example, the

Council will notice in the revised implementation timeline, the suggestion that 2019 be devoted to coming up with a funding plan to maintain as well as advance the County's solid waste management in a sustainable way. However, before this funding plan and associated tasks are implemented, they will come before the County Council for discussion, consideration and approval.

Questions to Consider Today

As the County Council reviews the final draft of the 2018 update to the Solid Waste Master Plan and considers whether or not to adopt it, the Planning Committee suggests the Council consider the following questions to simplify and better understand what exactly the Council is being asked to approve:

- 1) Do we continue to operate solid waste collections as we have done in the past, from a long-term financial and environmental cost/benefit perspective?
- 2) Do we build a facility with community partners and/or private partnerships that changes the way we collect and distribute recyclable materials to their final destination and focus on educating the community to propel behavioral changes?
- 3) Do we build a lasting, sustainable funding source and governance to support the overall master plan?

Summary of the Plan

Background

Summit County's integrated solid waste program consists of a municipal solid waste (MSW) landfill (i.e. Three Mile Landfill), a construction and demolition (C&D) landfill (i.e. Henefer Landfill), countywide curbside residential solid waste and recycling collection, including several central dumpster service areas where residences are remote and widely spaced, a household hazardous waste exclusion program, and a public education program.

Summit County employees operate the landfills and the household hazardous waste drop-off station at the Three Mile Landfill. The County has a contractual agreement with Recycle Utah, a local nonprofit organization that operates a recycling facility, to manage the public education program, two annual household hazardous waste collection events, glass collection, and other recycling efforts.

The County manages a contract with Republic Services, Inc. to haul residential waste and recycling.

In 2007, Summit County hired CH2MHILL to develop an Integrated Solid Waste Management Master Plan, which was completed and adopted in 2008.

In 2014, the County contracted with Five Star Engineers, LLC to update the solid waste master plan. The County Council approved the updates and the recommended goals. However, the goals described in the plan were not realistically achievable nor were there any implementation strategies or available funding at that time to accomplish them.

In 2017, the County Manager tasked staff with updating the Solid Waste Master Plan with the following objectives in mind:

- Divert more waste from the Three Mile Landfill, protect the County's water and air quality, and reduce the number of recycling trucks/trips between the County and Salt Lake City.
- Include County Council, stakeholders (i.e. cities and nonprofits) and public input throughout the process (guidance and coordination).
- After Council provides direction on the recommendations, develop realistic and attainable implementation strategies and timelines with progress targets for both short-term and long-term programs.
- Create clear linkages between the implementation plan, costs, revenues currently available and the steps/resources needed to satisfy and complete the plan over time.

On February 28, 2018, the Planning Committee presented the draft plan to the Council for discussion and consideration. The Plan being reviewed today reflects the feedback provided at the February 28th meeting. We are now at the point where we are asking the County Council for adoption of the Plan.

Overview of the Plan

The Problem we are Trying to Solve

The existing working cell at the Three Mile Landfill has run out of space and will be partially closed/capped toward the end of 2018. Efforts are underway to expand the landfill through the construction of five new lined cells; however, even with these expansions, the County estimates it has approximately 35 years left of landfill space if nothing is done to change the way the County manages solid waste.

County staff estimate that around 80% of what currently goes into the landfill is recyclable materials primarily from the commercial sector. This presents an opportunity to implement programs to divert these materials from the landfill, thereby extending the life of the landfill beyond 35 years (i.e. well into the 2050's).

Additionally, as the County works on an affordable and workforce housing plan that will house more people within the County boundaries, the volume of the County's solid waste will only increase.

We are at a point in our solid waste management program where our fixed costs and commitments exceed the available budget, leaving little to no room to fund programs to solve our landfill capacity problem or advance the Council's strategic goal of environmental stewardship. The County must identify or develop a dedicated, sustainable funding source.

Additionally, as we move into the future and take on new initiatives or possibly manage solid waste curbside and commercial collections, we need to also address the governance structure for the overall solid waste program.

Summit County is uniquely positioned to address these challenges as manager of the area's landfills and of solid waste collection and disposal.

