Solid Waste Management in the CBJ

Feb 22, 2021 Committee of the Whole Update

2021 Assembly Goal:

5. Sustainable Community

Juneau will maintain a resilient social, economic, and environmental habitat for existing population and future generations.

D. Develop solid waste strategy including plans to increase recycling and deal with abandoned/junked vehicles.

Entity Responsible

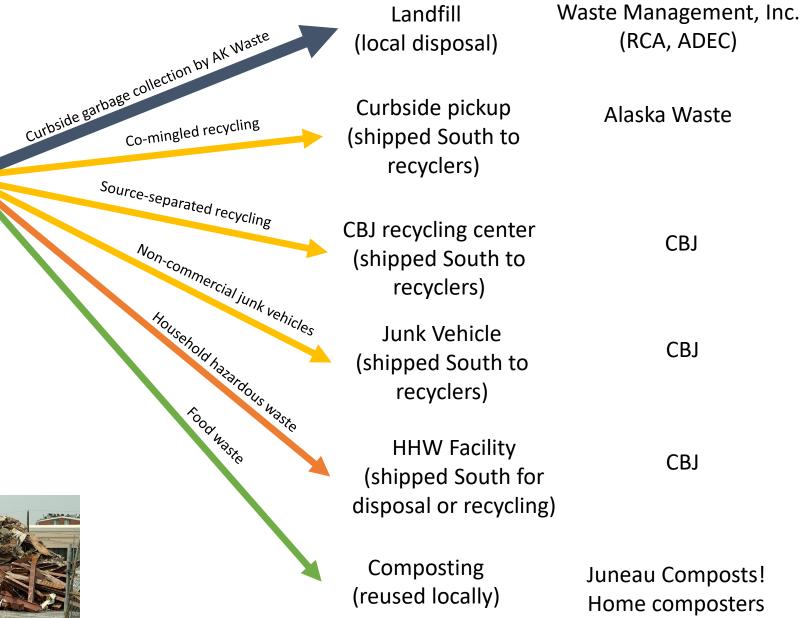


Community Produced Wastes

Household garbage Construction debris Food waste Recyclable materials Household hazardous waste Biosolids Junk Vehicles







Past CBJ Solid Waste Planning Efforts

- 1993 Technical Reconnaissance Study for New Landfill Site Selection
- 2004 Mayor's Ad Hoc Recycling and Waste Reduction Task Force
- 2006 Southeast Conference Regional solid waste planning effort (transportation network was a barrier)
- 2008 Solid Waste Management Strategy (recommended CBJ take on the RCA cert for garbage hauling. That effort was not successful.)
- 2014 Biosolids Study by CH2M Hill
- 2018 CBJ Assembly passed Ordinance 2018-37 to allow partnership with Waste Management, co-location of Recycling Center and HHW
- Solid Waste Action plan (RecycleWorks programs)

Plans can be found here: <u>https://juneau.org/engineering-public-works/recycleworks/projects-plans</u>

Estimated Life of Capital Landfill = 20 years What will we do with our garbage in 20 years?



- Waste Management Inc. owns Capital Disposal Landfill.
- Alaska Waste (Waste Connections) owns the collection and hauling service for CBJ's garbage. They also hold the Certificate of Convenience and Necessity through the Regulatory Commission of Alaska to collect garbage.
- CBJ cannot legally collect garbage currently.
- CBJ can legally collect recyclable materials.

What are the options?

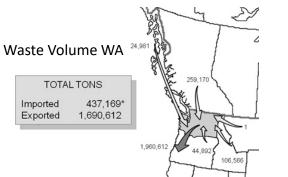
1. Someone builds a new landfill



Complexity includes:

- CBJ does not control collection or disposal of garbage.
- Lack of available land, significant site preparation would be required, high cost of development.
- Difficult topography and access to lands that are large enough to accommodate a landfill.
- Stringent regulatory requirements.

