

Report of the 2021 Aldan Borough Recycling Committee

Recommendations approved by the Aldan Borough Recycling Committee on August 26, 2021. Report submitted to Aldan Borough Council by Councilwoman and Committee Chair Caroline McKernan on September 1, 2021.

Recommendations

The recommendations of the Aldan Borough Recycling Committee (hereinafter referred to as the Committee) fall into the following three categories: Contract Inclusions, Education, and Advocacy.

Contract Inclusions

The Committee recommends that the Aldan Borough Council (hereinafter referred to as the Council) advertise a Request for Proposal (RFP) in October 2021 for a single-stream recycling pickup services contract starting in January 2022. In order to ensure stability for the Borough residents and for flexibility in responding to a changing recycling market, the Committee recommends that the Borough seek a contract for a minimum of two years and a maximum of three years and that includes one or more of the following stipulations:

1. Recycling materials in the Borough may be restricted to the currently profitable materials: aluminum, paper/cardboard, and plastics 1 & 2. Pick up of glass and plastics #3 through 7 may be omitted for this next contract.
2. To allow the Council to see trends and adjust the terms of future contract renewals accordingly, the vendor shall provide quarterly reports listing the average market price for each of the recyclable products collected in the Borough.
3. The vendor shall provide monthly reports of the volume in tons of recyclable materials collected, along with the percentage recycled versus the percentage diverted to trash.
4. Contract renewals or extensions may be linked to performance (based on the metrics in #3 above).
5. The vendor may provide education materials (quarterly/annually) to Borough residents to increase profitable recyclables and reduce contamination.
6. The Borough may implement revenue sharing with the vendor by paying a higher fixed processing cost with a rebate tied to actual market value. (This creates more stability in recycling by covering the processors' direct financial needs while allowing the Borough to benefit if/when markets rebound.)

Furthermore, in the event that the Borough does not receive any reasonable bids to the 2021 RFP, the Committee recommends that the Borough (1) postpone resuming recycling pickup for another year, (2) continue to provide recycling dumpsters for borough residents, and (3)

advertise another RFP no later than the fall of 2022. If the recyclable materials market improves earlier in 2022, the Committee urges the Council to advertise the RFP earlier in order to restart recycling pick up services as soon as possible in 2022.

NOTE: For more information on contracting, best practices as recommended by the EPA, see [Contracting Best Practices: Incentives and Penalties | US EPA](https://www.epa.gov/transforming-waste-tool/contracting-best-practices-incentives-and-penalties) (<https://www.epa.gov/transforming-waste-tool/contracting-best-practices-incentives-and-penalties>)

Education

The Committee makes the following recommendations (ordered from least financially costly to most costly) of actions the Council should consider taking to educate residents on how to reduce, reuse, and recycle:

- Display on the electronic board at the Borough Municipal building a reminder of the types of materials that can be recycled and notices of future recycling update meetings.
- Ensure that the Borough website contains a page that provides the latest up-to-date information on recycling in the Borough (e.g., types, method of recycling, etc.). It is recommended that the webpage uses a simple, memorable URL, such as aldan-boro.org/recycling.
- Consider providing an automated message option on the Borough phone line to provide a recording of the basic recycling information for residents who cannot access the Borough website.
- Recruit the assistance of other Aldan Borough groups, such as the Aldan Booster Civic Association and the Aldan Recreation Board, to provide word-of-mouth and/or flyer distribution concerning recycling information and/or upcoming recycling events.
- Members of the Council and/or Mayor can make an informational video or podcast to post on social media and the Borough website.
- Host several Borough Q&A meetings to provide information on how to recycle and reduce our environmental footprint.
- Provide a door-to-door canvass with volunteers and Council members providing information on recycling best practices.
- Provide recycling information at a walk-up booth at Borough events.
- Work with the Aldan Elementary School to provide an educational presentation to the students on reducing, reusing, and recycling along with a flyer that they can share with their parents.
- The Borough provides educational materials on how to recycle in Aldan, including letters, postcards, fridge magnets, etc.
- The Borough holds an annual or semi-annual community event that provides information on recycling/reusing in a fun and interactive way (e.g., using small games, food truck, etc.). Also, utility companies and waste management companies could be invited to provide information.