Plan Details

The 2018 update to the County's Solid Waste Master Plan provides new objectives, vision, and guiding principles to the approach the County takes in managing solid waste, as well as sets new reduction targets and diversion goals for landfill waste (15% by the end of 2023 and 30% by the end of 2028), which the Planning Committee believes are more realistically achievable.

In addition, the 2018 draft updates details about the County's current solid waste program and commitments made by the County to either comply with new state and federal regulations or develop and manage the Three Mile Landfill.

It also includes results from a survey and analysis done on other similarly situated municipalities as well as from several public outreach/engagement efforts, both of which directed the Planning Committee on where to spend resources to study further, ultimately leading to a list of short- and long-term programs that could be pursued in order to expand the lifespan of the Three Mile Landfill.

Finally, the 2018 update outlines several potential funding scenarios to continue to pay for the County's solid waste management program as well as pay for the short- and long-term programs to extend the lifespan of the landfill, a list of recommendations from the Planning Committee, input and direction from the County's policymakers, and a proposed implementation timeline.

Recommendations, Costs and Timeline

After the February 28, 2018 presentation of the draft update to the Solid Waste Master Plan, it became clear to the Planning Committee that the original

implementation timeline was too aggressive and more time was needed to figure out the funding.

As a result, we have updated the recommendations and implementation plan sections of the Master Plan to simplify the timeline so it only looks at the next five years and is more realistically achievable. Included in this new timeline, based on recent experience the County has had, is planning for how long it will take to communicate the Master Plan to the public and implement a funding mechanism that asks for additional contributions from the community.

Below is the new, suggested five-year timeline.

Year 2018	
Required Actions/Commitments	Estimated Cost
Solid Waste Management Program Budget: Collections, management of the landfills, personnel, equipment, etc.	\$5,840,000
Landfill Development: Completion of Cell 1 at Three Mile Landfill; compliance with state/federal regulations; and construction of storm-water monitoring system.	\$750,000
Recommended Actions/Discretionary	Estimated Cost
Recycling Transfer Facility: Draft and issue RFP for consultant to complete conceptual design of the facility; select consultant; determine start date and timeframe and costs; budget for in 2019 budget.	NA/County Staff Time
Recycling Facility Property Acquisition: Identify and designate property parcel for County Recycling Transfer Facility, recycling drop-off and education center, and warehouse for our solid waste partners.	NA/County Staff Time
Commercial Cardboard Waste Diversion Pilot Program: Design and develop a plan for the program, including collection and hauling logistics, participating partners and tenants, true costs and funding, start date and timeframe, data collection and analysis, etc. Reserve funding in the 2019 County budget.	NA/County Staff Time
Commercial Composting Pilot Program: This will largely be driven by the private sector. The County will contribute staff to help address zoning and land-use challenges, health code compliance, and permitting from the Department of Environmental Quality, as well as serve in some type of coordination role to help collect and analyze data so decisions can be made about if, how, and when to expand the program. The County will also contribute some funding to cover supplies and operating expenses.	\$40,000
Commercial Recycling Ordinance: Reserve funding for coordinator/enforcement FTE in County's 2019 budget (salary and benefits only)	NA/County Staff Time
Collections Alternatives: Plan for funding in the County's 2019	NA/County

budget for a collections feasibility study.	Staff Time
Total Fixed Costs for 2018	\$6,590,000
Total Discretionary Costs for 2018	\$40,000
Total Costs (Fixed + Discretionary)	\$6,630,000
Offsetting Revenues (tipping fees & \$36 annual fee)	(\$2,011,000)

