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DATE: December 18, 2023
TO: Wade Bryson, Chair, Public Works and Facilities Committee
THROUGH: Denise Koch, Director, Engineering and Public Works
FROM: Dianna Robinson, Environmental Project Specialist, Engineering and Public Works
SUBJECT: Zero Waste Update

Zero waste as a concept is very broad and can include reducing or diverting everything that is disposed of in our community. Programs can center around waste reduction, reuse, composting, recycling, household hazardous waste, construction & demolition waste, and biosolids. Below you will find progress updates on CBJ's pathway towards zero waste.

Waste characterization study (Summer 2024):

A waste characterization is the first step in any large-scale Zero Waste/waste reduction process. This study will tell us exactly what is in our waste stream entering the landfill, which will help inform program development and give us baseline data to measure future progress against (exactly like the GHG emissions inventories for energy efficiency).

- Contractor selection:
 - o Cascadia Consulting Group, Inc. out of Seattle, WA, selected via RFP in November 2023
 - o Over 30 years of institutional experience performing waste characterization studies
- Timeline:
 - o Projected start date of mid-May 2024 to capture community and seasonal tourism
 - o Draft report ready by June 2024

Program Feasibility and Prioritization (Through Fall 2024 and continuously):

Staff have begun working on examining potential waste reduction and diversion programs for their economic and logistical feasibility. Staff are able to begin this work before the completion of the waste characterization study because, based on national data, certain waste categories, such as organics, and construction and demolition waste, take up a significant portion of the waste stream, and we are therefore able to look for solutions ahead of time.

We will likely contract some of this work to a consultancy firm (like Cascadia) due to limited staff capacity. This will also provide us with more insights from firms that routinely help other communities with these processes. With a growing number of companies promising a wide range of solutions with varying results, it will take time and expertise to evaluate them and select the best fit for our community.

Once we have a thoroughly vetted list of options, as well as a completed waste characterization study, we can proceed to stakeholder engagement and goal setting. By vetting options and removing those that economically and logistically will not work in Juneau, we can create a focused menu of choices for the stakeholder group and Assembly to consider. While other ideas will be welcome from stakeholders, Assembly members, and the general public, staff believes this will help streamline the public process by performing the majority of this necessary research in advance. It will also help inform goal setting as it will give us an idea of how quickly we will be able to scale up different programs.

Goal setting (Begin Fall 2024):

Once we have the completed waste characterization study and have vetted the feasibility of potential programs and solutions, we can begin stakeholder engagement in earnest. Staff are currently working on an outreach plan for the zero-waste planning process, which we will present to this body when it is completed. This will include broad community

outreach as well as targeted engagement with key stakeholders, including: waste-related businesses such as Juneau Composts!, WM (formerly Waste Management), Alaska Waste; other groups such as Sustainable SE Partnership/Spruce Root, UAF Cooperative Extension, and area tribal governments and Corporations; and large waste generators, such as local breweries, distilleries, restaurants, mining operations, construction companies, the hospital, correctional facility, UAS, and fish processing.

There are many forms that stakeholder engagement can take, but it will likely involve a neutral third party to facilitate an equitable goal-setting process. Staff intend to use the stakeholder group for goal setting after there is an educational component to get everyone working from the same knowledge base.

Planning and program development (After goal setting and stakeholder engagement are completed):

Using these diversion and programmatic goals, we can begin planning and program development.

Currently, staff are laying the groundwork for this future process. There are still unanswered questions, but we do know two things:

1. The Assembly has identified municipal composting as a priority.
2. CBJ will have \$2.5 million in congressionally directed spending (CDS) from Sen. Murkowski to begin development of the former Lemon Creek Gravel Pit for future waste diversion activities, pending EPA determination that the site is suitable for composting and construction. The [comment period](#) for the EPA Finding of No Significant Impact (EA/FONSI) is December 26th, 2023. (Projected date of acquiring funding: Spring 2024)

This site is a critical first step to supporting the community's waste reduction. A portion of the CDS funds will be used to begin planning the future 'zero waste subdivision (ZWS),' which will inform our future funding goals and grant proposals.

The following outlines the plan for the CDS funding:

Short-Term Outcomes: Plan and design a ZWS and Compost Facility (by Winter of 2024).

Medium-Term Outcomes: Perform site preparation and basic infrastructural improvements for a composting site where composting can begin without a building (Late 2025-early 2026).

Long-Term Outcomes (Future Funding): Contingent upon future funding, build a composting facility (i.e., building, equipment, etc.) and build out the rest of the ZWS infrastructure. A full-scale composting program, along with other diversion and reduction programs, can be developed in conjunction with selected contractors and community partners, although parts of this can also occur during stakeholder engagement (Completion TBD).

Implementation, assessment, and adjustment (Continuously and TBD):

These activities will be farther down the road when we implement new programs, but current programs, such as recycling and household hazardous waste (HHW), can be assessed and adjusted sooner. Please note that either program will require substantial infrastructural investments to significantly change current diversion rates due to space limitations at the current recycling and HHW facilities.

Discussion Item

Staff believes that the discussion on the design of the future composting program should occur during the stakeholder engagement portion of this pathway. It needs to be after the results of the waste characterization study are out in order to understand the quantity and types of organics that we will have available for diversion.

However, staff are also aware of community concerns around what CBJ's role in composting will be. If it is desirable, there are some unanswered questions that the Assembly will need to decide on, and that can be discussed in the meantime. These include whether the Assembly wants to subsidize composting, and if so, to what extent. Other items include whether the Assembly would like to lease out a future composting site or facility, versus the standard CBJ practice of contracting operations.