Advocacy

Recognizing that the most significant factors affecting the effectiveness of recycling efforts are well beyond the control of any municipal government, the Committee recommends that Aldan Borough officials use their positions to lobby their state and federal elected officials to develop a viable, long-term solution to the problem of a failing recycling market. The Borough officials should also encourage Borough residents to lobby these officials to create laws and regulations that encourage biodegradable packaging and discourage single-use plastics.

Background

Recycling in Aldan

Overview

Aldan Borough has had recycling options for its residents for several decades. For a period in the late 1980s through the early 1990s, Aldan had twice-monthly curbside recycling pickup of newspapers. After the market price of newsprint dropped, the Council chose to cancel this pickup service.

Following that, a voluntary drop-off container for paper and cardboard was available at the rear of the Aldan Elementary School on Woodlawn Avenue and collection igloos for glass and plastics were located behind the Giant Food Store on Oak Avenue. Both sites were heavily used by many Aldan residents, but both collection sites also had high rates of contamination by non-recyclable materials.

In addition, Boy Scout Troop #2 has held an aluminum can collection on the first Saturday of each month in the Municipal Building parking lot at Clifton Avenue and Providence Road. The money from the aluminum is used by the Scouts to sponsor camping trips and other scouting activities.

In 2011, with the market for recyclable materials improving considerably, the Council decided to seek bids for recycling pickup. At the September 14, 2011 meeting, the Council awarded a one-year contract to Suburban Waste Services for weekly, single-stream recycling collection of glass, aluminum, paper, cardboard, and plastics (#1 & 2 only) beginning January 2012. The contract was for \$9,900 and included a provision that allowed the vendor to receive any profits (or absorb any losses) from the materials collected. To defray the initial start-up costs of the program, the state provided the Borough a one-time grant of \$24,990 to purchase recycling containers for the residents.

One-year recycling contracts were renewed with Suburban Waste Services for \$9,900 each on October 10, 2012 and November 13, 2013.

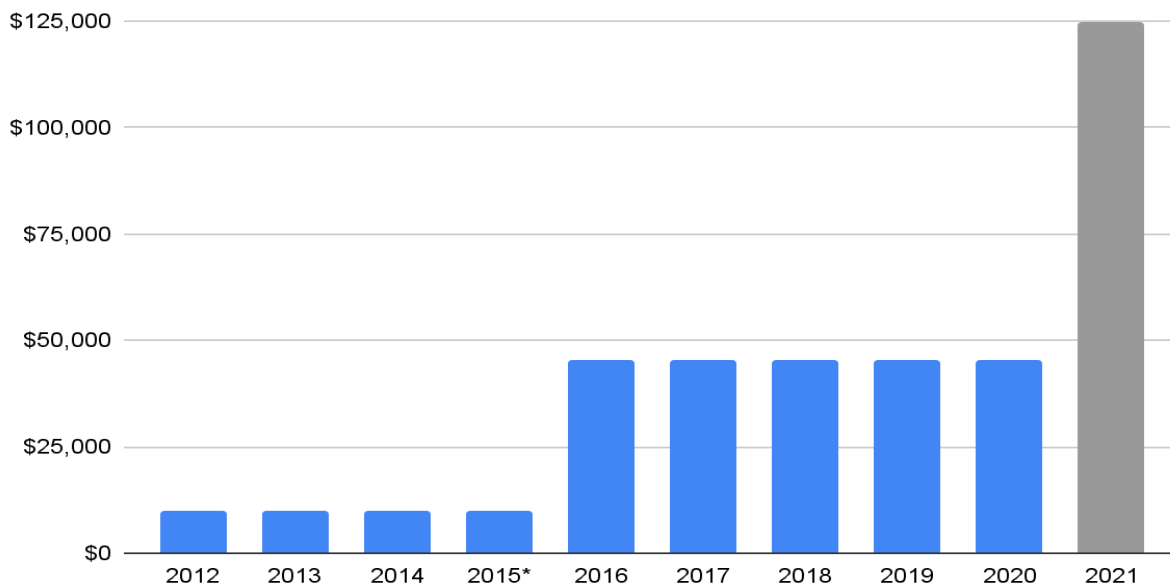
On November 11, 2015, the Council approved a three-year contract to Suburban Waste Services for \$136,558. On December 12, 2018, the Council chose to extend the existing contract on a month-to-month basis to allow more time for additional bids to be sought. In the summer of 2020, Suburban Waste Services informed the Borough that it would not be able to continue providing the services at the same rate in 2021. On November 11, 2020, the Council announced that there was only a single bid received for the recycling contract and that it was for \$124,800—nearly three times the current cost. In light of that, the Council decided to suspend the weekly recycling pickup service indefinitely to allow time to explore additional options for recycling pickup in the Borough.