Year 2019	
Required Actions/Commitments	Estimated Cost
Solid Waste Management Program Budget: This includes collections, management of the landfills, personnel, equipment, etc.	\$5,840,000
Landfill Development: Partial closure of old cells and compliance with state/federal requirements, such as leachate management system and testing and maintenance of storm-water monitoring system.	\$525,000
Recommended Actions/Discretionary	Estimated Cost
Funding Plan: Devote the year to developing a realistic funding mechanism to sustain the County's solid waste management program over the long-term. The plan must be able to cover all the fixed costs (i.e. ongoing operations of collections, landfill management, personnel, equipment, etc.), commitments (i.e. compliance with state and federal laws, landfill expansion, partial closure and post-closure maintenance, etc.), and discretionary funding (i.e. programs and initiatives to expand the lifespan of the Three Mile Landfill). Included in this planning should be a timeframe and an implementation strategy. Ask Council to consider, discussion and approve plan.	NA/County Staff Time
Recycling Transfer Facility: Complete the contract for the consultant for the conceptual design and start work, including collaboration with Recycle Utah and Habitat ReStore. Concurrently, start planning and budgeting for engineering and architectural design phase for County's 2020 budget.	\$200,000
Commercial Cardboard Waste Diversion Pilot Program: Commence program and collect data.	\$100,000 (true cost will be decided from 2018 analysis)
Commercial Composting Pilot Program: Analyze data and effectiveness of program to decide if should continue or expand. If decide to continue/expand, plan the expansion and analyze costs; develop funding plan that includes contributions from participants and partners. Any funding agreed to by the County should be budgeted for in 2020.	NA/County Staff Time
Commercial Recycling Ordinance: Hire coordinator/enforcement FTE (salary and benefits only; vehicle will be budgeted for when	\$73,000

enforcement begins in 2020 or 2021. NOTE: FTE becomes part of the operating budget for the Dept of Environmental Health in subsequent years) who will lead the effort to plan and develop the ordinance with stakeholder involvement. The process will also need to include a communications campaign, timeframe and implementation strategy.	(salary & benefits only)
Collections Alternatives: Hire consultant for feasibility study of taking collections "in-house." Complete study in the first or second quarter of the year and based on results/recommendations, make a decision about whether or not to pursue moving collections under County operations.	\$65,000
Total Fixed Costs for 2019	\$6,365,000
Total Discretionary Costs for 2019	\$438,000
Total Costs (Fixed + Discretionary)	\$6,803,000
Offsetting Revenues (tipping fees & \$36 annual fee)	(\$2,011,000)

Year 2020	
Required Actions/Commitments	Estimated Cost
Solid Waste Management Program Budget: This includes collections, management of the landfills, personnel, equipment, etc.	\$5,840,000
Landfill Development: Continued work on the partial closure of old cells, post-closure maintenance, and maintenance of leachate and storm-water monitoring systems and testing.	\$525,000
Recommended Actions/Discretionary	Estimated Cost
Funding Plan: Implement year 1 of the approved Funding Plan.	NA/County Staff Time
Recycling Transfer Facility: If not completed in 2019, complete RFP process for architectural/engineering design and hire consultant. Complete design for facility. Budget for construction and labor for 2021 based on funding plan established in 2019.	\$500,000 (true cost will be decided in 2019)
Commercial Cardboard Waste Diversion Pilot Program: Analyze data and decide to stop, or continue/expand the program. If continue/expand, plan out expansion details and budget for funding in 2021 budget.	NA/County Staff Time
Commercial Composting Pilot Program: Carry out decision made in 2019 about continuation or expansion of the plan and implement associated plan.	TBD (minimal; private partners will manage the program)
Commercial Recycling Ordinance: Implement ordinance according to plan developed in 2019, which either begins enforcement in 2019 or delays it until 2020. Have FTE move into a technical assistance and compliance role, helping businesses develop recycling programs and understand the requirements/regulations. Purchase vehicle for FTE; FTE costs are now part of Dept of Environmental Health base budget.	\$20,000 (vehicle)
Collections Alternatives: Based on decision made in 2019 regarding	NA/County

taking collections "in-house," start planning for the transition to either rebid the collections contract or develop a funding, procurement, and recruitment plan to move collections under County operations by July of 2022.	Staff Time
Total Fixed Costs for 2020	\$6,365,000
Total Discretionary Costs for 2020	\$520,000
Total Costs (Fixed + Discretionary)	\$6,885,000
Offsetting Revenues (tipping fees & \$36 annual fee)	(\$2,011,000)