2. Ship garbage to the lower 48



- Southeast communities including Petersburg, Sitka, Ketchikan and Wrangell ship their garbage by barge to the lower 48.
- Private sector control of hauling and disposal makes predicting costs difficult.

3. Someone buys an incinerator/Waste-to-Energy technology



 Industry standard volumes for economic viability of these systems are 200-500 tons MSW/day. Juneau produces only about 80 tons/day. –*CH2MHill, 2014*

What can CBJ do under the current solid waste management structure?

- Increase diversion of wastes from the landfill for beneficial reuse
 - Collect more recyclable materials
 - Increase diversion of organics (composting) requires strategy development, funding
 - Continue to pursue other options for biosolids
- Reduce the amount of waste produced
 - Waste reduction programs
 - Shift towards recyclable/compostable vs. single use materials

Funding note: RecycleWorks programs are paid for through the general fund. Program costs increase as usage of the programs increase, but the benefit is waste diversion, extending the life of the landfill.

CBJ RecycleWorks Program Focuses on Beneficial Reuse of Materials and Maximizing Diversion of Waste from the Landfill

42% of GHG emissions in the U.S. are from materials management: resource extraction, production, transport and disposal of food and goods.

Production of aluminum products has 96% lower GHG emissions when recycled aluminum is used. -EPA, 2011



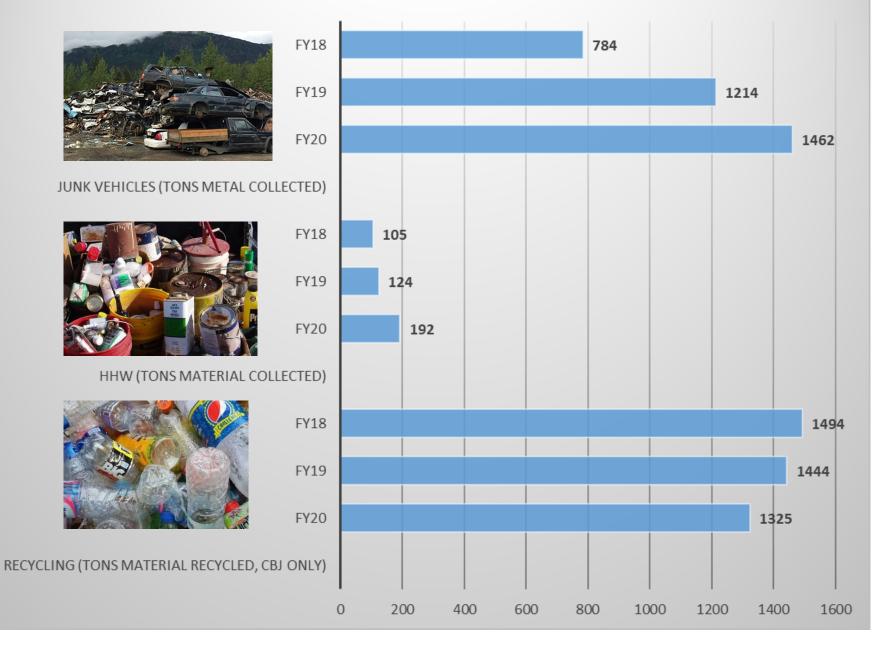


Current RecycleWorks Programs

JuneauRecycling.com

REPEING . HAZARDOUS WASTE . SH

RecycleWorks Program Usage FY18-FY20



What can we do about the stink?

- Making changes to the current solid waste management structure is challenging
- Complaints should be directed to the regulating agencies (ADEC, RCA)
- Odor is a reminder of our solid waste situation
- Continue to fund and support current and expanded RecycleWorks programs and community efforts to reduce and divert waste
- Juneau Commission on Sustainability has formed a solid waste subcommittee. A report is expected to be issued in the next several weeks



-Harborview students compost their lunch scraps and use compost in their garden beds