Unlike most municipalities in Delaware County, Aldan's population is less than 5,000 residents. Therefore the Borough is not required by state law (1988 Act 101) to provide curbside pickup of recyclable materials.

Since recyclable pickup services have been suspended, the Borough has arranged for dumpsters to be available in the parking lot of the Aldan Swim Club for residents to deposit their recyclable waste.

Recycling Costs in Aldan

In Aldan, we have seen a significant increase in the costs in the bids that were received for recycling services during the last decade. The chart below shows the annual cost to the Borough for recycling pick up services from 2012 through 2021:



**The Committee could not find any Borough Council meeting minutes containing contract renewal information for 2015, but it is assumed that the cost was flat from 2014.*

NOTE: Since the Borough chose not to renew recycling pick up services in 2021, the annual cost of \$124,800 listed above was the total proposed cost of the single bid that the Borough received. This is the cost that the Borough would have paid if recycling services in the Borough had not been suspended for this year.

Global Trends

A Volatile Market

Historically, the demand for recyclable materials has been very volatile with prices for materials fluctuating significantly from year to year. Below are two graphs obtained from the EPA's July 2020 report: ["Historical Recycled Commodity Values"](#) that show the overall volatility of the recycled commodities market from 1990 through 2018:

Figure 1a. Indexed Recycled Commodities by Year

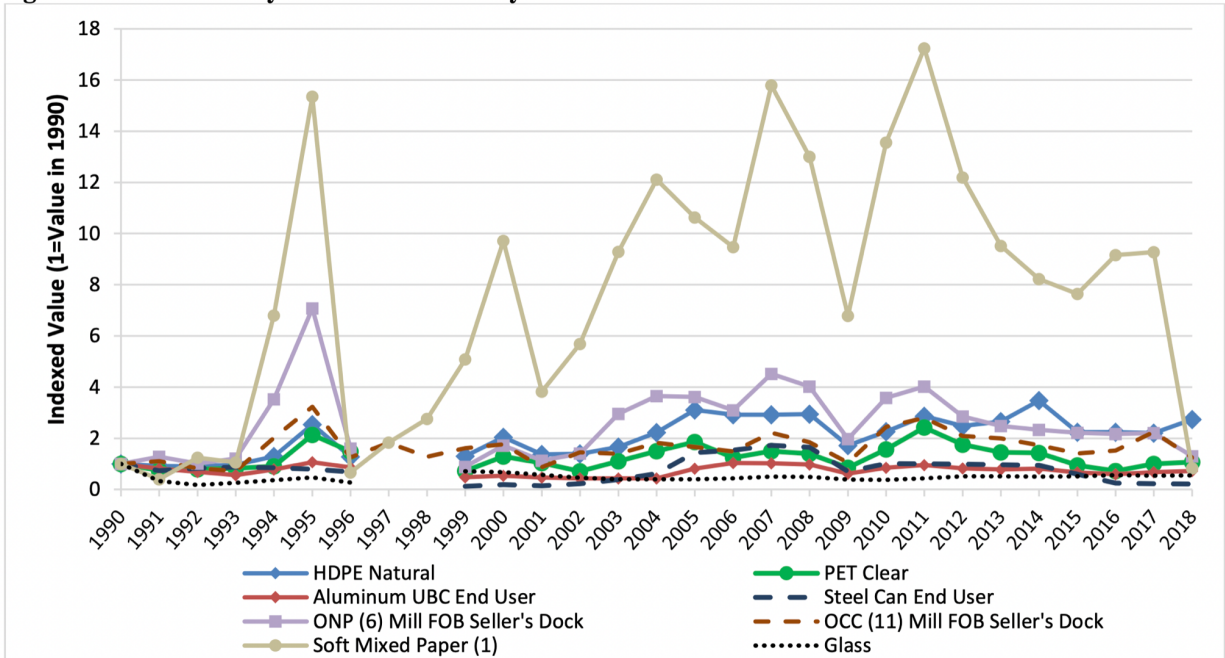
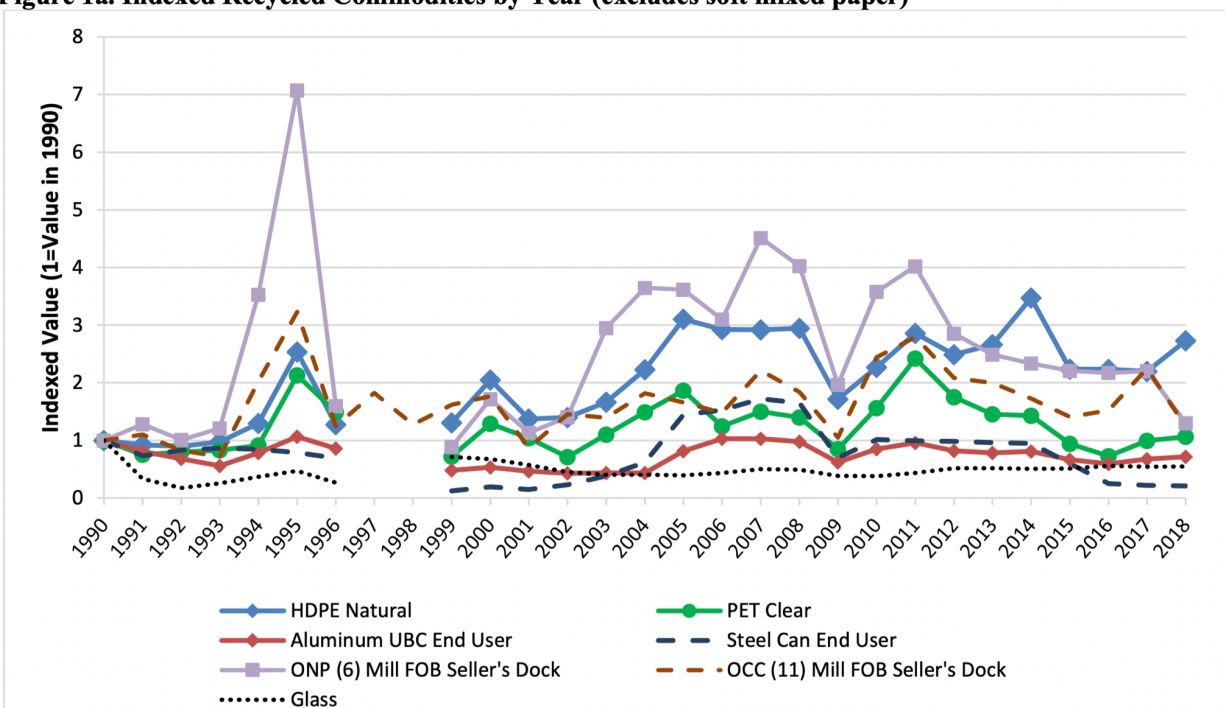


Figure 1a. Indexed Recycled Commodities by Year (excludes soft mixed paper)



For more information on this data, please see the original report online at https://www.epa.gov/sites/default/files/2020-07/documents/historical_commodity_values_07-07-20_fnl_508.pdf.

NOTE: The second graph was mislabeled in the original report. It should be labeled Figure 1b. Also note, HDPE Natural is Plastic #2, and PET Clear is Plastic #1.

China's Change in Policy

In July 2017, China, one of the largest importers of recycled waste, announced that starting in 2018, it would no longer accept imports of almost all foreign recyclable materials. Prior to the change, 70% of the US's exported plastic waste went to China. As a result of this import policy change, the global demand for recyclable materials plummeted.

Initially, other southeast Asian countries such as Malaysia and Thailand increased their imports of American plastics, but their markets were tiny compared to that of China's and were soon saturated. With such drastically reduced demand, recyclable material from the United States sat on barges with nowhere to go or was eventually sent to landfills or trash-to-steam plants in the U.S. As a result, the overall demand has since decreased significantly, causing what was once a profitable service for municipalities and haulers to become a significant cost.