Year 2021	
Required Actions/Commitments	Estimated Cost
Solid Waste Management Program Budget: This includes collections, management of the landfills, personnel, equipment, etc.	\$5,840,000
Landfill Development: Post-closure maintenance, and maintenance of leachate and storm-water monitoring systems and testing. Design Cell 2 and ensure there is budget for the excavation of Cell 2 in 2022.	\$205,000
Recommended Action/Discretionary	Estimated Cost
Funding Plan: Implement year 2 of the Funding Plan.	TBD
Recycling Transfer Facility: Construct facility. Concurrently, develop operational plan for the facility, determining costs, personnel and equipment needs, insurance and permitting, etc.	\$6,500,000
Commercial Cardboard Waste Diversion Program: Carry out decision made in 2020 to continue/expand the program and implement expansion plan.	TBD (based on analysis done in 2020)
Commercial Composting Program: Ongoing operations of composting program. Consider feasibility of expanding to residential units either curbside or drop-off models.	TBD
Commercial Recycling Ordinance: Based on plan developed in 2019, begin enforcement, unless the plan implements this in 2020.	NA/County Staff Time
Collections Alternatives: Based on decision made in 2019, continue working on transition to be completed in July, 2022 (expect some costs if County decides to start hiring staff & procuring equipment, etc.).	NA/County Staff Time
Total Fixed Costs for 2021	\$6,045,000
Total Discretionary Costs for 2021	\$6,500,000
Total Costs (Fixed + Discretionary)	\$12,545,000
Offsetting Revenues (tipping fees & \$36 annual fee)	(\$2,011,000)

Year 2022	
Required Actions/Commitments	Estimated Cost
Solid Waste Management Program Budget: This includes collections, management of the landfills, personnel, equipment, etc. (estimated cost includes only 6 months of the contract with Republic for collections; remaining 6 months of collections budget in "collections alternatives")	\$4,475,000

below).	
Landfill Development: Post-closure maintenance, and maintenance of leachate and storm-water monitoring systems and testing. Start excavation of Cell 2.	\$1,205,000
Recommended Action/Discretionary	Estimated Cost
Funding Plan: Implement year 3 of the Funding Plan.	TBD
Recycling Transfer Facility: Occupy facility, hire personnel, and procure equipment per the O&M plan developed in 2021; begin operations (costs include one-time procurement of equipment and 6 months' worth of costs for transfer, hauling & disposal of materials, FTE salary and benefits, insurance and maintenance, assuming it will take the first half of the year to hire and train everyone and move into the facility).	\$800,000
Commercial Cardboard Waste Diversion Program: Ongoing operations. Consider ending once recycling ordinance is fully implemented and enforced.	TBD
Commercial Composting Program: Ongoing operations and staff support. Based on analysis done in 2020 re residential program, start working on plan and budget accordingly.	TBD
Commercial Recycling Ordinance: Continue enforcement and technical assistance to businesses. Program becomes part of routine operations at the Dept of Environmental Health.	NA/County Staff Time
Collections Alternatives: By July, either sign new contract with private hauler or begin collections "in-house." If the latter, devote first 6 months of the year to hiring FTE, procuring equipment, and other actions to prepare for the transition in July (some of these costs may occur in 2021 if the County finds it advantageous to start procuring or hiring staff earlier).	\$1,500,000 (contract option) or \$11,000,000 (in-house option)
Total Fixed Costs for 2022	\$5,680,000
Total Discretionary Costs for 2022	\$11,800,000
Total Costs (Fixed + Discretionary)	\$17,480,000
* NOTE: Total does not include 6 months of the contract with private hauler because the assumption is collections moved "in-house" and is covered by the \$11 million estimate)	
Offsetting Revenues (tipping fees & \$36 annual fee)	(\$2,011,000)

