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TO: Wade Bryson, Chair Public Works and Facilities Committee

THROUGH: Katie Koester, Director Engineering and Public Works

FROM: Dianna Robinson, Environmental Project Specialist Engineering and Public Works

SUBJECT: Zero Waste Planning Pathway - Informational

*Assembly Goal 5.A: Develop a zero waste or waste reduction plan.*

Below is the recommended Zero Waste Pathway/steps toward a Zero Waste plan for Juneau:

1. **Waste characterization study:** City-wide and performed at the landfill by a contractor (early 2024 based on contractor availability; 1 week for study, ~2 months for the report)
  - The first step in any Zero Waste/waste reduction process
  - A waste characterization study will provide two necessary pieces of information:
    - Identify unaccounted-for waste streams in Juneau's trash
    - Baseline data to tell us where we are right now. We need to gauge if our programs are successful and if we've met our goals – exactly like the GHG emissions inventories
  - EPA national averages are estimates only, and not all states (including Alaska) participate in EPA's surveys
2. **Prioritization:** Now that we know our waste types and quantities, we can set our priorities (~6-12 months dependent on staff capacity):
  - Which waste types will give us the biggest impacts for the community and the environment, and reduce the most landfill space – the “biggest bang for our buck”
  - Of those, which waste types are the most logistically and economically feasible to target – the “low-hanging fruit”
3. **Goal setting:** Set diversion and reduction targets, e.g. 30% total diversion by 2030, 20% food waste reduction by 2035, etc.; set short-, medium-, and long-term goals
  - *Public outreach and education; stakeholder participation in setting goals*
4. **Planning and program development:** Now that what is feasible and desirable is identified, we can:
  - Identify solutions and strategies for each waste type
  - Build relationships with:
    - Major waste producers and receivers to identify mutually beneficial solutions
    - Groups working towards the same goals (CCTHITA, Sustainable Southeast Partnership, etc.)
  - Creation of a “Zero Waste Plan”
  - Develop programs and behavior change campaigns – *public outreach and education*
  - Plan and invest in any needed infrastructure
  - *Encourage input and participation of community leaders/stakeholders at this stage*
5. **Implementation:** Building infrastructure, putting programs into place, working with contractors (1-8 years depending on amount of infrastructure and funding needs)

6. **Assessment and adjustment:** Measure the effect of programs and adjust as needed (ongoing)
  - This may require additional waste characterization studies down the road (either contracted or performed by staff if there is capacity)
  - There are no “one-size fits all” solutions to solid waste problems, some trial and error should be expected
  - *Ongoing public education and outreach*

**Staff tasks associated with each step:**

1. Waste characterization study
  - Issue RFP for a contractor
  - Coordinate with Alaska Waste, Waste Management, Juneau Composts!, and RecycleWorks for data collection
  - Identify a location for the study
  - Work with contractor to perform the waste characterization
  - Receive a report from the contractor
2. Prioritization
  - Analyze the report\*
  - Identify most impactful waste types
  - Research best practices for those materials
  - Distinguish which waste types are desirable and feasible to reduce or divert
3. Goal setting\*
  - Work with PWFC, JCOS, and the public to set goals for reduction and diversion
4. Planning and program development
  - Determine what waste reduction and diversion solutions are available to Juneau
  - Build relationships and seek public input from community members
  - Develop programs and campaigns
  - Identify any infrastructural needs, seek and secure funding for those needs
    - Zero Waste Subdivision
5. Implementation\*
  - Build needed infrastructure and hire staff (if needed)
    - Zero Waste Subdivision
  - Start new programs – internally and through contractors
  - Record data to measure progress
6. Assessment and adjustment\*
  - Perform additional waste characterization studies (over time)
  - Identify programs that work well, and programs that underperform – adjust as necessary

Public participation: Work with stakeholders (waste haulers, receivers, processors, and major producers) to set attainable goals and create sustainable programs. Public outreach and education campaigns to ensure buy-in from community members.

Note: Work can begin on many of these tasks before the waste characterization study without impacting that data collection. Tasks and stages with an \* cannot begin until a waste characterization study is completed – implementing major programs will not allow us to measure progress appropriately.

- Zero Waste Subdivision pre-planning (in progress)
- Researching waste types that we know we will need to target – for example, food waste and construction and demolition waste (in progress).
- Identifying solutions for those waste types and begin planning for diversion/reduction (in progress)
- Building relationships (in progress)
- Identifying and pursuing funding opportunities (in progress)