Environmental Benefits & Costs

While conventional wisdom generally holds that recycling is simply and entirely a positive activity for the environment, it is important to recognize that the environmental impact of the recycling process is more complex and includes some significant environmental costs. While not attempting to provide a comprehensive overview of this complex process, the Committee is providing the following negative and positive impacts for recycling below:

Negative Environmental Impacts of Recycling

1. Recycling sites are commonly unsafe, posing health risks for the individuals responsible for separating and recycling the waste products.
2. The transporting, sorting, cleaning and processing of recycling materials in separate factories requires more energy consumption and causes pollution.
3. Methane is a greenhouse gas produced during recycling. If this gas seeps out it can lead to global warming and ozone depletion

Positive Environmental Impacts of Recycling

1. Overall reduced energy consumption.
2. Decreased pollution.
3. Slows the rate of resource depletion.
4. Fights global warming.
5. Decreases landfill waste.

In short, reducing our consumption of and/or reusing single-use plastics and other packaging materials have a much more positive impact on the environment compared to recycling while also being significantly less financially costly.

Committee Research Findings

The following is a summary of the main findings of the Committee's research:

Recycling materials are often not recycled.

While the Committee was not able to find specific data on the amount of recyclable materials that ends up getting sent to landfills and trash-to-steam plants, it is known that a portion of collected recyclable materials does end up not being recycled. The primary reason for this diversion from recycling is the contamination of the materials. If the contamination rate exceeds a certain threshold, the cost of separating and processing the recyclable material becomes prohibitively expensive both in financial and environmental terms, and so the materials get dumped with the non-recyclable trash.

In past recycling contracts in Aldan, there were no provisions requiring that any specific percentage of recycling materials actually be recycled nor any requirement of the vendor to report on the amount of recyclable materials that gets sent to landfills and/or trash-to-steam plants. The Borough only received reports of the volume of recycled materials that were collected. According to the March 2019 Borough Council meeting minutes, the Council was aware that a portion of Aldan's recyclable materials was going to trash-to-steam rather than being recycled. The EPA recommends including provisions in recycling contracts to report on the volume of material actually recycled versus sent to trash-to-steam and/or landfills.

Recycling costs have skyrocketed.

As described above in the Global Trends section and as directly evidenced by the chart in the Recycling Costs in Aldan section, the cost charged for processing recyclable materials has increased dramatically over the last decade. The primary cause of this increase is the crash in the global demand for recyclable materials. However, as suggested by the single bid received for the 2020 RFP, it appears that the local waste management industry may be very territorial, with companies generally avoiding submitting bids outside of their usual areas. This may also be a contributing factor to the high bid costs.

Certain materials still have value.

While the overall market for recyclable materials has decreased considerably since China's import policy change in 2017 (see Global Trends above), there are still some materials that can be profitable when they have a low contamination rate—namely, aluminum, paper/cardboard, and plastic #1 & 2. Currently glass and plastic #3 through 7 are not profitable.

Committee Information

Committee Background

At the February 10, 2021 Borough Council meeting, Councilwoman Caroline McKernan announced that she would be organizing a committee of Borough Council Members and borough residents to explore options to increase recycling in Aldan. The first meeting of the Committee was held on May 13, 2021.

Aldan Borough Council Members

- Councilwoman Caroline McKernan, Committee Chair
- Council President Daniel Procopio
- Council Vice President Joyce Lambert

Aldan Borough Resident Participants

- Christine Bomento-Key
- Michael Ceci
- Marianne Curry
- Kesha Fraser-Brown
- Sylvia Hayes
- Joseph Koperna
- Emma Medina-Castrejon
- Thomas Medina-Castrejon
- Roxanne Norman
- Marie Previti
- Michael Previti
- Ryan Silberstein
- Lana Vitale
- Jessica Walker
- Scott Walker

Meeting Dates

All meetings of the Aldan Borough Recycling Committee were advertised and open to the public and were held in person at the John P. McBlain Community Center and via video conference on the following dates:

- May 13, 2021
- June 10, 2021
- July 8, 2021
- August 12, 2021
- August 26, 2021 (adjourned meeting; continuation of the 8/12/21 meeting)