Year 2023	
Required Actions/Commitments	Estimated Cost
Solid Waste Management Program Budget: This includes in-house collections, management of the landfills, personnel, equipment maintenance, etc.	\$5,125,300
Landfill Development: Post-closure maintenance, and maintenance of leachate and storm-water monitoring systems and testing. Continue work on Cell 2 – unused monies from the \$1.2 million budget carries	\$5,000

over from 2022.	
Recycling Transfer Facility: Fully operational; becomes part of general solid waste management program. Costs involve ongoing operations and maintenance.	\$800,000
Recommended Actions/Discretionary	Estimated Cost
Composting Program: Implement residential plan. Continue operations of commercial program.	TBD
Total Fixed Costs for 2023	\$5,930,300
Total Discretionary Costs for 2023	TBD
Total Costs (Fixed + Discretionary)	TBD
Offsetting Revenues (tipping fees & \$36 annual fee)	(\$2,011,000)

Rationale for Taking Action Now

Similarly to what the County Council has done with transportation planning and is currently doing with affordable housing, we must have a future-looking plan for solid waste management. We understand the difficulty with making decisions now when the impacts are not realized until 30 or 40 years down the road. However, the Council has shown time and time again, its interest in and ability to make investments now to address future challenges. Solid Waste is no different; and in fact, advance planning for solid waste management is more critical due to the consequences poor management and lack of planning have on the quality of the County’s air, land and water, as well as overall finances.

The landfills are the biggest contributors to greenhouse gas emissions in County operations. The way we manage the landfills, as well as our overall solid waste management in the County, directly impacts air and water quality in Summit County. For several years now, the Council has included environmental stewardship in its strategic plan, specifically implementing plans and policies to “secure, preserve and protect our water, land and air quality for the present and future.” Investing in the Solid Waste Master Plan, particularly the short- and long-term programs to extend the lifespan of the Three Mile Landfill is perhaps the most impactful action the Council could take to advance these strategic goals.

Advance planning is key to ensuring the County has access to a wide spectrum of options for managing the County’s solid waste. It takes on average five to ten years to construct a new landfill, including the site planning, design, permitting and environmental studies, not to mention exorbitant costs (at least \$1 million for the application and design engineering, plus \$75,000 per acre in construction costs, several million dollars for permitting and environmental impact studies, and around \$3 million in operations and maintenance).

It can take nearly as long to develop short- and long-term plans and identify, evaluate and receive public input on funding sources to transfer solid waste out of

the County. Additionally, if the County decides to transfer out the waste, it loses control over containing costs, subjecting the County to third party price escalators as well as makes the County liable for any environmental issues at the landfill the waste is being transferred to even though the County does not operate the landfill.

Doing nothing or waiting too long to act could have devastating impacts to the environment, County budget and programs, and quality of life of residents and visitors.

The Planning Committee strongly recommends approving the 2018 update to the County's Solid Waste Master Plan, providing staff direction now rather than waiting until we are closer to reaching capacity at the Three Mile Landfill. Setting this direction now and making these investments now, when time is on our side, will avoid greater costs in the future as well as allow the County to make smart decisions rather than rash decisions caused by the pressure of time constraints. Again, please keep in mind, a vote to adopt this plan is not a commitment to fund or implement any program or funding strategy; these decision points will come before the Council in the future once they have been fully researched, vetted and developed. Your vote today, merely gives staff direction on where to go next.

Further, instructing staff to develop a funding plan, which adoption of the 2018 update to the Solid Waste Master Plan does, is a critical step because the County's General Fund and Municipal Fund can no longer sustain the costs of the overall solid waste management regardless of pursuing any initiatives or new programs. A sustainable and dedicated funding mechanism is critical for the success of the program and the County's ability to avoid disasters that impact the quality of life of our residents, employers, and guests.

Additionally, Recycle Utah (RU) will lose its current facility site by the year 2020. The Planning Committee would like the Council to commit to providing RU a new location that can also accommodate other partners so the County can continue to partner with these entities in measures to divert materials from and extend the lifespan of the Three Mile Landfill through recycling, education, and other reuse and reduce efforts. A large portion of the updated Solid Waste Master Plan is dedicated to the concept of a joint recycling and education facility, another reason why we strongly recommend adopting the 2018 Master Plan now.